August 2, 2002

To: James Yates

Director, Land Preservationm, Gloucester County

From: Marci D. Green

Chief of Legal Affairs, SADC

Subject: Chiulli/Right to Farm Hearing

South Harrison Township, Gloucester County

Enclosed please find the SADC's hearing report for the above-referenced matter. The SADC adopted the report at its July 25, 2002 meeting. Its action, however, is not effective until the Governor's review period expires pursuant to N.J.S.A. 4:1C-4f.

c: Louis and Donna Chiulli
David C. Frank, Esq.
Mike and Janet Toomey
Robert and Charlotte Gaines

State Agriculture Development Committee Right to Farm Conflict Resolution

Hearing Report

Re:

Chiulli

Township of South Harrison, Gloucester County

Aggrieved Parties: Louis and Diane Madonia

Mike and Janet Toomey Robert and Charlotte Gaines

Date of Hearing: June 13, 2002

Background

pasture.

Louis and Donna Chiulli operate a small beef cattle farm in South Harrison Township, Gloucester County. They own and farm 150.76 acres and lease an additional 30 acres of land. The land is divided into an 8.76 acre parcel, which Mr. Chiulli refers to as the "home farm," and a 142 acre parcel which is preserved under the County and State's farmland preservation program ("preserved farm"). The home farm contains the Chiullis' residence, a barn, pasture area (three acres), and cropland (six acres of hayfields). According to their 2001 farmland assessment application, the Chiullis have an average of 24 beef cattle on the home farm. (As described below, Mr. Chiulli testified at the hearing that they currently have 20 head of beef cattle, although this fact was disputed by the Neighbors.) On the preserved farm, the Chiullis have approximately 99 acres of cropland (hay, oats, rye, soybeans and wheat) and three acres of permanent

Three houses separate the home farm from the preserved farm. The neighbors who reside in these houses are Robert and Charlotte Gaines, Louis and Diane Madonia, and Mike and Janet Toomey (referred to collectively as "the Neighbors").

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On October 17, 2002, the Gloucester County Agriculture Development Board (GCADB) received a request for mediation dated September 24, 2001 from the Neighbors. (Exhibit S1). The request alleges that Mr. Chiulli's manure management practices created a fly infestation problem on their properties. The Neighbors contend that Mr. Chiulli did not remove the manure generated by his cows and that this negligence created their fly problem. They also allege that the Chiullis are in violation of various provisions of State health statutes.

A mediation was held in October 2002, but the parties could not reach agreement. On October 29, 2001, Louis and Donna Chiulli sent a letter to the GCADB and the SADC expressing his frustration at the Neighbors' complaints. (Exhibit S2).

SADC staff conducted a site visit to the Chiullis' farm on March 25, 2001 and photographed the operation. (Exhibits S5and S6). Pursuant to the N.J.S.A. 4:1C-10.15b, the SADC scheduled a public hearing for June 13, 2002 and notified the Neighbors, Mr. and Mrs. Madonias' attorney, David C. Frank, Esq., and the Chiullis by letter dated May 22, 2002.

Issue

The issue before the SADC is whether the Chiullis' beef cattle operation and manure management practices conform to generally accepted agricultural practices.

Summary of Relevant Facts

A hearing was held at the New Jersey Department of Agriculture on June 13, 2002. Mr. and Mrs. Madonia were represented by David C. Frank, Esq. Louis and Diane Madonia and Robert and Charlotte Gaines attended the hearing; the Toomeys did not. Louis and Donna Chiulli were present. Sherry

Dudas and Charles Roohr, Right to Farm Program Specialists, also attended the hearing.

A. <u>The Neighbors' Testimony</u>

1. Louis and Diane Madonia

Mr. and Mrs. Madonia testified that manure accumulates on the Chiullis' property and that Mr. Chiulli does not remove it regularly. They contended that the manure pile has accumulated, uncovered, at times for up to nine months before Mr. Chiulli removed it. They described the pile as eight to ten feet wide, 20 feet long and six to eight feet high. They testified that sometimes Mr. Chiulli hauls the manure offsite and other times spreads it on his field. Mr. and Mrs. Madonia contend that Mr. Chiulli has over 30 cows confined within a two-acre pasture area.

Mr. and Mrs. Madonia produced six photographs taken in 2001; five of their outdoor deck and one of their air conditioner. (Exhibits C1 to C6). All of the photographs show what appear to be flies scattered on the deck and air conditioner. Mrs. Madonia testified that she counted 41 flies on the deck railing in the picture that has been identified as C4.

The Madonias also produced 12 digital photographs of their house taken in 2001, (Exhibits C7 to C11 and C13 to C19), and one digital photograph of the Toomeys' house (C12). The photographs show what the Madonias allege to be fly "droppings" throughout the interior and exterior of their house to substantiate their claim that their property has been infested with flies. The Madonias attribute the flies to the Chiullis' manure pile and failure to remove the manure in a timely manner, as well as the overcrowding of cows in a small area. Mr. Madonia testified that "common sense tells you the flies are coming from the manure." He also noted that there is no septic problem in the area that could have caused the fly infestation.

Mr. Madonia gave examples of the severity of the fly problem. He stated that if he washes his car, two days later there are fly droppings all over the car; that if he walks outside, the flies "swarm" on him; that when he walks his dog, 15 to 20 flies will land on the dog. He stated that the fly problem began two and a half years to three years ago, contemporaneously with the growth of Mr. Chiulli's cattle operation. Mr. Madonia conceded that he does not expect the flies to be completely eradicated. He understands that there will be insects when you live "in the country," however he adamantly believes that there are too many flies in and around his house. He testified that the Neighbors would like a reduction in the amount of flies.

When asked whether he believes that the flies could be coming from the farm adjacent to the Chiullis' home farm, on which sheep and goat are raised, he stated that he did not believe so because the Chiullis' property is closer to his property than the sheep and goat farm, and because he has not seen a goat manure pile.

Mr. Madonia admitted that the flies have not been as bad "so far" this year. He attributed the improvement to the fact that Mr. Chiulli has been removing the manure more often than he did last year.

The Madonias produced a videotape they took of the Chiullis' farm from December 2001 through March 2002. The videotape depicted Mr. Chiulli moving manure around and scraping manure from the barn into a pile outside the barn. It also showed flies landing on the Madonias' dog.

2. Robert and Charlotte Gaines

Mr. Gaines testified that he has lived in his house for 19 years and had cows for 12 of those 19 years. He has not had cows for the past three years and when he had cows, he admitted to having a "little" fly problem. The last couple of years, he testified, the fly problem has gotten progressively worse. He believes

there are too many animals on Mr. Chiulli's property and that last July there was no grass on Mr. Chiulli's pasture, evidencing too many animals for the property. Mr. Gaines believes that there have been greater than 35 cattle at one time.

3. Mike and Janet Toomey

Mr. and Mrs. Toomey submitted a letter stating that they would be unable to attend the hearing. (Exhibit C20). Their letter set forth their frustration and concern about the "fly situation." It stated in part that the flies are everywhere and that they are concerned that their children will get sick from the infestation.

B. <u>Chiullis' Testimony</u>

Mr. Chiulli began his testimony by challenging the veracity of the digital photographs produced by the Neighbors. He provided four photographs (R1 through R4), showing his pasture in front of the Madonias' house (R1, R2, and R3) and the sheep and goat farm adjacent to his farm (R4).

Mr. Chiulli stated that he has never had more than 26 head of cattle. Mrs. Chiulli stated that the barn and manure pile are closer to their house than they are to the Neighbors' houses and that they have never had a fly problem like that described by the Neighbors. Mr. Chiulli testified that he has been removing the manure every four months since he has owned the property. He explained that he used to pay a hauler to remove the manure, but that last summer he purchased his own loader and manure spreader and now removes and incorporates the manure onto the fields himself. He explained that he scrapes the manure from the barn and lets it accumulate for up to three to four months, and then removes it to the preserved farm, where it is eventually incorporated into the fields or used as a top dress on the hayfield. He currently removes the scraped manure every three to four months to the preserved farm and stockpiles it on that parcel.

Mr. Chiulli testified that the manure pile is not solid manure; it contains a significant amount of hay and straw. He explained that once the manure is scraped, he always covers the pile with lime to reduce odor and fly habitat. He testified that he does not have a fly problem and that other neighbors do not have fly problems.

Mr. Chiulli provided a timeline for his recent manure removal: on April 21, 2001, he removed the manure and spread it and incorporated it on and into the soil on the preserved parcel; on October 25, 2001, he incorporated the manure into the soil on the preserved parcel and plowed it under; on January 26, 2002, he removed the manure and top dressed the hayfields with it; on March 20, 2002, he scraped the manure and incorporated it into the fields sometime thereafter.

Mr. Chiulli testified that he has a fly management program for the cattle which involves dust bags. Dust bags are burlap bags that contain a fly repellent which the cattle brush against to dust themselves.

He also stated that he requested a farm conservation plan from the Gloucester Soil Conservation District. A representative from that office visited his property and suggested a plan. Mr. Chiulli testified that the Soil Conservation District office advised him that they have a backlog of plans and that he might have to wait two years before he receives it in writing. He testified that the plan addresses manure management, and that he has begun to implement the plan.

Mr. Chiulli mentioned that he consulted with the New Jersey Department of Environmental Protection with respect to where he should store the manure on the preserved farm. It appears that DEP informally advised him of a location on the preserved farm, where the manure storage would cause the least amount of environmental disturbance.

Mr. Chiulli contended that the Neighbors' complaints about flies were "total exaggeration." He testified that County health officials inspected his property and did not find a fly problem.

He also mentioned that he is seeking organic certification from the Northeast Organic Farming Association (NOFA) and hence, manure is his only source of fertilizer for a portion of the preserved farm. Mr. Chiulli stated that the organic standards require that manure be stockpiled for six months before it is applied. Upon questioning, he also stated that he is composting his soil to meet organic standards.

On June 19, 2002, Mr. Chiulli sent a letter stating that "the tapes which the Madonias produced at the June 13th hearing were selectively edited and do not remotely depict the true practices on my farm." (Exhibit R5).

D. SADC Site Inspection

On March 25, 2002, Charles Roohr inspected the Chiullis' farm. (Exhibits S4 and S5). Mr. Roohr observed that there were 20 head of cattle on the farm. During this visit, Mr. Chiulli stated that he had sold eight head around December 2001. Mr. Roohr observed grassy areas in the barnyard. He also observed that the manure pile contained a "good percentage" of dry matter in the form of hay and straw and that the pile had a light coating of lime over it. Mr. Roohr did not detect any odors until he was standing immediately adjacent to the manure pile. Mr. Roohr also observed that there were three to four acres of sheep, goats and geese on the property immediately adjacent to Mr. Chiulli's property.

3. <u>Industry Standards</u>

New Jersey does not have any regulations, written standards or guidelines governing beef cattle manure management. Thus, to ascertain whether Mr. Chiulli's beef cattle operation and manure management practices conform to

generally accepted practices in New Jersey, SADC staff consulted various agricultural and soil conservation experts in New Jersey, some of whom have inspected the Chiulli farm on more than one occasion. SADC staff also consulted the Pennsylvania standards for beef cattle manure management.

David Lee, the Salem County Rutgers Extension Agent visited Mr. Chiulli's property on more than one occasion this year. Mr. Lee does not believe that there is overcrowding of cattle on the property. He observed that there was sufficient feeder space, water space and exercise space. He also observed that some grass remained on the area where the cattle were kept, indicating adequate space. Mr. Lee informed the SADC that the cattle operation and manure management were consistent with that of other small beef operations throughout the State and that the conditions at this farm were as good or better than most operations of this size. Mr. Lee indicated that despite the fact that a farm is kept well, flies and manure will always be generated from any area with livestock. (Exhibit S7).

Charlie Miller, Dairy Specialist at the New Jersey Farm Bureau, also inspected the Chiullis' farm on more than one occasion this year. He shares Mr. Lee's opinion that the agricultural practices of Mr. Chiulli are consistent with other small beef cattle operations in New Jersey. Mr. Miller visited the site during a heat wave in June 2002 and found the amount of flies present to be no greater than what would be normally expected at a livestock operation. Mr. Miller also observed that there was an adequate amount of dust bags and that there were very few flies on the cattle. It is Mr. Miller's opinion that "there is a strong likelihood" that the 50 goats next to the Chiullis' farm are as responsible as the Chiullis' cattle for the flies on the Neighbors' properties. Although Mr. Miller believes that the manure stockpile conforms with generally accepted agricultural practices in New Jersey, he suggested that if Mr. Chiulli placed a tarp over the

manure pile, it would keep the manure drier, which may reduce the number of flies generated. Mr. Miller also noted that there were no signs of overcrowding and that the cattle appeared to be "happy and healthy."

SADC staff also consulted with the Hunterdon County office of the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) regarding acceptable lengths of time for stockpiling manure. The NRCS provides cost share grants to farmers for manure storage systems and designs the systems. Ciro LoPinto, a soil conservationist, advised that the optimal length of storage is six months. He said that NRCS does not design or cost share on systems that allow for less than three months' storage. According to Mr. LoPinto, NRCS prefers a four to six month storage plan, because storage for that time period allows the farmer some flexibility in spreading manure if a crop harvest has been delayed or if weather conditions do not allow for environmentally sound manure spreading.

Nicole Ciccaglione of the Gloucester Soil Conservation District Office confirmed that Mr. Chiulli applied for a farm conservation plan and also confirmed that the plan has not been put in writing due to a backlog in the office. When asked whether the plan will address manure management, she stated that it will address the spreading of the manure but would not address the length of time manure may be stockpiled. She said that the plan could, however, recommend construction of a dry stack facility to contain the manure, which typically consists of a concrete floor with timber sidewalls and roof. When asked whether this would reduce the number of flies generated by the manure, she stated that it would not – that it would only contain the manure and serve to keep rain off of the manure. Fran Vissalli of that office also stated that a farm conservation plan would not address how long manure can be stockpiled.

SADC staff contacted the Northeast Organic Farming Association to ascertain whether there are any organic farming standards related to the stockpiling of manure. Eric Bremmer of that office confirmed that Mr. Chiulli has submitted an application for organic certification. Mr. Bremmer advised that the new federal organic standards (which do not go into effect until October 2002) do not address stockpiling of manure, except to the extent that they prohibit stockpiling from contributing to degrading of soil, air and water quality. The standards only address the timeframe in which a crop can be harvested after manure has been applied. When asked whether Mr. Chiulli is composting his manure, Mr. Bremmer stated that the definition of composted manure in the federal organic regulations is "unworkable" and that it is highly unlikely that Mr. Chiulli is meeting this definition. He explained that to meet the definition, the manure has to be maintained at a temperature between 131 and 170 degrees for 15 days and must be turned five times within those 15 days. Mr. Bremmer also clarified that organic standards do not require that manure be stockpiled for six months prior to use as a fertilizer.

As stated above, New Jersey does not have written guidelines or environmental regulations addressing the stockpiling of manure. The Pennsylvania Department of Environmental Protection, however, has published a guide entitled "Beef Manure Management" which states that "at least six months storage of manure is needed for maximum fertilizer benefits and for flexibility in timing manure application to fields."

There are also no standards in New Jersey regarding the acceptable number of cattle per acre. According to Mr. Miller, various factors are considered, including the weight of the animals, whether they are pasture fed, whether there are calves present, and the time of the year. Based upon their observations of Mr. Chiulli's farm and their experience with similarly-sized

operations in the State, Mr. Lee and Mr. Miller do not believe that Mr. Chiulli has too many cattle.

4. <u>Health Issues and Municipal Standards</u>

As stated above, the Neighbors allege various violations of State health statutes. Specifically, they allege that Mr. Chiulli's manure management is in violation of N.J.S.A. 26:3-31f, N.J.S.A. 26:3B-5, and N.J.S.A. 26:3B-7. The Gloucester County Board of Health inspected the Chiullis' property after receiving complaints from the Neighbors, and found that there were no violations of public health laws.

The first statute cited by the Neighbors is a provision of the Local Boards of Health statute, N.J.S.A. 26:3-1 et seq. which authorizes the local board of health to regulate, control, and prohibit the accumulation of offal and any decaying or vegetable substance. N.J.S.A. 26:3-31f. The Neighbors also claim that the Chiullis have violated the Nuisances Affecting Health statute, N.J.S.A. 26:3B-1 et seq., specifically, the provisions prohibiting the "accumulation of animal or vegetable matter in which fly larvae exist," and the "accumulation of filth or source of foulness which is hazardous to the health or comfort of any of the inhabitants of this State." N.J.S.A. 26:3B-5 and 7.

The Chiullis are not in violation of the Local Boards of Health statute as that law merely gives the local boards of health authority over public health matters. With respect to the Nuisances Affecting Health statute, the SADC relies upon the conclusion of the Gloucester County Board of Health that there were no public health violations on the Chiulli property.

The SADC obtained the reports prepared by the Gloucester County Department of Health regarding the Chiullis' farm. (Exhibit S8). The Department of Health inspected the farm and the Toomey and Madonia properties on July 24, 2001, July 25, 2001, May 8, 2001 and August 28, 2001 as a result of complaints

filed by neighbors. After each inspection, the health inspector concluded that there was insufficient evidence to link the Neighbors' fly problems to the Chiullis' manure pile and cattle, and recommended that no further action be taken by the Department of Health. In the July 25, 2002 report the health inspector confirmed that there was fly fecal matter on the exterior surface of the Toomey and Madonia residences. The reports note that the manure on the Chiullis' farm appeared dry with no odors or "significant" amount of flies. The July 25 and May 8 reports note that goats and sheep were present on the farm adjacent to the Chiulli farm. The May 8 report concludes that

no direct link could be established to say that these flies come from the manure and only the pile as there are other existing agricultural uses within the site of complainants property.

With respect to local zoning ordinances, the Zoning Officer of South Harrison Township submitted a letter stating that there are no ordinances regarding the number of sheep, cows, or llamas a landowner can keep on his property. (Exhibit S9).

4. Legal Issues Raised by the Neighbors

At the hearing, Mr. Frank, challenged whether the storage of manure disposal is a protected activity under the Right to Farm Act (Act), N.J.S.A. 4:1C-1 et seq. Mr. Frank argued that the Act specifically protects the on-site <u>disposal</u> of organic agricultural wastes, but does not specifically protect the on-site <u>storage</u> of organic agricultural wastes. N.J.S.A. 4:1C-9g. The SADC rejects this argument, as manure management is an integral component of livestock production, which the Act explicitly protects. N.J.S.A. 4:1C-9a.

Mr. Frank also questioned the appropriateness of the SADC approving a site specific agriculture management practice regarding manure storage in light of the New Jersey Aquaculture Development Act, which directs the New Jersey Department of Agriculture to promulgate a comprehensive animal waste management program pursuant to the Administrative Procedure Act, N.J.S.A. 52:14b-1 et seg. N.J.S.A. 4:27-19. The Aquaculture Act states that the animal waste management program shall include, but not be limited to, criteria and standards for the composting, handling, storage, processing, utilization, and disposal of animal wastes. Ibid. Although the Legislature enacted this Act in 1997, the Department has not yet promulgated such a program. In the absence of such regulations, it is appropriate for the SADC to determine whether Mr. Chiulli's manure management practices conform with generally accepted agricultural management practices. (It should also be noted that the procedure before the SADC is not the recommendation of a "site specific agricultural management practice," but rather a determination made pursuant to the conflict resolution provisions of the Right to Farm Act, N.J.S.A. 4:1C-10.1c)

5. Conclusions and Determination

Based upon the industry standards set forth above, it appears that Mr. Chiulli's manure management practices conform to those that are generally accepted in the industry. Those standards indicate that it is acceptable to store manure for at least six months. For small beef cattle operations such as Mr. Chiulli's, it is generally accepted in New Jersey to leave the manure piles uncovered.

Furthermore, while the testimony established that the Neighbors' properties were infested with flies last year, the testimony and expert opinion did not establish a definitive link between the Neighbors' flies and Mr. Chiulli's cattle and manure. While all of the experts with whom the SADC consulted agreed that

Mr. Chiulli's operation has most probably contributed to the flies on the Neighbors' property, they also opined that his operation is probably not the sole cause of the fly infestation. They, and Mr. Chiulli, believe the goat and sheep farm adjacent to the Chiulli farm also contributes to fly breeding in the area.

With regard to the frequency of the manure removal, Mr. Chiulli testified that he has been removing the manure every four months. Although his testimony did not entirely support this assertion (e.g., he testified that he removed the manure in April 2001 and then six months later in October 2001, and he did not provide specific testimony regarding removal prior to 2001), it does appear that he has been removing the manure at least every four months this year. Given that it is acceptable to store manure for at least six months, the frequency of Mr. Chiulli's manure storage conforms to generally accepted practices.

The optimal lengths of time for manure storage recommended by the NRCS and the Pennsylvania Beef Manure Management guide is four to six months and a minimum of six months, respectively. It should be noted that those timeframes are based upon the manure's optimal use as fertilizer and are not based upon environmental or fly habitat reduction principles. Nonetheless, if the manure's effectiveness increases with storage time, it follows that the generally accepted practice is to store manure for periods up to or greater than six months.

The experts agree, however, that measures should be taken to reduce odor and fly breeding. Mr. Chiulli testified, and various inspections corroborated, that each time he adds manure to the pile, he applies lime to reduce odor and fly habitat. The lime expedites the breakdown of organic matter, reducing the amount of flies and odor. According to the various inspections conducted by industry experts and the SADC, the manure pile on Mr. Chiulli's farm was dry, was not generating abnormal odor, and was not generating excessive flies. It is

therefore reasonable to conclude that Mr. Chiulli is taking appropriate measures

to control fly habitat.1

The fact that Mr. Chiulli is currently removing the manure and stockpiling it

on the preserved farm, which is situated further from the Neighbors than the

current stockpile, should help reduce the flies on the Neighbors' property, if in

fact the flies are coming from the manure. Mr. Chiulli stated that he intends to

eventually move the cattle to the preserved farm so that all of the manure will be

generated, stored and applied on the preserved farm.

With respect to the number of cattle owned by Mr. Chiulli, it is the general

consensus of the agricultural experts with whom the SADC consulted that the

farm is not overpopulated with cattle.

I find that the Chiullis' beef cattle and manure management practices

conform to generally accepted agriculture management practices.

Date: July 25, 2002

Marci D. Green

Public Hearing Officer

State Agriculture Development Committee

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¹ Although the experts with whom the SADC consulted agree that Mr. Chiulli's beef cattle

operation and manure management practices are as good or better than other operations of its

size in New Jersey, it appears that the optimal manure management system would involve

applying hydrated lime and covering the pile with a tarp or containing it in a dry storage facility.

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