

November 28, 2008

Air and Radiation Docket and Information Center
Environmental Protection Agency
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Washington, DC 20460

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RE: **Docket ID No. EPA-HQ-OAR-2008-0318, Advance Notice of Proposed Rulemaking, "Regulating Greenhouse Gas Emissions under the Clean Air Act"**

Dear Sir or Madam:

Please see below the response of the National Council of Farmer Cooperatives ("NCFC"), the National Milk Producers Federation ("NMPF"), the National Pork Producers Council ("NPPC") and the United Egg Producers ("UEP") to EPA's request for comments on the Agency's Advance Notice of Proposed Rulemaking, "Regulating Greenhouse Gas Emissions under the Clean Air Act." We appreciate the opportunity to submit these comments.

I. Introduction

Our organizations offer for your consideration the following comments on the Advance Notice of Proposed Rulemaking (ANPR) for regulating greenhouse gases (GHG) under the Clean Air Act (CAA). The ANPR presents many complex issues for public comment, several of which directly impact our membership and our associations. Animal agriculture as a whole, including the sectors represented by our members responsible for the vast majority of the production of milk, pork and eggs in the U.S, are a major GHG emissions success story. We offer a specific perspective as to how the CAA could stifle the further success and ongoing improvements that will undoubtedly occur in this regard. Furthermore, these comments involve general and significant concerns about how ill-suited the Clean Air Act is as a mechanism to help the nation limit GHG emissions. Our comments follow the descriptions of our organizations and the farmers and we represent offered below.

A. National Council of Farmer Cooperatives

NCFC has represented the interests of America's farmer cooperatives and their nearly 2 million farmer, rancher and grower members since 1929. NCFC members include nearly 50 national, regional and federated farmer cooperatives which, in turn, are comprised of some 3,000 local cooperatives. NCFC's membership also includes 27 state and regional councils of cooperatives. NCFC's mission is to protect the public policy environment in which farmer-owned cooperative businesses operate, promote their economic well-being, and provide leadership in cooperative education

B. National Milk Producers Federation

The National Milk Producers Federation develops and carries out policies that advance the well being of dairy producers and the cooperatives they own. The members of NMPF's 31 cooperatives produce the majority of the U.S. milk supply, making NMPF the voice of more than 40,000 dairy producers on Capitol Hill and with government agencies. NMPF is an active member of the Board of the Agricultural Air Research Council, and in this role is helping to oversee the implementation of the National Air Emissions Monitoring Study (NAEMS) for the dairy industry. This air research has been required as part of the Agency's Air Consent Agreement, in which there are almost 700 dairy operations participating. The air emissions monitoring study, which is being funded by a one-time use of dairy producers' check-off funds, is measuring emissions from six dairy operations around the country during a two-year study which began last year. This research will help determine what emissions come from barns and lagoons on dairy operations. The substances to be monitored in NAEMS are ammonia, hydrogen sulfide and particulate matter.

C. National Pork Producers Council

The National Pork Producers Council is an association of 43 state pork producer organizations and the voice in Washington for the nation's 67,000 pork producers. The U.S. pork industry represents a significant value-added activity in the agriculture economy and the overall U.S. economy. Nationwide, more than 67,000 pork producers marketed almost 130 million hogs in 2007, and those animals provided total gross receipts of almost \$15 billion. Pork producers are strong and vital contributors to value-added agriculture in the United States, and we are deeply committed to the economic health and vitality of our businesses and the communities that our livelihoods help support.

Just as importantly, though, pork producers take a broad view of what it means to be environmentally responsible farmers and business people, and we have fully embraced the fact that our pork producing operations must protect and conserve the environment and the resources we use and effect. We take this responsibility with the utmost seriousness and commitment, and it was in this spirit that our producer members have made a major commitment to environmental conservation. NPPC played a leadership role in the establishment of Air Consent Agreements ("ACA") between the Agency and approximately 2700 swine operations. We are also a founding member of the Agricultural Air Research Council. NPPC has been instrumental in the establishment of the National Air Emissions Monitoring Study ("NAEMS") and pork producers from across the country are providing the nearly \$6 million in research funds that are being used by NAEMS to fund this air research at six swine site.

D. United Egg Producers

United Egg Producers is a farmer cooperative representing about 95 percent of egg operations nationwide. Our industry is important to national, state, and local economies, supplying more than 300 eggs per year to each of the nation's 300 million residents in 2007. Most of our producer members own their flocks and do not make

contractual arrangements with others for production responsibilities, as is the practice in other sectors of the poultry industry. Most egg production operations are integrated from the point of production through the final marketing of the eggs. UEP producer members take very seriously the need to protect air quality, and they are committed to high levels of environmental stewardship and management.

UEP is a founding member of the Agricultural Air Research Council, and are actively involved in the oversight and implementation of the National Air Emissions Monitoring Study (“NAEMS”). This air research has been required as part of the Agency’s Air Consent Agreement, in which there are more than 300 egg laying producing sites participating. UEP is also actively involved in major efforts to develop and demonstrate economical and effective on-farm practices for the reduction of air emissions from our operations. We are managing a USDA Natural Resources Conservation Service under their Conservation Innovations Grant (“CIG”) program to demonstrate to egg producers the major reductions in ammonia emissions that are possible through the manipulation of the diet fed to our laying hens.

II. Animal Agriculture’s GHG Emissions Record of Success

Contrary to the preconceptions of many observers, the domestic animal agriculture industry is an overwhelming and unmitigated success with respect to GHG emissions. The facts bear out a 180 degree different picture from that conveyed by conventional or received wisdom regarding modern animal agriculture and agriculture as a whole. This same fact pattern is the case with respect to the associated preconception that animal agriculture is overly “dependent” on fossil fuels. In fact, in this regard modern animal agriculture exceeds or rivals the performance of the best of the other major sectors of our economy relative to the efficient use of resources by our producers to meet the country’s critical food needs in total.

Some of this discrepancy between the conventional or received wisdom and the actual performance of animal agriculture stems from improperly considering our GHG performance from the perspective of a single animal producing milk, pork, eggs and other products. It is always possible to conceive of and characterize an alternative and better production system capable of producing the last unit of output for a particular industry. But this marginal analysis is highly misleading when the critical issue is how a production system will be able to produce the entire quantity of output needed to meet the total demand for that output—in our case food.

It makes far greater public policy sense to consider total food needs, given the size of a population, its income levels and preferences and needs for food products, and then consider how well a particular food production system meets these needs in total while also conforming to other societal objectives, such as food safety, affordability, and a minimal environmental footprint, including fossil fuel use and GHG emissions.

From this perspective, the critical question is how well will a particular food production system perform as a whole and in the context of the total amount of food that has been and will be needed to feed the US’s and the world’s growing population? Considered from this sector-wide perspective rather than at some hypothetical margin

where all that is being considered is the last unit of output, today's modern US agricultural operations present an unequivocal picture of the past and continued major reductions in GHG emission by animal agriculture per product provided and person fed.

This performance is derived from the simple but overriding economic forces in animal agriculture that always lead producers to seek ways to reduce their costs, per every unit of milk, pork, egg or other animal good their farms generate, in order to make their farms more profitable. Reducing costs per unit of production in animal agriculture means by definition producing each unit of food from the animals in production using the least amount possible of energy, corn, oilseeds, forage, water and the other contributors to animal farms and their costs. All of these things have a GHG footprint to produce and use, and it is their total and combined implications and consequences that must be examined as various policy options are considered. Producing more food with less of these things means the GHG footprint for the system as a whole must go down. That is in fact exactly what has happened and some simple considerations and statistics bear this out:

- Animal agriculture's GHG emissions from 1990 to 2005 have remained nearly constant, increasing by only about 3.5% since 1990, while over the same period total US meat production has increased 50%, milk production has increased almost 16%, and egg production has increased about 33%.¹ This means almost 30% less in total livestock sector GHG emissions per pound of meat produced from 1990 to present.
- While animal agriculture has been reported by the United Nations as responsible for 18% of GHG emissions worldwide, animal feeding operation systems more similar to US-style operations are reported by the UN as accounting for only 5% of GHG emissions worldwide.²
- Animal agriculture in the US does even better than its counterpart systems worldwide, as it was directly responsible for about 2.5% of total US emissions in 2007 as reported by the EPA.³
- Conventional egg production in the United Kingdom, according to research conducted there in 2006, uses less energy, has a lower global warming potential, and uses less land than organic, cage-free or free range egg systems. Relative to the average values for these three other systems, conventional egg systems use 5% less energy, have a 10% lower global warming potential, and use 31% less land. The research traced all inputs to primary resources, including coal, crude oil and mined ore. It considered all activities supporting production, including feed

¹ US Department of Agriculture (USDA), 2007. "U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2005." USDA. Washington, DC. See Table 1-2, Page 5.

² Un Food and Agriculture Organization (FAO), 2006. "Livestock's Long Shadow; Environmental Issues and Options." FAO. Rome, Italy. See page 112, and table 3.12

³ Environmental Protection Agency (EPA), 2008. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006. EPA, Washington, DC. Calculated from statistics provided in tables ES-2 and 6-1.

production.⁴ These non-conventional egg systems have strong merits, especially given consumer demand for eggs produced in this manner. But given that 95% of the eggs produced in the US are in conventional systems similar to those studied in the UK, these results are an indication of the strong GHG performance of the overall US egg farming sector.

- Between 1948 to the present, while the manure generated by US meat producing animals has been reduced in total by 25%, the production of meat from the animal herd has been increased 700%.⁵

III. Further Representative Evidence -- the US Dairy Industry's Record on GHG Emissions

These considerations and statistics are further corroborated by the more in-depth work that has been done recently on the GHG footprint of the US dairy sector.⁶ In 1944, the dairy herd was 25.6 million animals, producing about 1.2 billion hundredweight (cwt) of milk a year, supplying a US population of almost 130 million persons with their milk products. The GHG emissions of this system, including the dairy cows, the heifer replacement animals, the bulls, and the production, handling, storage and feeding of all these animals, as well as the management of their manure, totaled about 30 kg on a CO₂ equivalent basis on a per milking cow basis. By 2007, the number of dairy cows supplying the nation's milk had been reduced to about 9.2 million animals, producing almost 1.9 billion cwt of milk, supplying a US population of almost 302 million persons with their milk products. The GHG emissions of this system, including all of the same elements described above, was slightly more than 60 kg on a CO₂ equivalent basis on a per milking cow basis.

Seen on a per milking animal basis, this GHG performance is disappointing. But expressed as total GHG emissions for the entire milking herd, the picture changes significantly, since in 1944, those 25.6 million animals were producing 768 million carbon equivalent units of GHG emissions, and in 2007 those 9.2 million animals are producing only 552 million units of GHGs. The picture becomes even more dramatically improved when considered relative to the total amount of milk produced by these far more efficient dairy cows in this far more efficient 2007 dairy system. In 1944 slightly more than 3.5 units of carbon equivalents were emitted per unit of milk produced, while in 2007 this figure has decreased to about 1.3 units—a reduction of almost two-thirds.

⁴ Williams, A.G., Audsley, E. and Sandars, D.L. (2006) *Determining the environmental burdens and resource use in the production of agricultural and horticultural commodities*. Main Report. Defra Research Project IS0205. Bedford: Cranfield University and Defra. Available on www.silsoe.cranfield.ac.uk, and www.defra.gov.uk. See Table 58; averages for the other 3 systems were calculated for these comments to generate these percentage comparisons.

⁵ Calculated from various USDA-NASS data sources.

⁶ These particular observations are drawn from the work of Capper, J.L., R.A. Cady and D.E. Bauman. 2008. "Increased Production Reduces the Dairy Industry's Environmental Impact." *Proceedings of the Cornell Nutrition Conference for Feed Manufacturers*. October, 2008.

The US dairy system is therefore today supplying the US consumers' needs for dairy products with about one-third of the GHG emissions generated by the system in 1944 per pound of milk produced. 1944 is a time period that many people might assume was the heyday for the environmental performance of dairy farming, consisting of mostly smaller operations with small herds being fed grass and forages and less concentrated feeds. This analysis shows that when it comes to the environmental and GHG footprint of the dairy industry, the exact opposite is true.

Comparable analyses have not yet been conducted for other US livestock and poultry sectors. Pork producers have such a study under development and will provide those results to EPA when completed. But for all the US livestock and poultry species there is every reason to expect that the results would be just as dramatic in terms of the significant improvement in GHG emissions performance. The statistic cited in the previous section indicates this clearly – that while the livestock sector's GHG emissions have remained relatively flat, meat production has increased by about 50%, milk production has increased almost 16%, and egg production has increased about 33%. Further studies should simply provide more detail about and explanations for this significant record.

IV. The Clean Air Act is not the Proper Approach to Support and Continue Animal Agriculture's Record of GHG Performance and to Control GHG Emissions in General

A. The CAA regulatory process will stifle further innovation in animal agriculture

While the improvements in GHG emissions performance in US animal agriculture over the modern post World War II period are dramatic and significant, there was nothing about this achievement that was simple or easy for animal agriculture, or for the research and agricultural extension communities that helped make it happen. There always were and remain considerable barriers to be overcome in achieving further reductions. This progress will be made through the development and application of new and innovative adaptive research, and associated on-farm testing through trial and error by farming practitioners. Mistakes are always made in this process, leading to financial and performance failures. But the drive to reduce costs and increase profitability leads, over time, to the identification of the most successful efficiency and profit enhancing practices, and these are then rapidly adopted, only to be followed by another and largely continuous and concurrent round of further research and experimentation.

A regulatory program like that imposed under by the CAA for non-attainment areas or for operations with emissions large enough to trigger CAA Title V permitting requirements means that this normal experimentation and progress through trial and error will largely have to stop. Suddenly, the error side of this equation becomes impossible because of the significant and in many cases overwhelming CAA liabilities that come with such errors. Single, fixed technology standards become more or less

mandatory, and while academic and private sector research will continue, the on-farm complimentary work that makes innovations real and possible largely will stop.

As a result the application of the CAA to achieve GHG reduction goals in animal agriculture will largely end further progress in the direction seen over the last several decades, and will fix in place production systems that will tend to lead to increases in GHG emissions per unit of animal product generated from our farms and delivered to consumers. Furthermore, compliance with these mandatory requirements, being an expensive proposition, and the associated CAA legal liabilities and risks, will naturally favor larger operations with the expertise and financial resources to manage such risks and costs. Further concentration in the animal agriculture sectors would be the direct result.

B. A CAA endangerment finding leads to excessive costs and a host of problems in general

The ANPR was published in response to the Supreme Court decision in *Massachusetts v. EPA*, which dealt with a petition to regulate automobile emissions. In order to trigger the regulation of automobile emissions under the Clean Air Act, the EPA must first make a finding that any or all of the GHG endanger public health or welfare. We note that the US Chamber of Commerce and others have submitted detailed comments regarding the cascading and enormous negative economic consequences resulting from such an endangerment finding, and we wish to associate ourselves with those comments. With respect to those comments we note the following in summary:

- Such an endangerment finding will lead to restrictions throughout the US economy, not just for automobiles.
- There is little practical flexibility in the CAA's the National Ambient Air Quality Standards process and resulting mandatory CAA actions once non-attainment is established and it is easy to envision a situation where states will as a result
 - Lose some or all their federal highway funding;
 - Be forced to offset new construction on a 1:1 basis or greater;
 - As noted above in the case of animal agriculture, impose strict "best available technology" for both new and existing stationary sources in a potentially limitless number of source categories; and
 - Create innumerable opportunities for citizen suit challenges and complaints.

V. Conclusion

For the numerous reasons discussed above, the use of the CAA authorities as the basis and means for regulating GHG emissions in the US is a fundamentally wrong policy approach. Managing and reducing GHG emissions as many have advocated represents one of the most challenging, comprehensive and all-encompassing policy initiatives ever contemplated, given its implications for almost every facet of the

economy and the effects in businesses, consumers, auto users, homeowners and the population in general. Almost by definition then, such matters require explicit and direct discussions and negotiations in Congress to ensure that the numerous, painful tradeoffs and decisions can be made while taking all of these issues into account. Attempting to force all of this policy work and associated painful decisions into a statutory framework that was neither devised for this problem nor capable of properly adjudicating the difficult tradeoffs among the interests of various affected parties and stakeholders is a recipe for disaster and simply irresponsible.

For these reasons we fully concur with the EPA finding that reaches this same conclusion in this ANPR. In the case of animal agriculture, our tremendous success in reducing our GHG reductions over time has occurred without the imposition of mandatory standards such as those under the CAA, and there is ample reason to believe that the imposition of such standards will have the perverse effect of stifling further innovation and the risk taking it entails in the process of trial and error we follow to achieve greater efficiencies in resource and input use to reduce costs and increase profitability. We believe it is far more sensible to have this discussion in Congress where the various strengths, capabilities and circumstances of differing industries such as ours can be taken into account and drawn upon to achieve the policy goals. The use of the CAA, as envisioned by the Supreme Court decision, with all of its cascading negative consequences, fails to meet this need.

Thank you once again for the opportunity to provide you with these comments.

Sincerely,

National Council of Farmer Cooperatives
National Pork Producers Council

National Milk Producers Federation
United Egg Producers