SOUND AGRICULTURAL PRACTICE Opinion Number 20-2

SUBJECT:

Request for an Opinion Pursuant to Section 308 of the Agriculture and Markets Law as to the soundness of the use of land for the composting of carbon-based waste products, mainly horse manure and bedding, to apply as a soil amendment on land used for the production of field crops in relation to odor within the Town of Southold, Suffolk County, New York.

REQUESTOR:

Paul Rogers

1514 Montauk Highway

PO Box 990

Water Mill, NY 11976

PRELIMINARY STATEMENT

On May 20, 2019, the Department received a request from Paul Rogers for an Opinion pursuant to Section 308 of the Agriculture and Markets Law concerning the soundness of agricultural practices related to the composting of horse manure, bedding, and grass clippings, as a beneficial soil amendment, and its application to farmland located at 2 New Ground Lane, Water Mill, NY.

The Department conducted a sound agricultural practice ("SAP") review concerning Mr. Rogers' agricultural practices employed in relation to the composting of carbon-based waste products and their application to soils to support the growth of agricultural crops. The Department concluded that the agricultural practices conducted on the affected parcel are sound.

The following information and findings have been considered in reaching this Opinion.

INFORMATION CONSIDERED IN SUPPORT OF THE OPINION

THE FARM

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- 1. The Rogers Farm consists of several parcels of land, including 2 New Ground Lane, Water Mill, New York, Suffolk County Tax Map Number 900-66-1-20.22, the subject of this Opinion. This parcel is approximately 37.6 acres and located within Suffolk County Agricultural District No. 4.
- 2. The Rogers family granted a Deed of Conservation Easement on the subject property to the Peconic Land Trust to preserve the "...open space character in perpetuity for scenic, agricultural and aesthetic values..." on November 4, 1998. On August 18, 2016, the Rogers family sold the enhanced development rights to the Town of Southampton to promote the preservation of open space (including)

farmland) pursuant to the Town's Zoning Code. The enhanced easement only permits the landowner to use the land for the "production of foods and food products." The purpose of the easement is to protect the property's high-quality agricultural soils and to ensure that the property remains in agricultural production.

- 3. Mr. Rogers states that the land has been farmed since the 1930's. His family farmed the land for the first 50 years and again since the summer of 2016 when Mr. Rogers started farming it again. In the intervening years, two separate farm operations grew predominantly corn and potatoes on this parcel. One of farmers who previously leased the land expressed difficulty in successfully growing crops on the property due to deer predation. As such, the leasing farmer planted grain crops for the last three years that he leased the property.
- 4. Mr. Rogers indicated that deer predation and soil health are the two major impediments to growing crops on this parcel of land. The family constructed a deer exclusion fence around the perimeter of the property partially funded by a \$10,000 grant from the United States Department of Agriculture Natural Resource Conservation Service (USDA NRCS). The farm contributed an additional \$41,000 to finish the project. Improving the soil's health to make it more productive is the remaining concern for growing crops on this parcel.

FIELD REVIEW

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- 5. On July 29, 2019, Dr. Robert Somers, Manager of the Department's Agricultural Protection Unit, visited the farm to discuss the SAP review process and to examine the fields where Mr. Rogers' compost was being processed and applied. The average temperature during the visit was between 84 and 88-degrees Fahrenheit. Dr. Somers examined the portion of the 2 New Ground Lane parcel located closest to Noyac Path Road (Site 1, See Attachment "A", Field Review) near the farm gate where compost was initially processed and then examined the site where that compost was relocated to reduce neighbor complaints. The relocated site (Site 2, See Attachment "A", Field Review) was located west of the original site, towards the back of the 2 New Ground Lane parcel. Dr. Somers examined a new area for the second year of composting that was also located on the 2 New Ground Lane parcel, north of the initial composting spot (Site 3, See Attachment "A", Field Review). The third year of composting occurred off-site from the 2 New Ground Lane parcel. That parcel is located on Scuttlehole Road and is not part of this review.
- 6. Dr. Somers indicated that there was no detectable odor coming from the two piles of compost (Sites #2 and 3). He dug into the compost and it did not produce any odors. It was his opinion that the composting process had been completed because steam was not observed to be emanating from the material. It was Dr. Somers' view that the amount of compost at these two locations, once spread on the farm, would only

cover a small portion of the property. Furthermore, he determined that the soils on the property are sandy and due to the rate of the decomposition of compost after application to the soil, the addition of compost on the farm will likely be a continual process.

7. Copy of images from the field review are attached. (See Attachment A).

INITIAL COMPOSTING PROCESS

- 8. In November 2016, the Rogers Farm took soil samples from two different areas on the property and sent the samples to the Cornell Soil Health Laboratory, Department of Crops Sciences, Cornell University for analysis. The test results for one of the samples stated that the land is "constrained" in the areas of rooting, water transmission, soil microbial abundance and activity, energy source for soil biota and low pH. The second sample, from an area which exhibited poorer crop production, contained the same constraints as found in the first sample, but also included issues with aeration, infiltration, rooting, crusting, sealing, erosion and runoff, nutrient and energy storage, ion exchange, carbon sequestration, water retention, organic matter quality, organic nitrogen storage and nitrogen mineralization. Cornell recommended that stable organic materials, including mulch, compost, biochar, and/or green manure be added to the soil. They further recommended the incorporation of a biomass cover crop to maintain plant cover throughout the season and to add lime to raise the pH levels of the soil.
- 9. According to information submitted, the farm purchased and spread lime to raise soil pH in the Spring of 2017. A year-round plant cover has been maintained, including winter cover crops. Mr. Rogers stated that bedding/manure from the annual Hampton Classic Horse Show as well as grass clippings had been brought onsite in the Fall of 2017 to generate a composted soil amendment. Mr. Rogers estimates that 95 percent of the waste product received from the horse show consists of wood shavings and 5 percent manure. Mr. Rogers decided to mix grass clippings with the bedding/manure (since the bedding is high in carbon and low in nitrogen) to increase the compost's nitrogen content and accelerate the composting process. Further, a local high school added vegetable waste from their cafeteria to the compost as part of their sustainability program. This food waste only amounted to a cubic yard or two each year. This practice occurred for several years but Mr. Rodgers indicated that it has been discontinued.
- 10. According to Mr. Rogers, in 2019 he used a payloader to turn the pile and to process it through a machine to blend the compost. The farm spread, and incorporated into the soil, approximately 1,200 cubic yards of compost on about 5.5 acres of the 37.6-acre parcel. Approximately 400 to 500 cubic yards of compost remained and was relocated to the southwestern corner of the field at the request of neighbors. The

remaining material was eventually spread on approximately three acres of land in the Fall of 2019. Mr. Rodgers indicated that compost was spread to a thickness of approximately 1.6 inches across approximately 8 acres of land. He stated that this represents only one year of bedding/manure/grass clippings. He indicated that another year's worth of horse manure/bedding, absent grass clippings, is located near the northeastern corner of the property. Mr. Rodgers indicated that compost was spread in the Spring of 2020. According to Mr. Rodgers, it will take quite a few years to generate enough compost to treat and rehabilitate the whole field.¹

- 11. Mr. Rogers and his son, Sam, own a company called Diversified Services. Diversified Services currently has a contract to remove the manure from the Hampton Classic equestrian event. Mr. Rogers benefits from the use of the business' equipment to bring the raw materials to the farm.
- 12. Mr. Rogers indicated that the primary source of objectionable odor came from the addition of grass clippings in 2017 which came from the greens on a golf course. These grass clippings were stored on the golf course for several weeks prior to being transported to the farm. According to Mr. Rogers, the clippings were small, dense, rotten and had a foul odor when brought to the farm. Since then, the farm has stopped taking grass clippings from the golf course, which has helped to resolve the odor issue. The farm worked with a consultant, Steve Storch, owner of Vortex Brewer, to improve the farm's composting methodology. Mr. Storch worked with Mr. Rogers to modify his composting methodology. Instead of piling the manure/bedding into one large pile, the manure/bedding is segregated into six piles where an equal amount of grass clippings² is added to the manure/bedding and mixed. The piles are turned more frequently; every two to three weeks. According to Mr. Rogers, the only time there is an odor is when the pile is turned, but the odor is much less objectionable and quickly subsides.

CURRENT COMPOSTING PROCESS

13. According to Mr. Rogers, the farm has composted the manure/bedding and grass clippings for 2018 and 2019 on a 50-acre field adjacent to Scuttlehole Road. This parcel is accessed through a deeded grade crossing that was obtained by Mr. Rogers' grandfather when the Long Island Railroad acquired the right-of-way by eminent domain in the early part of the last century. Mr. Rogers stated that in August of 2020 horse manure/bedding will be delivered and grass clippings will be added in

¹Department staff confirmed these numbers with the McGill compost calculator. The dimension of an acre of land is approximately 209 ft. x 209 ft. Application of 1.6 inches of compost on one acre of land will require approximately 215.7 cubic yards of compost. If this number (215.7 cu. yds.) is multiplied by 8 acres that totals 1,725.6 cubic yards of compost.

² These grass clippings are from local landscapers and mowing companies.

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September.³ Mr. Rogers states that over the course of the last two years (2018 and 2019) he mixed between 750 -1,000 cubic yards of yard waste, grass clippings and leaves only, with the horse manure to make compost. He stated that he did not come close to nor exceed the 3,000 cubic yards limitation imposed by the Department of Environmental Conservation in their solid waste regulations.

14. Mr. Rogers states that by adding compost to a portion of his 2 New Ground Lane field, the improvement to the soil's fertility is already evident. (See Attachment B; pictures). In the Spring of 2019, a cover crop of winter wheat was planted on most of the field. The cover crop was planted in areas where the compost had been added and in areas where the compost was not added. He states that when the wheat crop emerged the wheat that was planted in the composted area grew greener, thicker and more quickly than the area without the addition of the compost. Mr. Rogers asserts that by improving the soil health the farm can achieve better fertility and use less nitrogen in the process. The farm's goal is to transition the field into one that is certified as organic.

NEIGHBOR COMPLAINTS AND COMMENTS FROM ADJOINING LANDOWNERS

- 15. Mr. Rogers indicates that he has met with several neighbors on several occasions to discuss the issues that they have with his composting operation. During these discussions it was recommended that Rogers relocate the compost pile from the southwestern corner of the farm to another part of the property and develop an access point from the road to manage the compost pile. Additionally, possible treatments of the compost were discussed concerning ways to accelerate the process and to address the odor issue. Mr. Rogers states that to accommodate these concerns he agreed not to bring in more grass clippings until his composting techniques improved. He asserts that the horse manure/wood shavings emit very little odor. Mr. Rogers and his consultant determined that without more frequent turnings of the compost pile, the grass clippings contributed to anaerobic composting conditions. Mr. Rogers indicates that new green waste has not been brought to this property since this agreement was reached with the neighbors. The farm has worked with its waste stream to improve the composting techniques with the aim of eliminating odor. Mr. Rogers reports that these efforts have resulted in improved methodology and he plans to resume composting at the New Ground Field during the Summer of 2020.
- 16. Dr. Somers, by letter dated July 12, 2019, informed 36 landowners adjacent to the Rogers Farm, located at 2 New Ground Lane, Water Mill, New York in the Town of Southampton, that the Department received a request for an AML §308 Sound

³ The 2020 Hampton Classic has been cancelled, as such, Mr. Rogers will not be composting manure and bedding this year.

Agricultural Practice Opinion. He indicated that the request concerned the soundness of an agricultural practice conducted by the Rogers Farm related to the composting of horse manure, bedding and grass clippings for use on the property as a soil amendment. The letter invited adjacent landowners to submit written comments on or before August 4, 2019. (See Attachment "C"; aerial photo of neighbors that submitted responses; blue supportive of practice, red against).

- 17. On July 15, 2019, Dr. Somers received a call from Jean Cohen. Ms. Cohen stated that trucks have been dumping large amounts of manure onto the subject property, along with food waste from a local school and debris from landscapers. She stated that the odor is very offensive, and a lot of flies are present. She indicated that the trucks used to deliver the manure from a Bridgehampton horse show are owned by Paul Rogers' son. She stated that some of the manure on the Rogers property has been removed recently.
- 18. On July 16, 2019, Dr. Somers received a call from David Blatte concerning the compost. He stated that Mr. Rogers has deposited material on the subject property for three years and the piles are 22 feet long. He stated that Mr. Rogers should place the material on another side of the property away from neighbors. Mr. Blatte indicated that over the last six weeks, the compost was spread out on the ground and nothing was planted on the property. He stated that landscapers have been dumping branches and grass clippings on the property and schools have been dumping garbage. Mr. Blatte stated that he sent a letter to the Town. He suggested that Mr. Rogers threatened them. Mr. Blatte stated the manure was turned every couple of months.
- 19. Carl and Pam Wittenberg sent a letter to the Department dated July 16, 2019. The Wittenbergs stated that they live directly opposite the entrance to the Rogers Farm on the Blank Lane side of the field. They indicate that they have lived in their house for the past 29 years and have seen farming taking place for all of that time. They have never seen anything objectionable from the farming practices taking place on the property. The Wittenberg's stated that it appears that Mr. Rogers is composting horse manure to use as a soil amendment. Horse manure is plentiful in their area and the manure is used to improve fertility and makes a lot of sense. They state that they have not noticed anything unpleasant, such as smell or dust, from the use of manure. They state that the use of manure may make the farm more productive and help preserve the long-term agricultural use of the land.
- 20. By letter dated July 18, 2019, Susan Grun writes that she is Paul Rogers' sister. Her brother and nephew farm the same property that her father and grandfather farmed for close to a century. She indicated that they intend to have the farm qualify for organic designation. To improve soil fertility, it is necessary to add horse manure and grass clippings to the property. Ms. Grun stated that she is happy to see the

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clippings and manure being put to a good use and composting is an environmentally sound alternative to being trucked off and buried. She stated that the number of second homeowners has vastly increased. These owners want to be surrounded by beauty and the serenity of pastoral vistas, but are unprepared to accept odors, noise and dust from farming operations. Ms. Grun stated that her brother has attempted to mitigate the more negative aspects of living next to a farming operation. He has located the manure and grass piles as far from residences as possible and does not use loud equipment early in the morning or late in the evening. He also attempts to minimize noise on weekends.

- 21. On July 22, 2019 Dr. Somers received a call from Oliver Eberstadt. He said that he has lived in his residence since 2000. Three years ago, the Rogers' began trucking massive amounts of compost to the farm. He said that during the summer, he could not open his windows or go outside. He indicated that he reached out to the Town and would send the Department additional information.
- 22. By letter dated July 24, 2019 Anthony Meyer, a neighbor and adjacent landowner to the farm, stated that when Mr. Rogers began composting horse dung, grass clippings and raw garbage, the odor of the compost greatly affected the neighboring properties. He said that the number of rodents and insects increased, and it was difficult to enjoy their homes. Mr. Meyer stated that the aquifer is directly beneath the farm and the practice could permanently damage their water supply.
- 23. On July 29th, Dr. Somers received an email from David Blatte, Oliver Eberstadt and Mary Sammon. Attached to the email was a letter addressing the neighbor's issues, correspondence between Mr. Rogers and Noyac Path residents and pictures of the Farm. A hard copy of the documents was received by the Department on July 30, 2019. In the letter to Dr. Somers from Blatte, Eberstadt and Sammon, the neighbors discussed their observations of farm activities, their perception of organic farming, unbearable odor emanating from the compost, increased presence of rodents, groundwater contamination and excessive water runoff/soil erosion. The neighbors make many accusations concerning the use of Diversified Services to bring manure to the property, the dumping of grass clippings by landscapers and the use of food waste from the school. They state that Paul Rogers has not been cooperative in trying to resolve the issue.
- 24. The neighbors submitted copies of 8 letters to Mr. Rogers and 6 letters from Mr. Rogers to the neighbors from June 17, 2018 to May 30, 2019. The neighbors laid out their complaints and Mr. Rogers responded.
 - a. June 17, 2018 Correspondence from Blatte to Rogers Mr. Blatte indicates that the compost pile is 25 yards from his property line. Odor, flies

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- and insects are unbearable. His family cannot enjoy their property or pool. He requests a meeting to resolve their issues.
- b. June 21, 2018 Response from Rogers to Blatte Mr. Rogers states that the material referred to is over two years old and is over 90 percent wood shavings. He states that no manure has been added since August of 2016. He indicates that grass clippings have been mixed with shavings/manure for the last two summers to improve the compost. He indicates that the farm is trying to become organic certified and must compost the material for three years. The material is initially laid out in long rows but as they turn the compost the volume decreases over time and the rows become taller but shorter. He indicates that the odor comes from the decomposing grass, but once mixed with compost the odor should be reduced substantially. The piles will be turned once a month, increasing the odor, but it should subside quickly. He stated that this process was explained when they met two years ago.
- c. July 3, 2018 Correspondence from Blatte to Rogers Mr. Blatte points out that the piles are getting bigger, longer and higher and smell more. He asks if the compost can be moved to another section of the farm where it will not affect the neighbors.
- d. July 30, 2018 Correspondence from Rogers to Blatte Mr. Rogers provided a history of the family farm from 1930's to present, transition to residential housing beginning in the 1970's, trespass on the farm, enrollment into the agricultural district, conveyance of a conservation easement and the sale of the property's enhanced development rights to the Town of Southampton where the property must be farmed to produce food products. They have made a commitment to farm organically and must increase the soil's organic matter. Mr. Rogers states that a neighbor raised the question on protection of the aguifer. He stated that he is also concerned with this and is one reason they are preparing the land to meet organic certification standards. He indicates that the farm has not added Nitrogen to the soil for the past five years and no herbicides, pesticides or fungicides have been used on the property. Mr. Rogers wonders "...about the impact on the aguifer of hundreds of homes in the area with fertilized and irrigated lawns, applications of pesticides, use of polluting 2-cycle engines in leaf blowers and string trimmers, leaching septic systems and swimming pool chemicals being dumped into the ground during backwashing or seasonal emptying." Mr. Rogers writes that he could consider implementing measures to mitigate some of the concerns expressed by neighbors, but intimidation of legal action and harassment must stop, and the neighbors must recognize his right to farm.
- e. August 18, 2018 Correspondence from Blatte to Rogers Mr. Blatte acknowledged the Rogers family's commitment to agriculture and the effect of residential construction in the area, including the sale of 40+ acres of land

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owned by the Rogers family for the construction of homes on New Ground Lane. He stated that they have been in their homes for 20 years with no issues except the current one which is a "life-changing" event to the neighbors. Mr. Blatte asked to meet to discuss a suitable area on the 40-acre parcel that may be used for composting. He writes that the Hampton Classic is only two weeks away and they would like to meet prior to this year's event to try and rectify the situation. Mr. Blatte listed interested neighbors and others on his cc list.

- f. August 27, 2018 Rogers to Blatte and Neighbors Mr. Rogers told them that he is not planning on bringing manure to the New Ground property in 2018, the farm is working with a bio-dynamics expert concerning the reduction of odor, and is evaluating an area where the compost operation may be relocated. Mr. Rogers said that he would meet with a designated spokesperson for the group and would like to remedy the odor issue.
- g. September 12, 2018 Blatte and Eberstadt to Rogers They agreed to meet with Mr. Rogers. They agreed to halt communications with public officials and attorneys until they have had a chance to meet. The neighbors indicated an interest in the current and future composting on site, landscapers dumping on site, the name of the bio-dynamics expert, and where the compost may be relocated. They provided possible meeting dates.
- h. February 1, 2019 Blatte, Eberstadt and Sammon to Rogers It appears that Mr. Rogers and son met with Eberstadt, Blatte and Massoni on October 5, 2018. The neighbors stated that Mr. Rogers would look at a curb cut on the north side of the farm, provide contact information for Steve Storch, the farm's organic specialist, and provide an engineering report stating that trucks are unable to enter/leave the property from Blank Lane. This inquiry states that the neighbors have not received this information.
- i. February 11, 2019 Rogers to Blatte, Eberstadt and Sammon Mr. Rogers stated that at their meeting, he stated that the farm would "consider" adding a curb cut. He states that there was no discussion of an engineering report. The bio-dynamic treatment is only effective when added to compost piles as they are created. He indicates that there is not much impact on existing piles. Mr. Rogers stated that they are not depositing more grass clippings on the farm. He indicated, however, that leaves were added to the compost piles. He stated that the compost piles near the homes of the complainants will be spread over the next two to three months and plowed into the soil in the spring. They agreed to take steps to address the odor issue going forward. He indicated that odor will be present when the compost piles are turned and when the material is prepared for spreading onto the field.
- j. February 25, 2019 Blatte, Eberstadt and Sammon to Rogers They stated that the two sides apparently came away from the meeting with different understandings. The neighbors asked if any material will be

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- deposited on the farm once the existing compost is spread, they asked for a time frame on a curb cut and wanted to know if the entire operation will move to the Blank Lane location.
- k. March 2019 Rogers to Blatte, Eberstadt and Sammon Mr. Rogers reiterated their intent to resolve the odor issue and address stormwater runoff and erosion near the gate on New Ground Lane. He indicated that the farm will be composting with grass clippings at another site to try some new management techniques and that no grass clippings will be brought to the New Ground parcel in 2019. Alternatives include composting at a different site on the New Ground parcel, a new curb cut and bio-dynamic treatments. The farm has considered not using grass clippings, but then they would have to add nitrogen to the mix. There was also a discussion concerning legal matters, which are not part of this review.
- I. May 15, 2019 Blatte, Eberstadt and Sammon to Rogers Again the neighbors reiterated their grievances concerning odor, insects, erosion and aquifer safety. The neighbors asked for a commitment not to use this site in the future and want to know when the compost piles will be spread.
- m. May 20, 2019 Rogers to Blatte, Eberstadt and Sammon Mr. Rogers reiterated his commitment to resolve the odor issue. He said that due to weather and equipment issues they have been delayed in spreading the compost. He informed them that due to the delay, they intend on putting the compost through a chipper to blend the material and make it easier to spread. The farm also plans on relocating the pile to a location much further from the homes of the complaining neighbors. They are behind schedule because they have moved their compost onto another property. He said that the farm will address the erosion issue. Mr. Rogers said that if you drive down specific roads, you will see evidence of serious erosion from many of the farm fields due to the volume and intensity of rainfalls this spring. He assured them that he does not intend to compost next to their residences, but if he can control odor, the site may be considered in the future.
- n. May 30, 2019 Blatte and concerned neighbors to Rogers The neighbors complained about the odor and use of heavy equipment on the farm over the Memorial Day weekend. They indicated that they look forward to the completion of spreading/moving the piles of compost near their homes.
- 25. By letter dated November 7, 2019, Tiffany S. Scarlato, Esq., of Burke & Sullivan, PLLC, wrote to the Department on behalf of the complaining neighbors. Ms. Scarlato requested that the Department take into consideration the proximity of the composting in relationship to the numerous residential neighbors; including requiring specific setbacks from residential activities and limiting the amount of manure and materials that can be placed in any one single location. Further, she asserts that the applicant has been storing substantial amounts of materials on site commercially and

without approval. She stated that commercial garbage dumping must be prohibited on the property as it is not part of a farming operation and should be carefully monitored. She asserts further that the neighbors have raised legitimate concerns about groundwater contamination and the Department should consider the potential impact of composting on the drinking water wells in the immediate vicinity. She specifically references long term composting found to negatively impact groundwater (Long Island Compost/Great Gardens in Yaphank) as well as the study conducted by Suffolk County. She further requested that the Department consult with the Department of Environmental Conservation with respect to this particular issue for the specifics of those findings. In conclusion, Ms. Scarlato requested that the applicant be required to retain all runoff on site and be required to install a groundwater monitoring system to ensure that groundwater contamination does not occur.

AGRICULTURE AND MARKETS LAW

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- 26. The Agriculture and Markets Law (AML) was amended in 2008 adding paragraph (g) to §301(9) to allow up to \$5,000 from the sale of "compost, mulch or other organic biomass crops" to help meet the eligibility requirements for an agricultural assessment; §301(11) was amended to add "compost, mulch or other biomass crops" to the "farm operation" definition and subdivision (16) was added to define "compost, mulch or other organic biomass crops." The Legislature renumbered subd. 16 to subd. 17 in 2016.
- 27. AML §301(17) defines "compost, mulch or other organic biomass crops" to mean "...the on-farm processing, mixing, handling or marketing of organic matter that is grown or produced by such farm operation to rid such farm operation of its excess agricultural waste; and the on-farm processing, mixing or handling of off-farm generated organic matter that is transported to such farm operation and is necessary to facilitate the composting of such farm operation's agricultural waste. This shall also include the on-farm processing, mixing or handling of off-farm generated organic matter for use only on that farm operation. Such organic matter shall include, but not be limited to, manure, hay, leaves, yard waste, silage, organic farm waste, vegetation, wood biomass or by-products of agricultural products that have been processed on such farm operation. The resulting products shall be converted into compost, mulch or other organic biomass crops that can be used as fertilizers, soil enhancers or supplements, or bedding materials. For purposes of this section, "compost" shall be processed by the aerobic, thermophilic decomposition of solid organic constituents of solid waste to produce a stable, humus-like material."
- 28. In reviews of local laws that regulate the composting of animal waste, recognizable and non-recognizable food waste, and yard waste, the Department determined that composting is a beneficial biological process that produces valuable soil

amendments for crop production. The composting of such waste is a preferred method because it is recycled and utilized as a soil amendment to enhance plant growth for the production of crops. Agriculture and Markets Law §305-a(1) protects the on-farm composting of these materials when the composting is part of the agricultural production function of the farm, that is, the farm composts to rid the farm of its excess agricultural waste or the farm composts to create a soil amendment for crop production. [Emphasis added]. In prior reviews, the Department has determined that the on-farm composting of animal waste and green materials should be allowed in all areas within a county-adopted State certified agricultural district provided that the activities follow Department of Environmental Conservation (DEC) regulations.

29. AML Section 300 states that it is the policy of the State to conserve, protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. AML §310(1) provides that purchasers of land in an agricultural district are put on notice that farming activities may cause noise, dust and odors. Although only one of the parcels neighboring the Rogers Farm is located within an agricultural district, it is common knowledge that farms, at times, cause noise, dust, odors, and may have extended hours of operation and other activities that are not customary in residential areas.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION LAW

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- 30. The NYS Legislature established the State's Solid Waste Management Policy in 1988. Reuse of material for the purpose for which it was originally intended, or recycled material are two of the four priorities of this Act. Reuse and recycling are preferred by NYS Department of Environmental Conservation (DEC) over incineration and landfilling as a solid waste management alternative. The land application of compost that has undergone aerobic and/or anaerobic digestion is considered recycling of organic waste. Composting is a biological treatment system that converts organic waste into a more stable soil-like material and may be used as a fertilizer and/or to add organic matter to soils.
- 31. The NYS DEC Solid Waste Regulations at 6 NYCRR 361-3.2(a) provides an exemption for certain composting facilities. Part 361-3.2(a) states that when a composting facility does not produce vectors, dust or odors that unreasonably impact neighbors of the facility, as determined by DEC, and waste does not remain on site for more than 36 months, the following facilities, in pertinent part, are deemed exempt:

Part 361-3.2(a)(3) – a composting facility that accepts no more than 3,000 cubic yards of yard trimmings⁴ per year.

Part 361-3.2(a)(6) – a composting facility⁵ for animal manure and bedding or crop residues.

The Cornell Waste Management Institute, Department of Crop and Soil Sciences, Cornell University discusses regulation and certification of composts in their Compost Fact Sheet #2 "Regulation and Certification of Composts." According to this fact sheet, in general, agricultural composts are not regulated by the United States Environmental Protection Agency or the New York State Department of Environmental Conservation (DEC), except the Part 360 regulations as described above. In general, agricultural composts are exempt from NYSDEC regulation as long as the material does not contain sludge or septage. The fact sheet concludes that "[H]owever, agricultural operations must be properly managed and have minimal environmental problems, such as excessive odor, runoff or similar nuisance problems."

- 32. According to information received and Dr. Somers' observations, the material does not emit odors, attract vectors or remain on the site for 36 months. Further, the farm operator notes that the farm over the last two years has received significantly less than 3,000 cubic yards of leaves and grass clippings. The material is predominantly composed of animal manure and bedding and as such is exempt from 6 NYCRR Part 360.
- 33. Neighbors assert that the farm uses heavy equipment during off hours. The use of heavy equipment "off" hours is a reasonable and supportable method for crop production. Farm operations customarily use heavy equipment during evening hours, on weekends and on holidays. Farms must conduct work when they have the time, labor and equipment to accomplish the task.

⁴ 6 NYCRR 360.2(b)(314) – "Yard trimmings means leaves, grass clippings, garden and other plant debris, small tree branches and limbs (less than 4 inches in diameter), aquatic weeds and other similar materials."

⁵ 6 NYCRR 360.2(b)(55) – "Composting and other organics processing facility means a facility that treats the readily biodegradable organic components in waste to produce a mature product for use as a source of nutrients, organic matter, liming value, or other essential constituent for a soil or to help sustain plant growth. The processes include, but are not limited to, composting, vermiculture, anaerobic digestion, fermentation, and class A processes..."

⁶ http://cwmi.css.cornell.edu/factsheets.htm

TOWN OF SOUTHAMPTON ZONING CODE

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- 34. Town of Southampton Code Section 161-1 provides that "[i]t has long been the policy of the Town Board of the Town of Southampton to conserve, protect and encourage the use of its agricultural land for the production of food and other agricultural products. Over the years, farms have become increasingly hemmed in by residential development, leading to a greater potential for conflict between some of the everyday consequences of farming activities, such as dust, noise and odors, and the desires of homeowners to enjoy their property free of the nuisances that agricultural production can generate. It is the purpose of this article to help reduce the pressure on farmers to give up their agricultural operations. The minimal nuisance which may be experienced by the surrounding community from agricultural operations is more than offset by the benefits of the preservation of working landscape and the contributions to rural character and economy that farming provides."
- 35. Section 161-2. Definitions of the Southampton Code defines "AGRICULTURAL ACTIVITIES" as "[a]activities related to on-farm production, preparation and marketing of field crops, fruits, vegetables, horticultural specialties, livestock and livestock products." Furthermore, Code § 161-3, Protection of Agricultural Activities, states that "[n]otwithstanding any other provision of this Code, agricultural activities, if consistent with good agricultural practices and if conducted on farmland established prior to surrounding nonagricultural activities, are deemed reasonable and shall not be considered to be a nuisance or an interference with the comfortable enjoyment of life and property, unless the activity has a substantial adverse effect on the public health and safety, and provided that such activities are not being conducted in violation of any other provision of the Town Code."
- 36. Code Section 330-76H states that "[t]he storage of manure or odor or dust-producing substances as an accessory use shall not be permitted within 50 feet of any side or rear lot line or within 100 feet of any front lot line."
- 37. On March 26, 2020, Dr. Somers received an email from Michael Chih, Town of Southampton Ordinance Enforcement Officer. Mr. Chih stated that he investigated the history of the property located at New Ground Lane relating to the Town Code. He indicated that the Town has not issued any notices of violation to the property in relation to zoning, compost, or carbon-based materials. Mr. Chih stated that the Town has not inspected the property in relation to the manure piles since they have not received any complaints. He indicated that he has searched code enforcement records and the police records and have found no complaints pertaining to zoning or composting.

CORNELL WASTE MANAGEMENT INSTITUTE

- 38. The Cornell Waste Management Institute, Department of Crop and Soil Sciences, Cornell University, developed a "Compost" fact sheet series that examines various topics associated with the composting of waste products. Basically, the speed at which compost is produced depends upon moisture, air, C:N (carbon/nitrogen) ratio and temperature. The literature is replete with methods used to produce compost and ranges for moisture content, internal temperatures and C:N ratios needed to produce an optimal product for use on the farm or for sale. Turning rates, turning methods and pad types have also been found to affect the nitrogen and organic matter content, the speed at which the material composts sufficiently and the amount of weed seeds that remain viable in the compost.
- 39. Compost Fact Sheet No. 5 discusses compost bulking materials that are a good source of carbon and nutrients. 9 The document states that wood shavings have a higher surface area than wood chips, making carbon more available. Wood shavings can clump when wet and may impede airflow. Leaves and small sticks are also a good bulking material and carbon source. Composting yard debris, including grass clippings, make the nutrients and organic matter more available to crops. The literature also suggests that adding grass clippings to manure and animal bedding increases the nitrogen content of the compost.
- 40. Cornell Waste Management Institute Compost Fact Sheet No. 6 addressing Compost Pads, provides that an improved pad may not be needed when easy to manage feedstock is used. Horse manure and associated bedding materials are easy to handle since these materials are relatively dry. Moisture is added when grass clippings are mixed with the manure/bedding material. The Guide states that a compost facility may be located on a wide range of soils, but moderate to well-drained, hard-packed soils with gentle slopes around 2% are the best. This provides enough slope to move water off the site and prevents ponding. Further, equipment can easily access a site with these conditions to aid in the composting process.
- 41. The Fact Sheet suggests that when a landowner is locating a permanent composting pad on the farm, they should look at proximity to neighboring residences, zoning restrictions, if any, soil drainage, depth to water table, compactability of the soil and proximity to wetland/waterways. Further, easy access to the site is desirable and monitoring the site for leachate is important to ground and surface water.

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⁷ http://cwmi.css.cornell.edu/factsheets.htm

⁸ http://cwmi.css.cornell.edu/factsheets.htm, Compost Fact Sheet No. 3.

⁹ http://cwmi.css.cornell.edu/factsheets.htm, Compost Fact Sheet No. 5

- 42. The allegation of ground water contamination has not been substantiated or documented with well testing. The Department of Health (DOH) Appendix 5B Guideline requires that manure and composting piles be setback a minimum 200feet from wells. The Department has used this standard as a benchmark in prior reviews. The allegation of commercial dumping of garbage has also not been Based upon information submitted and observed, there is no substantiated. commercial dumping of garbage on site. According to Mr. Rogers, local school students brought food waste on-farm one year to study composting. This practice is no longer taking place at the farm. Ms. Scarlato asserted that there are negative impacts from long term composting on groundwater and referenced the Long Island Compost/Great Gardens facility, which was purchased by Scotts Miracle Grow in 2015. The comparison between this operation and Rogers farm is impractical due to the substantial difference in the size and scope of the businesses. The Company's website states that "[E]ach year, Long Island Compost recycles hundreds of thousands of tons of leaves, grass clippings and other landscaping related materials generated by Long Islanders." The Rogers Farm composts less than 3,000 cubic yards of compost which is significantly less than hundreds of thousands of tons.
- 43. Agriculture and Markets Law (AML) §308(1) requires that the Commissioner consider whether an agricultural practice is conducted by a farm owner or operator as part of his or her participation in the Agricultural Environmental Management (AEM) Program as set forth in Agriculture and Markets Law Article 11-A. Mr. Rogers indicated that he is not a participant in AEM.

FINDINGS

Based upon the facts, information and circumstances described above, and in consultation with the Advisory Council on Agriculture, Cornell University College of Agriculture and Life Sciences, and the Sound Agricultural Practice Guidelines¹⁰ by which agricultural practices are evaluated, I find the following:

1. The Department has found no evidence or received other information indicating that Paul Rogers is in violation of federal, state or local law resulting from the importation of animal bedding and grass clippings/leaves for the purpose of developing a soil amendment that will enhance the growth of agricultural crops and improve soil health.

¹⁰ On November 1, 1993, the NYS Advisory Council on Agriculture published its report entitled *Protecting the Right of New York Farmers to Engage in Sound Agricultural Practices.* The Council developed guidelines to assist the Commissioner of the Department of Agriculture and Markets in determining what is sound pursuant to Section 308 of the Agriculture and Markets Law. The Guidelines state that the practice 1) should be legal; 2) should not cause bodily harm or property damage off the farm; 3) should achieve the results intended in a reasonable and supportable way; and 4) should be necessary. The sound agricultural practices guidelines recommended by the Advisory Council on Agriculture are given significant weight in assessing agricultural practices.

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Further, composting is a process that is a supported recycling practice to reduce solid waste.

2. Several neighbors, and counsel retained by the neighbors, have stated that the composting activity conducted by Mr. Rogers has caused unpleasant odor, presence of rodents and flies, soil erosion on property, use of heavy equipment and possible groundwater contamination. The neighbors making these claims have not provided evidence that their water wells have been contaminated. The potential to pollute is speculative and no documentation has been submitted to substantiate these claims.

Mr. Rogers and the neighbors met to discuss the composting activity and concerns about impacts. Mr. Rogers acknowledged that there is odor associated with composting and agreed to change his process to minimize odor as much as possible. Mr. Rogers agreed to no longer accept food scraps from the local school. He engaged a consultant and redesigned his composting process with the aim of reducing odor. He moved the manure/grass clippings/leaves to another farm parcel for the past two years to try different practices and improve his composting process. However, Mr. Rogers indicates that in 2020 he intends to compost again at the New Ground site.

Mr. Rogers spread and incorporated the existing compost located on the New Ground property into the soil. Mr. Rogers has shown visual benefits to crop growth and intends to take soil samples to ascertain benefits to the soil. Mr. Rogers predicts that with an improved composting process and without the food waste, any fly and rodent issues should be substantially reduced.

Mr. Rogers indicated that he will seek to minimize soil erosion on his property. The addition of compost and organic matter to soil will help retain water on-site. Department staff observed that it appears that most of the erosion occurred on the portion of the property that is adjacent to New Ground Road, and that this is due to slope and the natural flow of surface water.

The Farm neighbors have complained about the use of heavy equipment. There has not been any documentation supporting any bodily harm or property damage off-farm resulting from the use of heavy equipment.

3. The addition of compost is a reasonable and supportable method for the current use of the land for crop production and for its transition to certified organic. The academic literature reviewed extolls the benefits of composting organic waste products, adding the material to the soil, and its beneficial use for crop production. Composting reuses waste products, adds nutrients to the soil, helps hold water for plant uptake, reduces soil temperature, promotes the growth of microorganisms and helps to control weeds. The addition of compost to soil is particularly important for organic farmers.

The use of heavy equipment "off" hours is a reasonable and supportable method for crop production. Farm operations customarily use heavy equipment during evening hours, on weekends and on holidays. Farms must conduct work when they have the time, labor and equipment to accomplish the task.

4. The production and addition of compost to the soil is necessary to improve soil health and to transition the land to qualify to be organic certified. For a property of this size, composting of carbon-based materials will be a recurring, annual process to increase soil health, improve productivity and to replace the use of chemical fertilizers. Heavy equipment is necessary for the management and land application of composted material. Mr. Rogers has stated that he is committed to managing the compost so that the odor is minimized. Odor will be produced when compost is turned but should be substantially reduced in a matter of days.

CONCLUSION

Based on the information and findings set forth above and in accordance with Section 308 of the Agriculture and Markets Law, I conclude that the agricultural practices related to the composting of horse manure, bedding, and grass clippings and its application to farmland as a beneficial soil amendment, as described above, are sound.

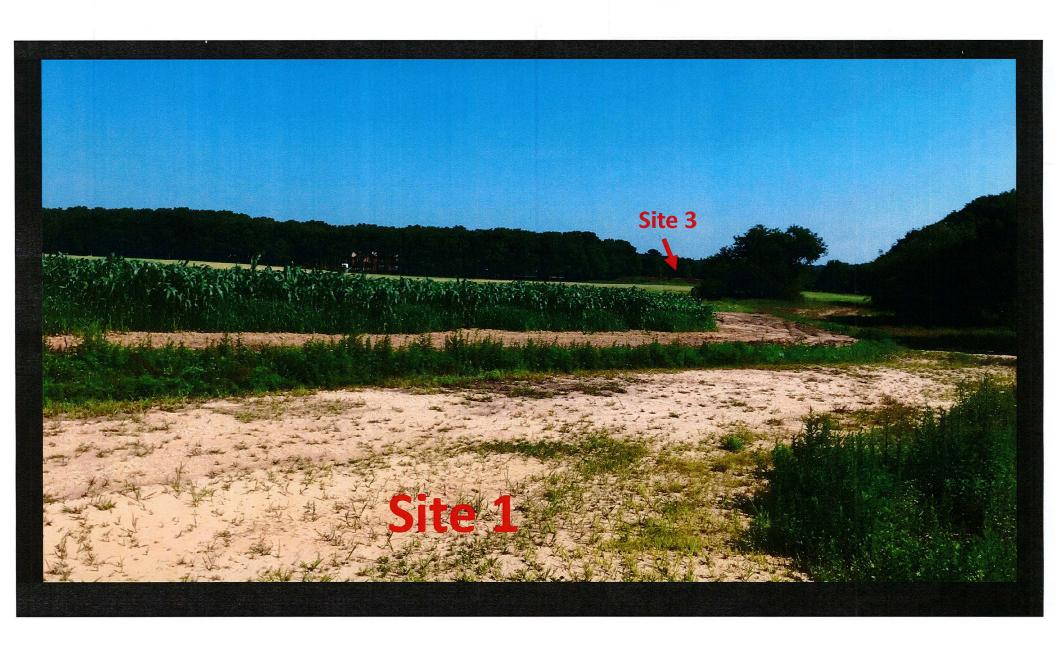
RICHARD A. BALL

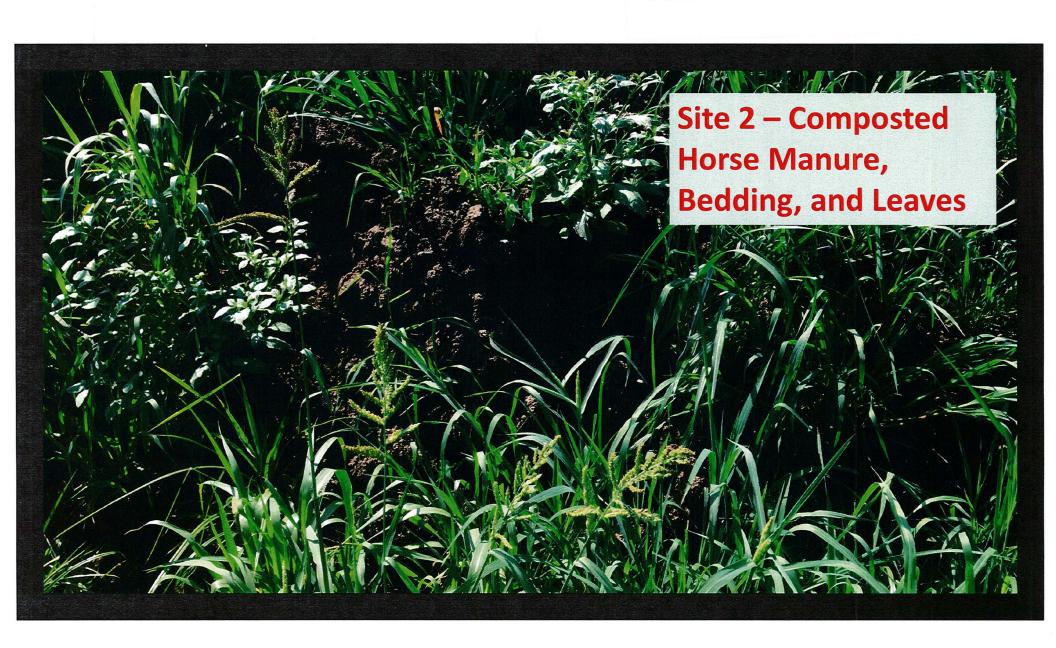
Commissioner of Agriculture and

Markets















Rogers SAP Opinion

This image is taken from the north west corner of the parcel, looking over the 3.5 acre field that is parallel to Blank Lane. You can see a divider strip between that field and the larger field which is planted in the opposite direction. As you look at the larger field, you can clearly see the line delineating the treated area from the untreated area. The 3.5 acre field was treated with compost. Therefore, its deeper green color matches the treated section of the larger field.



Rogers SAP Opinion

The image was taken adjacent to the field. The area to the left is untreated and the area to the right is treated. The wheat in the foreground on the right is not as vigorous as the wheat further back. The area in the foreground is where the manure spreader ran out of material

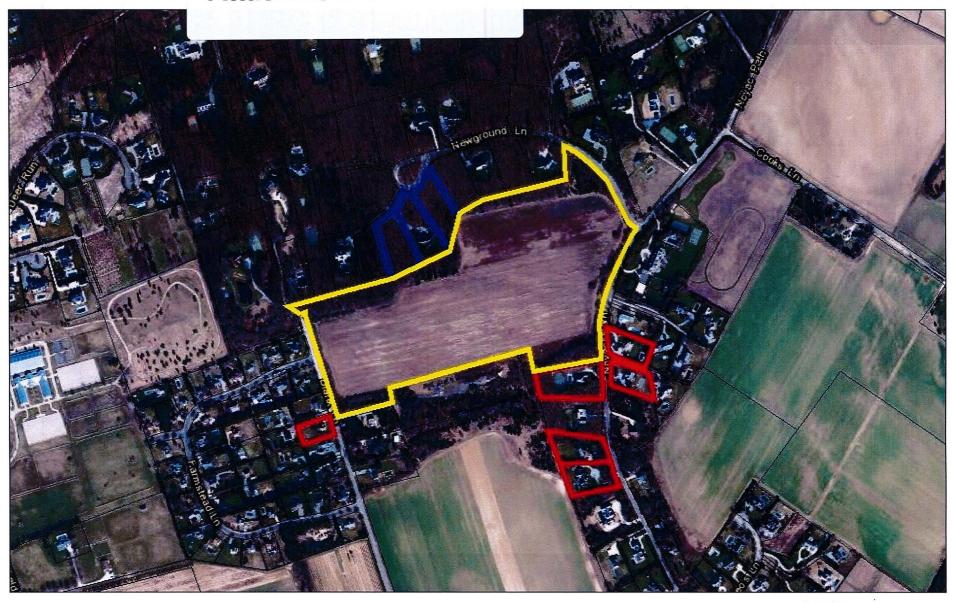


Rogers SAP Opinion

This image was taken from the strip dividing the two fields, but looking in the same direction as photo 2. Again, the line between treated and untreated is very clear.

To summarize, it is obvious from a visual standpoint that the composted material provides instant benefits to soil health. If the farm had not stopped bringing grass clippings to the New Ground field, twice the amount of material and would have been available, treating another 8 acres. The farm intends to resume composting on the property in the summer of 2020, with improved practices to significantly reduce odors.





Suffolk County Parcel Boundaries

