SOUND AGRICULTURAL PRACTICE
Opinion Number 01-5

SUBJECT: Request for an opinion pursuant to Section 308 of the Agriculture and Markets Law as to the soundness of certain agricultural practices conducted by David Eagan, Esq., and Mary Ann McCaffrey, Town of East Hampton, Suffolk County.

REQUESTER: David E. Eagan, Esq. and Mary Ann McCaffrey
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Preliminary Statement

By letter, dated December 8, 2000, David Eagan, Esq., requested that the Department review the soundness of agricultural practices on a horse farm, which he owns and operates with his wife Mary Ann McCaffrey. Mr. Eagan requested that the Commissioner issue an opinion as to the soundness of several practices on the farm, known as "Kilmore", including the use of a concrete structure to temporarily store horse manure as it relates to odor and ground water quality; the weekly dragging of seven paddocks to breakup and disperse horse manure as it relates to odor, ground water quality, noise and dust; and the daily watering and dragging of an outdoor training ring to control dust and maintain the quality of the footing as it relates to dust and noise.

Pursuant to the request, the Department conducted a sound agricultural practice review of the horse boarding operation. On May 30, 2001, Robert Somers, Chief of the Department's Agricultural Protection Unit, visited Kilmore farm to gather information on its manure handling and dust control practices.

Information Considered in Support of the Opinion

1. David Eagan and Mary Ann McCaffrey own Kilmore, a horse boarding farm operation, where they board, breed, raise and train up to 15 horses. The farm is located on a 14.2-acre agricultural reserve parcel in the Town of East Hampton, Suffolk County. The facilities on the farm include a 9-stall barn, an equipment barn, a horse shelter, an indoor training building, an outdoor training area, a concrete manure storage bin, 7 paddocks and perimeter fencing. According to Department records, the farm is in Suffolk County Agricultural District No. 5, which was recertified on or about February 7, 1995.

2. Mr. Eagan indicates that the farm is operated pursuant to and in accordance with a Site Plan Approval and Special Permit dated October 14, 1998 issued by the Planning Board of the Town of East Hampton. The property is burdened by an

agricultural easement in gross in favor of the Town of East Hampton. Only permitted agricultural activities within the meaning of the agricultural easement may be undertaken on the parcel. The Town has determined that the operation of a horse farm is a permitted agricultural activity under the easement. According to a clerk in the Town Assessor's Office, the property is subject to an agricultural assessment. The farm meets the requirements to be considered a "commercial horse boarding operation" pursuant to AML §301, subdivision 13.

3. In the "Findings of Fact" section of the Site Plan/Special Permit Approval for Kilmore, the Town of East Hampton restricted the number of horses to 15 and required multiple paddocks to be used in rotation to prevent the overgrazing of pastureland and thus, reduce the potential to create dust. The Town also required the construction of a manure storage bin to prevent groundwater contamination and the biweekly removal of such material to control odors. During the Town's review of the site plan, additional landscaping was requested and the placement of farm buildings on the land was adjusted. The buildings are located on the northern end of the property to minimize disturbance to prime farm soils and to minimize the visual and noise impact of the farm on adjacent residential lots. The Town stated that this land has always been used for agricultural purposes and concluded that a horse farm is more benign than traditional production agriculture because fewer chemical inputs are required and the amount of dust generated is less than found on crop farms.

4. The farm is surrounded on the north and south by single family homes, to the east by farmland and to the west by brush, shrubs and trees. Most of the farming within the area is used to produce vegetables and row crops. Several vineyards are located near the farm. A good breeze exists due to the parcel's proximity to the ocean. The ocean is a little more than a mile south of the farm.

5. There are seven paddocks on the farm ranging in size from 14,400 square feet (approximately 1/3 of an acre) to 21,600 square feet (approximately 1/2 of an acre). Six of the seven paddocks are a little less than 1/3 of an acre in size. A four and one-half foot high fence defines each paddock. The posts are constructed of a special type of plastic that is designed to hold a flexible fence planking that is embedded with high tensile wire (three strands). The fencing provides flexibility to minimize injury to the horses. An exterior fence that is offset 10 feet from the property line, as required by the Town, surrounds the farmed area.

6. Mr. Eagan stated that as required by the Special Permit, all manure and shavings are removed daily from the nine stalls in the horse barn and are stored in the temporary manure storage bin. He indicated that the manure and shavings are removed twice a week from the storage bin, loaded into a dump truck by a front-end loader and taken to the Town of East Hampton's recycling facility where it is used to produce compost.

7. The temporary manure storage bin is approximately 70 square feet and is constructed out of concrete. The pad has a four-foot concrete apron and a retractable cover. Mr. Eagan stated in his letter that the area immediately adjacent to the storage bin is raked as required. He stated that the design of the storage bin was reviewed by the Suffolk County Cornell Cooperative Extension Program in connection with their Manure Disposal Program and approved by the Town of East Hampton Planning Board.

8. Mr. Eagan explained in his letter that the nine horses housed in the barn are turned out in six turnout paddocks daily for grazing. The horses are rotated among the six paddocks, typically staying in the paddock four hours per day. One horse and one pony live in a larger paddock, which also contains a run-in shed. Mr. Eagan stated that the paddocks are mowed as needed. The paddocks are overseeded and limed annually and are dragged at least once a week. Dragging is accomplished using a tractor and a six by six-foot harrow to break up any manure in the paddocks. The manure serves as an organic fertilizer to the grass.

9. The farm operation has both indoor and outdoor training facilities. Mr. Eagan indicated that the footing of the outdoor training ring is composed of a base layer of maul and crushed blue stone, followed by layers of sand and topped with a layer of a processed product made of recycled tire treads to help prevent injury to the horses. The outdoor training ring is watered twice a day, to reduce dust. Watering is accomplished using automatic sprinkler heads that are located around the perimeter of the ring. The outdoor training ring is dragged daily with a six by six foot piece of chain linked fence which is pulled by a tractor. Mr. Eagan explained that the dragging redistributes the footing evenly, removes indentations caused by the horses and helps promote proper drainage.

10. On May 30, 2001 Dr. Somers visited Kilmore to observe the practices described in Mr. Eagan's December 8th letter to determine if any of the activities had changed. He met Ms. McCaffrey at the farm to review the operation. During Dr. Somers' field visit, the stalls were being cleaned and the manure/shavings were placed within the confines of the storage bin. It appeared that the manure in the storage bin had been removed and deposited off the farm. Upon inspection, he did not observe any manure lying outside of the storage bin. Dr. Somers did not detect any noticeable odor. Ms. McCaffrey indicated that lime was sprinkled regularly on the stored manure. It appeared that the bin's covering would adequately protect the manure/shavings during storm events and prevent the material from leaving the confines of the storage facility. Upon inspection, the paddocks were well vegetated. An accumulation of manure was not evident in any of the paddocks. Dr. Somers did not observe any bare spots on the farm other than for small areas in the paddocks where the horses tended to roll.

11. The Department mailed a letter to 13 landowners adjacent to Kilmore notifying them of the agricultural practice review and inviting them to comment on the practice. The Department received one response on October 11, 2001 from Ms. Leslie Mandel-Herzog.

12. In her letter Ms. Mandel-Herzog stated that she and her husband live on the northern border of the farm and they live in fear because they are concerned with the possibility of a barn fire. She states that a sprinkler system has not been installed in the barn or haylofts and the area is known for lightening strikes. Ms. Mandel-Herzog stated that she can see the training ring and seven paddocks and she has not observed daily watering and the dragging of the outdoor ring or the dragging of the seven paddocks.

13. On August 30, 2001 Dr. Somers contacted Mike Desgaines to discuss the manure handling facility located at Kilmore. Mr. Desgaines helped design the manure holding facility when he was employed as a composting/waste management specialist with the Suffolk County Cooperative Extension (CCE). Mr. Desgaines indicated that the Town of East Hampton provided the farm owners with the design of a manure management facility that they wanted installed on the farm. Mr. Desgaines indicated that the suggested facility was designed to handle large amounts of manure, such as that produced on a dairy facility. Mr. Desgaines stated that he worked with the Town and the landowner to design a facility that would meet the intent of the Town; i.e., be large enough to temporarily hold manure generated on the farm and prevent the manure and/or runoff from reaching the soil surface. A compromise facility was designed by Mr. Desgaines and approved by the Town of East Hampton.

14. In Connecticut, a coalition of federal, state and local agencies, organizations and individuals interested in educating horse operations on Best Management Practices (BMPs) to protect the environment formed a group called the Horse Environmental Awareness Program (HEAP). The USDA Natural Resources Conservation Service, the Connecticut Soil and Water Conservation Districts, the Connecticut Department of Environmental Protection, the Connecticut Cooperative Extension, and others, are members of the Connecticut based coalition. They recommend proper disposal of the manure if the owner does not have sufficient fields on which to spread the material. One of the recommended alternatives to land spreading is taking the manure to a composting facility in the area.

15. HEAP also provides a guide for the management of pastures which, when followed, will minimize environmental impacts and prevent soil and manure from moving into waterbodies; improve property aesthetics for good neighbor relations; and provide feed and recreation to the owner's horses. HEAP recommends that equine owners rotate and rest pastures; graze and/or mow pastures to maintain healthy grass growth and minimize the presence of weeds; protect pastures from hooves during

vulnerable times, such as when the soil is wet; drag or chain harrow pastures as needed to break up and spread manure piles to accelerate decomposition; and utilize an exercise lot, corral or paddock to conserve pasture use.

Findings

Based upon the facts, information and circumstances described above, and in consultation with the Advisory Council on Agriculture; the New York State Department of Environmental Conservation; the New York State College of Agriculture and Life Sciences at Cornell; the USDA Natural Resources Conservation Service; and the Sound Agricultural Practices Guidelines[1] by which agricultural practices are evaluated, I find the following:

1. The Department has found no evidence or received other information indicating that Mr. Eagan and Ms. McCaffrey have been cited for any violation of federal, state or local law as a result of the practices performed on the farm.

2. The temporary manure storage facility was designed to hold the manure from the 9-stall horse barn and indoor riding ring. The floor of the facility is made of concrete and an apron exists to contain spillage. A tarp is used to cover the manure facility to prevent stormwater from mixing with the manure. A composting/waste management specialist, hired by the County to assist farmers and towns with these issues, designed the facility. The Town approved the facility's location and design. The manure holding facility was constructed on the property so that it was not located near any residences. The amount of odor, if any, from this facility is minimal. The concrete pad, apron and tarp reduces the likelihood that the manure will come in contact with the ground's surface and pollute groundwater.

3. The weekly dragging of the paddocks is a practice suggested by HEAP as a Best Management Practice to accelerate the decomposition rate of manure in the paddocks. Horses are also kept in the turnout paddocks for only four hours a day, which minimizes the amount of manure deposited in the paddocks. The landowner rotates the use of the paddocks, as suggested by HEAP, to keep the paddocks from being overgrazed, and mows the paddocks, as needed, to maintain vigorous grass growth. The paddocks are overseeded and limed annually to maintain grass cover. The presence of grass within the paddocks and throughout the farm minimizes dust

[1] 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.

and noise generated by the animals. Nutrients in the manure are taken up and used by the grass, which helps minimize any risk to groundwater contamination.

4. The outdoor training ring was designed to accommodate the training of horses and maintain good hoof health. The equipment needed to spray down the ring was present and is used, as needed, to control dust. The facility is also offset from the property line, as required by the Town, to minimize noise that could be heard by adjoining residences.

5. The farm was constructed, and is operated pursuant to specifications set forth in a Site Plan and Special Permit approved by the Town Planning Board. In the Site Plan/Special Permit Approval the Town Planning Board concluded that the ecological impacts of the farm are likely to be minimal. The Planning Board also concluded that the terms of the Site Plan and Special Permit incorporated all reasonable measures for the protection of neighboring properties.

6. Although Ms. Mandel-Herzog stated in her letter that she did not observe the daily watering and dragging of the outdoor training ring, the equipment needed to water and drag the ring was present and the Department has found no evidence or received other information indicating that the outdoor training ring was not being watered and dragged regularly. The comments of Ms. Mandel-Herzog regarding the absence of sprinklers in the barn are not relevant to the evaluation of practices reviewed for this opinion.

Conclusion

Based on the foregoing and in accordance with Section 308 of the Agriculture and Markets Law, I conclude that the use of a concrete structure to temporarily store horse manure as it relates to odor and ground water quality; the farm's paddock maintenance practices including the weekly dragging of the paddocks to break up and disperse horse manure, rotating the use of the paddocks, and mowing, overseeding and liming the paddocks to maintain grass cover, as they relate to odor, ground water quality, noise and dust; and the daily watering and dragging of an outdoor training ring to control dust and maintain the quality of the footing as it relates to dust and noise, as conducted on Kilmore, are sound.

04/17/02
Date

Nathan L. Rudgers
Commissioner