

## **Delta County Board of County Commissioners**

Hostetler Western Slope Layers Poultry Facility  
Special Development Application Hearing  
May 1, 2013

Expert Comments by:  
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I, Professor Kendall M. Thu, Ph.D., do hereby provide comments and accompanying supportive scientific documentation (Exhibits 1- 7) in response to the University of Georgia College of Agricultural Sciences publication entitled “Nuisance Myths and Poultry Farming.”

### **I. QUALIFICATIONS AND EXPERIENCE**

I am a Professor and Chair of the Department of Anthropology at Northern Illinois University. I have a Ph.D. in Anthropology with a specialty in agricultural practices. I am a Fellow in the Society for Applied Anthropology and have served as the editor of Culture and Agriculture. I served a two-year term on the National Agricultural Air Quality Task Force under U.S. Secretary of Agriculture Dan Glickman. My research includes nearly 50 publications in the scientific literature attending to the relationship between food systems and public, environmental, and social health with a particular focus on the impacts of concentrated animal feeding operations. My CV is attached (Exhibit 1).

### **II. UNIVERSITY OF GEORGIA COLLEGE OF AGRICULTURAL SCIENCES “NUSIANCE MYTHS AND POULTRY FARMING” PUBLICATION**

The University of Georgia publication entitled “Nuisance Myths and Poultry Farming” is not a scientifically valid document. It contains no references to scientific literature in the body of the text and no bibliography of scientific references at the end of the document. As such, it is a woefully inadequate document for policy purposes containing little more than a set of assertions without foundation.

The document asserts that rural residents are uniformed and intolerant to typical poultry farming practices. There is no evidence provided in support of this claim. The article attempts to characterize community concerns as “myths.” These assertions are made without mention of the peer reviewed scientific literature that documents the deleterious social, environmental, and public health consequences that concentrated animal feeding operations (CAFOs) have on communities (See Exhibits 2-7).

#### **a. Social Consequences**

Airborne emissions from CAFOs have significant social consequences by virtue of their serious impact on the quality of life of neighbors. These emissions are known to cause health problems and erode the quality of life for people living in proximity to them (Exhibits 2-4). Neighbors of these facilities, particularly children and the elderly, with pre-existing respiratory conditions including asthma, chronic bronchitis, and emphysema, will be at increased risk for health problems from emission exposures. Emissions from these types of facilities likely contain numerous volatile organic compounds. Poultry operations can emit pollutants such as ammonia, methane, hydrogen sulfide, trace gases, particulates, bioaerosols, and microorganisms (Exhibit 6). Subjecting neighbors living within a two-mile radius of CAFOs to such emissions will have a significant detrimental effect on their quality of

life. In addition, persons with pre-existing respiratory conditions, as well as children and the elderly, will be subject to health risks.

The University of Georgia claims zoning restrictions placed on poultry operations can cause a loss of both economic and social value to communities. There is no evidence cited for this assertion. CAFOs have documented negative impacts on surrounding communities. More than merely an unpleasant sensation, CAFO emissions can have life-altering consequences for denizens of rural communities who relish a way of life premised on enjoying the out-of-doors. Neighbors of CAFOs frequently share common views, values, expectations, and experiences concerning country living. Their lives revolve around centrally cherished life values consisting of family, friends, home, and faith. The ability to express these values through activities at their homes is centrally important to their quality of life. Their homes and property are their primary universe and as such the principal arena in which they experience and express their core values concerning family and friends.

The encroachment of a factory livestock facility near their homes and their properties is significantly disruptive of numerous individual activities and expectations of rural living. Moreover, it affects the most sacrosanct areas inherently important for their quality of life. The freedom and independence associated with life oriented toward outdoor living gives way to a sense of violation and infringement as activities associated with central dimensions of their lives are taken away. Children and grandchildren cannot experience the unfettered joy of outdoor life in the country - jumping on the trampoline, bicycling, playing in the pool, picking flowers and playing with bugs in the yard, and inviting friends over to play.

Additionally, parents become upset when their children are affected by odors, which in turn have a ripple effect creating frustration, anger, and family tensions. Social occasions when family and friends come together are affected either in actual practice or through disruption of plans or routines that normally provide social cohesion and a sense of neighborhood belonging - backyard barbecues, visits by friends and family. Their homes are no longer an extension of, nor a means for, enjoying the outdoors. Rather, their homes become a barrier against the outdoors that harbor intrusive odors. In short, the odor significantly infringes on their ability to enjoy their home, property, family, and lives. Their homes and property are intimately connected to their ability to express, appreciate, and enjoy centrally important values in their lives involving family, friends, and home. As such, the odor disrupts more than an itemized list of activities on a calendar, it takes away the most basic elements of their lives and offers them no control in return.

The social health of areas where poultry facilities are located is contingent on creating setback distances of at least one and two miles between the facility and the nearest occupied residence and populated area. If this is not done, it will increase the likelihood of public health problems, be unreasonably offensive to the senses, and will unreasonably interfere with the comfortable enjoyment of the life or property of neighboring residents.

#### b. Environmental and Public Health Consequences

The University of Georgia publication asserts that concerns over environmental pollution are unfounded and that there is no evidence that poultry farms pose specific health risks to people living in their proximity. There is no scientific evidence cited for this assertion. Rather, such a claim ignores widely available scientific research showing the contrary. Environmental assessments of air quality inside livestock buildings reveal unhealthful concentrations of hydrogen sulfide, ammonia, inhalable particulate matter, and endotoxin (Exhibit 6). While there is less information on adverse effects among residents living in the vicinity of livestock operations, that body of literature has grown in recent years (Exhibits 2-5, 7).

Studies have documented excessive respiratory symptoms in neighbors of CAFOs, relative to comparison populations in low-density livestock-producing areas. The pattern of these symptoms was similar to those experienced by CAFO workers.

Various CAFO pathogens and pollutants that impact public health can be emitted into the environment by various means, including through occupational exposures, high volume ventilation of animal houses, land application of animal wastes, flies and pests, and through the transport of animals (Exhibit 5, 7).

#### FINAL NOTE

It is in the best interest of the public and the county to establish set back rules that are commensurate with protecting public health and minimizing the risk to the poultry industry of civil suits or enforcement action because of emissions. In all instances, the protection of at risk populations should take priority, namely the elderly, children, and other neighbors with pre-existing respiratory conditions.