

March 27, 2006

Mr. Thomas P. Dunne  
EPA Headquarters  
Ariel Rios Building  
1200 Pennsylvania Avenue, N. W.  
Mail Code: 5101T  
Washington, DC 20460

**RE: Docket ID No. EPA-HQ-SFUND-2005-0013  
Poultry Petition for Exemption from EPCRA and CERCLA  
Reporting Requirements for Ammonia Emissions**

Dear Mr. Dunne:

The Environmental Integrity Project submits the following comments in opposition to the poultry producers' petition ("Poultry Petition") for exemption from the reporting requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Emergency Reporting and Community Right to Know Act (EPCRA). We submit these comments on behalf of our members and the Center for a Livable Future, Clean Water Action Alliance of Minnesota, Columbia Riverkeeper, Community Association for Restoration of the Environment, Environmental Defense, Family Farms for the Future, GRACE Factory Farm Project, The Humane Society of the United States, Institute for Agriculture and Trade Policy, Iowa Citizens for Community Improvement, Iowa Environmental Council, Izaak Walton League of America, Kentucky Waterways Alliance, Inc., Minnesota Center for Environmental Advocacy, National Catholic Rural Life Conference, Natural Resources Defense Council, Northwest Environmental Defense Center, Ozark Clear Water, Save The Valley, Sierra Club, Southern Environmental Law Center, Union of Concerned Scientists, Waterkeeper Alliance, Rolf Christian, Dean & Sue Jarrett, Robert E. Rutkowski and Sacoby Wilson M.S., Ph.D from the Center for Social Epidemiology and Population Health. We urge you to continue to require hazardous release reporting under these statutes from large poultry operations that release ammonia or other hazardous substances at levels that may jeopardize public health.

There are several significant problems with the Poultry Petition. First, the Poultry Petition ignores the ever-growing body of science that suggests that ammonia emissions from poultry operations have human health or environmental impacts that warrant emergency response. Second, an exemption would be at odds with the goals of EPCRA and CERCLA by depriving the government of information it needs to protect natural resources, and by exposing the public to potentially dangerous quantities of hazardous pollutants. Third, an exemption would leave ammonia emissions from poultry operations virtually unregulated, because EPCRA and CERCLA are necessary to address emissions of ammonia that would not otherwise be regulated under federal permitting statutes. Fourth, it would be arbitrary for EPA to grant the

petition, because it would be a departure from EPA's past positions on reporting exemptions. Finally, exempting poultry operations from EPCRA and CERCLA reporting requirements would prevent EPA from gathering critical data and would hamper its ability to ensure that emissions do not exceed harmful levels.

Instead of granting the Poultry Petition, EPA should protect rural residents by following the recommendations of the National Academy of Sciences. EPA should require poultry operations to use all of the currently available methods that are practicable to reduce ammonia emissions. EPA should also conduct an aggressive field program to monitor AFO ammonia emissions using a mass balance approach.

## **I. Structure of the Poultry Industry**

Changes in the structure of the animal agriculture industry over the past few decades have generated a need for increased attention, not less, to the industry's impacts on the environment. Today, integrated livestock production is a multi-billion dollar business. Unlike traditional livestock farms where the animals grazed on pastureland, a growing number of Animal Feeding Operations (AFOs) confine thousands, or even millions, of animals in closed buildings for most, if not all of their lives, where they are fed a regimented diet in a closely controlled indoor environment.<sup>1</sup> These large-scale, integrated operations differ radically from the traditional family farm. The scale of modern integrated poultry operations dwarf historic farming enterprises and bring with them environmental and public health risks of equal proportion.<sup>2</sup>

In the poultry industry, large confinement operations dominate production. In the first half of the twentieth century a farm might have housed 500 chickens or a larger one might have housed 1,400 birds.<sup>3</sup> Today, a "smaller" poultry operation can house a 25,000 bird flock at a time producing an average of 5.5 flocks and 125 tons of poultry waste per year.<sup>4</sup> Although broiler houses typically confine approximately 20,000 to 30,000 birds per house at any given time in closed buildings, complexes housing laying hens may have as many as 1.5 million birds.<sup>5</sup> Such large AFOs are highly specialized operations in which the operator closely regulates the animals' environment, food source, and water supply.

Industry has been shifting away from the typical, smaller operation of years past, often in response to an increasingly competitive marketplace, with animal production becoming consolidated in the hands of a few giant agribusinesses. For example, between 1982 and 1992, roughly 20% of broiler operations across the country closed their doors, while the number of chickens raised increased considerably. Newer, larger operations replaced the small producers that went out of business.<sup>6</sup> This trend towards fewer but larger operations, results in concentrations of "more manure nutrients and other waste constituents within some geographic areas. These large operations often do not have sufficient land to effectively use the manure as fertilizer."<sup>7</sup>

Over 90% of all chickens are raised under a contractual relationship with "integrated" production and processing companies. Under this arrangement, the agribusiness "integrator" contracts with a "grower" to produce chickens for slaughter by the integrator.

The integrator owns the chickens throughout the production process and supplies the bulk of the necessary inputs including feed and medication. The integrator also monitors the production operation and provides growers with detailed instructions regarding the day-to-day activities at the site.<sup>8</sup>

Integrated livestock production is big business. The poultry industry alone generated over \$21 billion in on-farm revenue in 1997, with much of the production coming from corporate producers operating large AFOs.<sup>9</sup> Large agribusinesses realize the lion's share of the profits. For instance, Tyson Foods, the world's largest meat producer, enjoyed \$26.4 billion in sales and realized \$1.9 billion in gross profits in 2004.<sup>10</sup> Revenues and profits continue to grow each year.

## **II. Ammonia Emissions from Poultry Operations Have Public Health and Environmental Impacts That Require Emergency Response**

The Poultry Petition makes no mention of the large quantities of ammonia that are released from poultry operations and ignores the public health problems stemming from these releases. The livestock sector produces an estimated 73% of all ammonia emissions nationwide.<sup>11</sup> Poultry operations are widely recognized as the leading source of ammonia releases within the livestock sector with individual poultry operations producing staggering quantities of ammonia gas.<sup>12</sup> For example, Buckeye Egg Farm's facility in Croton, Ohio emitted 1.6 million pounds of ammonia in 2003 or over 4,300 pounds per day – 43 times the reporting threshold under CERCLA and EPCRA.<sup>13</sup> By comparison, Climax Molybdenum, a chemical manufacturer in Fort Madison, Iowa, reported to the Toxic Release Inventory (TRI) that it released 800 tons or 1.6 million pounds of ammonia—a figure identical to Buckeye Egg's annual releases. Climax Molybdenum was ranked ninth in the nation among manufacturers for point source releases of ammonia.<sup>14</sup> TRI data for 2003 reveals that Ohio Fresh Eggs' facilities are also among the top ammonia emitters in the country.<sup>15</sup>

Although few large poultry confinement operations have been willing to measure their ammonia emissions, there are many facilities that are likely exceeding the 100 pound per day reporting threshold under CERCLA and EPCRA. Recent studies suggest that layer operations with more than 44,000 birds and broiler operations with more than 49,000 birds may trigger the reporting requirements.<sup>16</sup> According to the most recent census data, there are more than 800 layer operations in the country that house more than 50,000 birds; 498 of these operations house more than 100,000 birds.<sup>17</sup> The census data also reveals that there are more than 25,000 broiler operations that have sold more than 60,000 birds.<sup>18</sup>

Ammonia is a human toxin that EPA lists alongside arsenic, cyanide, and benzene as hazardous substances under CERCLA. 40 C.F.R. § 302.4. Human exposure to ammonia triggers respiratory problems, causes nasal and eye irritation, and in extreme circumstances is fatal.<sup>19</sup> Ammonia concentrations of greater than 100 ppm have been regularly reported in poultry confinement operations,<sup>20</sup> with maximum concentrations reaching over 200 ppm.<sup>21</sup> These concentrations exceed virtually every recognized safety threshold for ammonia exposure, ranging from the reference concentrations of 0.144 ppm established by the EPA for community exposure to the time weighted average exposure limit of 25 ppm set by the National Institute for Occupational Safety and Health.<sup>22</sup>

Downwind neighbors are exposed to elevated ammonia levels, as well as other pollutants. For example, the Iowa Department of Natural Resources has been documenting ambient ammonia levels near poultry operations since 2003. In 2003, readings were as high as 750 ppb, in 2004, 481 ppb, and in 2005, 454 ppb.<sup>23</sup> These levels well exceed the recommended community exposure limit of 150 ppb and indicate that a public health hazard existed at the time the data was acquired.<sup>24</sup> EPA's ambient ammonia measurements taken at Buckeye Egg in Ohio also exceeded the public health limit, ranging from 151.5 ppb to 1,674 ppb (overall average of 407.5 ppb).

Public health standards, like the 150 ppb standard, are more conservative than the worker health standards that Poultry Petitioners rely on, because "the public includes sensitive individuals such as children, the elderly, and people with medical conditions."<sup>25</sup> However, ammonia emissions certainly affect non-sensitive persons as well. While taking ammonia measurements at Buckeye Egg, EPA's Environmental Protection Specialist experienced "personal discomfort from exposure to ammonia in the air" including watery eyes and "respiratory irritation."<sup>26</sup> He left the site "wondering if [he] could tolerate continued exposure and suspecting that residents...some 260 meters farther downwind, were also being fumigated by the ammonia plume."<sup>27</sup>

Ammonia is not only a human toxin but also contributes to the development of fine particulate matter which causes significant health problems, including aggravated asthma, difficult or painful breathing, chronic bronchitis, decreased lung function, and premature death.<sup>28</sup> Fine particulate matter has been linked to increased hospital admissions and emergency room visits for people with heart and lung disease, and decreased work and school attendance.<sup>29</sup>

Finally, ammonia emissions compromise the health of the birds themselves, reducing animal welfare and, in some instances, threatening public health. Poultry exposure to ammonia has been linked with high levels of contact dermatitis, such as foot, hock, and breast burns. Their risk of developing these conditions has become much more common over the past thirty years<sup>30</sup> and is exacerbated by the extreme stocking densities common to industrialized poultry facilities. Ammonia can also cause gastrointestinal irritation, respiratory problems, and lesions on the trachea and lungs, increasing their susceptibility to bacterial infections, which can have human health implications.<sup>31</sup>

These risks to public health led the American Public Health Association to call for a moratorium on new concentrated animal feeding operations "until scientific data on the attendant risks to public health have been collected and uncertainties resolved."<sup>32</sup> The Michigan State Medical Society, the Canadian Medical Association, as well as local boards of health, have also called for moratoria on new concentrated animal feeding operation construction.<sup>33</sup>

In addition to adverse health effects, ammonia emissions from poultry operations can pollute surface waters and harm the environment. Emissions of nitrogen to the atmosphere and to water are not independent effects. The residence time for ammonia in the atmosphere ranges from as little as hours to as long as days.<sup>34</sup> Ammonia and ammonium salts are water soluble and

can be deposited by wet deposition during precipitation.<sup>35</sup> Otherwise, gaseous ammonia and ammonium salts may be adsorbed to particulate matter and deposited during dry periods due to gravity.<sup>36</sup> Deposition of atmospheric ammonia can cause eutrophication of surface waters by accelerating vegetative growth, which chokes aquatic life.<sup>37</sup>

Volatilized ammonia affects local water bodies, as well as water bodies that are hundreds of miles from the site of origin. For example, ammonia emissions from Midwest agricultural operations may contribute to the eutrophication of the Gulf of Mexico.<sup>38</sup> Peer-reviewed research has documented that substantial ammonia emissions from commercial chicken houses on the Delmarva Peninsula could represent a significant source of nutrient nitrogen to the Chesapeake Bay through atmospheric deposition.<sup>39</sup> However, the Chesapeake Bay is also likely receiving ammonia deposition from upwind areas with intensive agricultural operations, including Ohio and North Carolina.<sup>40</sup>

### **III. EPA Should Deny the Poultry Petition Because an Exemption Would Be Contrary to the Goals of CERCLA and EPCRA and At Odds with Court and EPA Decisions**

CERCLA, which was enacted “in 1980...in response to the serious environmental and health risks posed by industrial pollution,” must be interpreted liberally so as to accomplish its remedial goals.<sup>41</sup> The EPA states that “a major purpose’ of section 103 is “to alert the appropriate government officials to releases of hazardous substances that may require rapid response to protect public health, and welfare and then environment.”<sup>42</sup> As discussed above, poultry operations have released quantities of ammonia that well exceed the reporting threshold under CERCLA and EPCRA, as well as public health exposure limits. Granting the Poultry Petition would be contrary to the goals and spirit of CERCLA and EPCRA by leaving the government without information to protect public health, welfare and the environment from ammonia releases. In addition, an exemption would be contrary to past court decisions and EPA enforcement actions which have all required agricultural operations to report releases of ammonia emissions that exceed reportable quantities.

#### **A. Courts and EPA Have Applied CERCLA and EPCRA Reporting Requirements to AFOs in the Way that Congress Intended**

Many in the integrated livestock industry argue that Congress never intended to apply CERCLA and EPCRA requirements to animal agriculture. However, they cite to no authority for this claim. If Congress had intended such a result, it could have excluded animal production facilities, including poultry facilities, from the reporting requirements of CERCLA.<sup>43</sup> Instead, Congress only chose to exempt “the normal application of fertilizer” from the CERCLA definition of release,<sup>44</sup> and provided an exemption under EPCRA for reporting releases when the regulated substance “is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate consumer.”<sup>45</sup>

Courts have applied these exemptions to agricultural operations in the way that Congress intended. For example, a federal district court in Kentucky held that neither of the exemptions should apply to Tyson's poultry production operations. Tyson did not qualify for EPCRA's routine agricultural use exemption, because it did not store ammonia in the chicken houses for agricultural use, nor did it use the ammonia in an agricultural operation.<sup>46</sup> Rather, it used exhaust fans and vents to release the ammonia to the environment so that it would not kill the chickens. Tyson also did not qualify for CERCLA's normal application of fertilizer exemption, because they were not applying ammonia to farm fields as fertilizer when they vented it into the atmosphere.<sup>47</sup> As a result, the court concluded that EPCRA and CERCLA "clearly [do] not exclude the release of ammonia from chickens or livestock production operations, and as a result, Defendants are required to report releases that meet or exceed reportable quantities."<sup>48</sup> Other courts have also clarified that EPCRA and CERCLA reporting requirements apply to AFOs. For example, an appellate court held that Seaboard Farms, Inc. must report the aggregate ammonia releases from all of its waste pits and confinement buildings at its 25,000 head hog operation.<sup>49</sup>

EPA has also taken enforcement actions against AFOs for failing to report ammonia emissions. For example, in November 2001, the United States and Citizens Legal Environmental Action Network, Inc. settled a case against Premium Standard Farms, Inc. (PSF), the nation's second largest pork producer and Continental Grain Company. The settlement resolved numerous claims of violations, including the failure to report ammonia emissions under CERCLA and EPCRA.<sup>50</sup> Recent measurements taken pursuant to the settlement agreement reveal that PSF releases 3 million pounds of ammonia annually from the cluster of barns and lagoons at its Somerset facility.<sup>51</sup> This data does not include the ammonia gases released when liquid manure is sprayed on the company's nearby fields. These emissions make PSF the fifth largest industrial emitter of ammonia in the United States.

Based on the foregoing, if EPA grants the Poultry Petition, it will run contrary to past Court decisions which have all appropriately held that AFOs should report ammonia releases that exceed regulatory thresholds. Furthermore, EPA will be reversing prior positions that it has taken in enforcement cases.

## B. CERCLA and EPCRA Fill Important Gaps in Permitting Statutes

The federal permitting statutes have not been effective at controlling AFO ammonia emissions; therefore, CERCLA and EPCRA are still necessary to fill critical gaps. Congress intended CERCLA to augment, not supplant, other federal statutes that fail to address hazardous substances. Section 102 of CERCLA specifically authorizes EPA to designate substances like ammonia that are not regulated under other federal statutes as hazardous if "when released to the environment [they] may present a substantial danger to public health or welfare or the environment..."<sup>52</sup>

CERCLA and EPCRA require the reporting of only non-federally permitted releases. Therefore, if a poultry AFO's ammonia emissions are authorized by a permit under another federal statute, it does not have to report these emissions. Releases that are federally permitted are exempt not only from CERCLA and EPCRA notification requirements but from CERCLA liability as well.<sup>53</sup> However, even if a facility were to have a federal permit, the permit would not necessarily address all of the ammonia releases. A Clean Water Act permit, for example, would not address releases of ammonia to the air and, conversely, a Clean Air Act permit would not address releases of ammonia to water. Furthermore, not all statutes regulate the same chemicals. For example, the Clean Air Act does not regulate ammonia as a hazardous air pollutant.

In addition, many AFOs have not been permitted under the Clean Water Act or Clean Air Act. For example, no AFO has ever obtained a Clean Air Act permit, and some states have exemptions in place that specifically exempt agricultural operations from clean air act permitting requirements. Although the Clean Water Act has required large livestock operations (CAFOs) to obtain permits for more than 30 years, noncompliance has been widespread. In 2001, EPA estimated that at least 13,000 concentrated animal feeding operations were required to have Clean Water Act permits, but EPA and States had issued just 2,520 permits.<sup>54</sup> Some of the states with the highest numbers of poultry operations have permitted the fewest numbers of CAFOs under the CWA. For example, Arkansas has only issued permits to 5% of its 2,110 CAFOs, and Iowa has only issued NPDES permits to 2% of its 1,859 CAFOs.<sup>55</sup>

A recent court decision which overturned certain provisions of EPA's CWA rules for CAFOs, may also result in fewer CAFOs being permitted under the CWA. In Waterkeeper v. EPA, the court ruled that CAFOs are not required to obtain NPDES permits unless there is an actual pollution discharge from a CAFO. EPA is revising its rules in light of the court's ruling; however some states and industry representatives have already taken the position that many CAFOs are now exempt from the requirement to apply for CWA permits. For example, the Des Moines Register quoted Mr. Gene Tinker of the Iowa Department of Natural Resources as stating that "[b]ecause Iowa law bars such discharges, virtually all confinement operations would be exempt from the EPA's rules under the court's ruling." See also Letter from American Farm Bureau Federation, et. al., to South Dakota Department of Natural Resources Regarding NPDES permitting after *Waterkeeper v. EPA* (Aug. 4, 2005) ("operators may manage their operations to avoid discharges and opt not to seek NPDES permit coverage knowing that they face potential enforcement penalties for any accidental discharges that occur despite their best efforts").

Based on the foregoing, EPCRA and CERCLA are necessary complements to federal permitting statutes to address emissions of ammonia that would not otherwise be regulated. Granting the petition will leave ammonia emissions from poultry operations virtually unregulated and will endanger public health, welfare and the environment.

#### **IV. An Exemption for Reporting Ammonia Emissions Would Be Inconsistent with EPA's Standards for Granting Exemptions from Reporting Requirements**

If EPA grants an exemption for ammonia releases from poultry operations, it would contradict its past positions on reporting exemptions. EPA has rarely granted exemptions from CERCLA and EPCRA reporting requirements. However, Poultry Petitioners rely on an exemption from CERCLA reporting requirements that EPA granted for releases of naturally occurring radionuclides in certain materials subject to the exemption (e.g., overburden and ores in the subject mining sectors, coal and coal ash).<sup>56</sup> In the Final Rule issuing the exemption, EPA explained that “[s]uch exemptions may be granted for releases of hazardous substances that pose little or no risk or to which a Federal response is infeasible or inappropriate.”<sup>57</sup> Additionally, “[r]equiring reports of such releases would serve little or no useful purpose and could, instead, impose a significant burden on the Federal Response system and on the persons responsible for notifying the Federal Government of the release.”<sup>58</sup> In response to public comment, EPA further concluded that the reporting exemptions would not undermine the development of public information or communities’ ability to obtain information on hazardous substances.<sup>59</sup> None of these criteria justify a reporting exemption for ammonia releases from poultry operations as discussed below.

##### **A. Ammonia Emissions from Poultry Operations Pose Great Risk to Public Health**

As discussed above, ammonia emissions from AFOs pose great risk to public health. Human exposure to ammonia triggers respiratory problems, causes nasal and eye irritation, and in extreme circumstances is fatal.<sup>60</sup> Despite these documented impacts, Petitioners argue that ammonia emissions from poultry houses pose little or no risk to public health, because they are very quickly dispersed over time and distance. However, in the rule issuing the radionuclide exemption, EPA noted that “overall population risks or the potential to pose significant risks at great distances are not the most important factors in deciding whether a CERCLA response action may be needed at any individual site.”<sup>61</sup> Rather, an important determination of the need for response is the risk to “reasonably maximally exposed individuals” (i.e., workers or nearby individuals).<sup>62</sup> EPA and state measurements taken at poultry houses have exceeded both worker and community public health standards; therefore, it is absurd to argue that ammonia emissions from poultry houses pose little or no risk to public health.

##### **B. Federal Response Actions Are Feasible and Appropriate**

In the rule issuing the radionuclide exemption, EPA concluded that a CERCLA response would rarely, if ever, be necessary because the activities result in low-level, diffuse releases of radionuclides at concentrations that are near or at background. In addition, a response may not be feasible, because CERCLA response actions would not normally clean-up to below background levels. In contrast, a response may be appropriate when concentrations are likely to be elevated, and may be feasible where emissions are not diffuse and capable of being controlled

(e.g., facilities that have “a point source release, as from an air vent,” or a waste pile that could be covered).

In many cases, responses to ammonia emissions from poultry operations would be both appropriate and feasible. The ammonia emissions that EPA and states have taken at poultry operations reveal measurements well above natural background levels. Ammonia exists naturally in the air at levels between 1 and 5 ppb.<sup>63</sup> Thus, ammonia emissions from poultry operations like Buckeye Egg have exceeded natural background levels by more than 300 times the upper end of the range. In such cases, where ammonia levels exceed both natural background levels and public safety thresholds, a response is certainly appropriate and warranted.

CERCLA responses are also feasible for poultry operations that have elevated levels of ammonia. In fact, the National Academy of Sciences recommends that AFOs implement existing control strategies aimed at decreasing emissions now.<sup>64</sup> The most effective way to reduce ammonia emissions is to reduce the size of the operation, so that the amount of waste is reduced and more easily managed. In addition, there are many management practices that poultry operations can employ to reduce ammonia emissions from buildings, manure storage structures and from land application activities. Ammonia emissions from buildings, which are “point source releases,” can be reduced by treating the air using washing walls or biofilters.<sup>65</sup> Biofilters have reduced ammonia emissions at AFOs by 65% to 80%.<sup>66</sup> Other methods to reduce ammonia include diet manipulation or adding enzyme additives to litter.<sup>67</sup> Covering manure storage structures, and composting solid manure will also reduce ammonia releases.<sup>68</sup> Directly injecting manure is the most effective way to control ammonia emissions during land application.<sup>69</sup> Some of these management practices in combination (e.g., diet, enzyme additives and injection) may reduce overall ammonia levels at poultry operations by more than 55 percent.<sup>70</sup>

In addition to requiring control technologies, other response actions, like monitoring nearby areas for exposure, would also be appropriate and feasible.<sup>71</sup> For example, EPA is requiring Buckeye Egg to monitor its ammonia emissions before and after implementation of an enzyme additive system.<sup>72</sup> Tyson is also commencing an ammonia monitoring project pursuant to a settlement, in addition to preparing a report on the available technologies for controlling ammonia from broiler houses and planting a tree barrier.<sup>73</sup>

### C. Reporting Does Not Impose an Undue Burden on the Response System

Poultry Petitioners argue that the agencies will experience prophylactic, wide-spread reporting of ammonia emissions from poultry operations, thereby burdening the emergency response system. However, as EPA explained in its final rule describing the notification requirements, “[t]he government is not obligated to respond to every release to which it has authority to respond and therefore should not design a notification system on such a basis.”<sup>74</sup>

EPA further explained that it is imperative for the Agency to have the information that it needs to assess whether a response is warranted:

“Reportable quantities have been established so that the Agency is alerted promptly to situations that may warrant a government response. While EPA will not initiate a removal or remedial action for every release that is reported, EPA must obtain the information it needs to determine who has response authority, to assess whether there is a need for a federal response action, and to check that action is properly taken by others where appropriate.”<sup>75</sup>

Unlike radionuclide releases at background levels where a response would rarely or never occur, agency responses to ammonia emissions from poultry operations may occur and indeed have occurred. Because recent measurements demonstrate that ammonia emissions from poultry operations continue to jeopardize public health, the importance of giving agencies access to information that allows them to address public health impacts outweighs any burden that comes from evaluating hazardous release reports.

#### D. Reporting Does Not Impose an Undue Burden on the Regulated Community

If EPA continues to require poultry operations to report ammonia emissions above reportable quantities, it will not place an undue burden on the regulated community. Although poultry operations are capable of measuring their emissions, CERCLA and EPCRA only require operations to estimate the quantity of ammonia releases. Recently, the NAS recommended development of mass balance models that would allow all operations to estimate their ammonia releases. Moreover, the administrative burden for reporting emissions is extremely low. For these reasons, EPA should deny the Poultry Petition.

##### 1. Poultry Operators are Capable of Estimating Ammonia Emissions

According to the NAS, air pollution from livestock operations “warrant[s] serious attention to determine the effects of AFOs and to mitigate their detrimental effects.”<sup>76</sup> In its report, the NAS was critical of EPA’s approach of estimating emissions from livestock operations throughout the country, and recommended an alternative approach. Based on this criticism, the Poultry Petitioners argue that there is no generally accepted methodology for estimating the amount of ammonia emitted from poultry facilities. The NAS report, however, did not address compliance at the individual operation level and did not suggest that there is no reliable basis for regulatory action.

Estimating emissions across a broad array of animal operations is an entirely different matter than determining emissions at individual operations. As the EPA demonstrated in the Buckeye case, poultry house operations are simply the product of pollutant concentrations inside the buildings and the ventilation rate.<sup>77</sup> Consequently, poultry operators can readily determine the quantity of a release by multiplying the ammonia concentration by the ventilation rate.

According to the NAS, ammonia emissions can also be estimated using a mass balance approach.<sup>78</sup> The components of such a calculation, including purchased feed, nitrogen fertilizer, animal products produced, crops produced and manure exported, should be known by any competent producer. From a whole farm nitrogen balance calculation, the nitrogen input, output and unaccounted nitrogen can be determined. What remains to be determined is the relationship between this unaccounted nitrogen, and nitrogen lost as undesirable gases. Requiring the poultry industry to develop whole-farm nitrogen balances to reveal this relationship, instead of exempting them from regulation, will help EPA to obtain useful information about ammonia emissions. First, a reliable estimate of the magnitude of the nitrogen lost to the environment by livestock production will be developed. Second, the comparison of whole farm nitrogen balances with emission monitoring studies may uncover valuable relationships between emissions and control variables. Finally, whole farm nitrogen balances will help to corroborate the data generated from direct emissions determinations.

## 2. *The Administrative Burden of Reporting Ammonia Emissions is Low*

The level of administrative burden that arises from the reporting requirements under CERCLA and EPCRA is extremely low. Section 103 of CERCLA provides that any person in charge of a facility from which a hazardous substance has been released in a reportable quantity (RQ) must immediately notify the National Response Center (“NRC”).<sup>79</sup> Releases of ammonia and hydrogen sulfide that exceed 100 pounds per day must be reported under section 103.<sup>80</sup> *One telephone call to the National Response Center fulfills the requirement to report releases of hazardous substances under CERCLA.*<sup>81</sup>

In addition to the reporting requirements under CERCLA, owners and operators of facilities must also provide immediate notice of the release of an extremely hazardous substance under EPCRA. Section 304(a) requires an owner or operator of a facility to report the release of an extremely hazardous substance to designated state and local officials, if “such release requires notification of section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.”<sup>82</sup> *One telephone call to the appropriate state and local authorities also fulfills the initial requirement to report releases of hazardous substances under EPCRA.* In addition, the statute requires a written follow-up emergency notice to the state and local officials “as soon as practicable after the release” to update the initial notice’s information. 42 U.S.C. § 11004 (a).

Section 103(f)(2) of CERCLA further provides for relaxed reporting requirements for continuous releases.<sup>83</sup> If a person can demonstrate that the releases are continuous or stable in quantity and rate, then notice of the release is only required to be given annually. Similarly, the regulations implementing EPCRA provide that reporting requirements do not apply to “[a]ny

release that is continuous and stable in quantity and rate under the definitions of 40 C.F.R. 302.8(b).” However, persons still have to provide the initial telephone notification required under Section 304(a) and (b) and the initial written notification under Section 304(c).

E. An Exemption Will Significantly Impact a Community’s Right To Know About Hazardous Substances

If EPA grants the Petition, the communities that suffer from AFO pollution will be unable to obtain information about hazardous ammonia releases. Petitioners incorrectly assert that “ammonia release reporting would not serve as a useful source for public information.” To the contrary, in most cases it is the *only* source of information. Unlike radionuclide releases, AFOs are not required to report ammonia releases pursuant to the community right-to-know reporting requirements, toxic release inventory requirements, and related provisions under EPCRA sections 311, 312, and 313. Therefore, a reporting exemption will significantly impact a community’s ability and right to know about hazardous ammonia releases. As a matter of good public policy, “a community’s right to know about pollution should always come before an industry’s right to secrecy.”<sup>84</sup>

V. Exempting Agribusinesses from EPCRA and CERCLA Requirements Would Prevent EPA from Gathering Critical Data

The NAS issued a report in 2003 in which it criticized EPA and USDA for not devoting the necessary technical or financial resources to estimate air emissions and to develop mitigation technologies.<sup>85</sup> In response to NAS concerns, EPA negotiated an Air Compliance Agreement with industry that establishes an emissions monitoring program.<sup>86</sup> Twenty-seven hundred participants have signed up for this agreement, including representatives of the poultry industry.<sup>87</sup> The stated purpose of the Agreement is to ensure that AFOs comply with applicable environmental requirements--including CERCLA and EPCRA requirements--and to gather scientific data that the Agency needs to make informed regulatory and policy determinations. Therefore, it would be arbitrary for the Agency to exempt poultry operations from EPCRA and CERCLA reporting requirements *before* it gathers the data it needs to quantify emissions coming from AFOs, particularly when the facilities already have a liability release.

Granting the Poultry Petition will not only remove incentives for facilities to participate in the monitoring study, but will also prevent government from having access to critical information about potentially dangerous releases. EPA agrees with this position. In response to amendment language that would have exempted AFOs from EPCRA and CERCLA reporting requirements, the Agency stated that if the amendment became law, many participants may withdraw from the Air Compliance Agreement, “because [they] signed up primarily based on the belief that they may currently trigger CERCLA and EPCRA ammonia emission reporting requirements.”<sup>88</sup> Furthermore, “the proposed amendment would also affect a pending case that includes claims for violations of CERCLA reporting requirements at an AFO” thereby “hamper[ing] EPA’s ability to obtain data regarding air emissions and to ensure that emissions do not exceed harmful levels.”<sup>89</sup>

## Conclusion

CERCLA and EPCRA provide an essential safety net for protecting water supplies and for protecting the air that we breathe. There is no compelling reason to exempt livestock facilities from these statutes when communities have been exposed to potentially dangerous quantities of hazardous pollutants from some large operations. Granting the Poultry Petition will leave agencies powerless to protect local communities by denying them access to critical information that they need to respond to hazardous levels of ammonia. Furthermore, it would deny communities the right to know about hazardous substances released by neighboring agricultural operations. Finally, companies that document their ammonia emissions are more likely to clean them up—both Buckeye and Tyson have taken steps to reduce ammonia to resolve violations of CERCLA and EPCRA reporting requirements.

Instead of granting the Poultry Petition, EPA should protect rural residents by following the recommendations of the National Academy of Sciences. EPA should require poultry operations to use all of the currently available methods that are practicable to reduce ammonia emissions. EPA should also conduct an aggressive field program to monitor AFO ammonia emissions using a mass balance approach.<sup>90</sup>

Sincerely,

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<sup>2</sup> Written Statement of W.A. Drew Edmondson, Oklahoma Attorney General, through Kelly Burch, Assistant Attorney General, Before the House Subcommittee on Environment and Hazardous Materials Hearing on Superfund and Animal Agriculture. (Nov. 16, 2005).

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<sup>6</sup> See Development Document at 4-37.

<sup>7</sup> See 68 Fed. Reg. at 7180.

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<sup>9</sup> Development Document at 4-35.

<sup>10</sup> Tyson, Annual Report 2004, [http://media.corporate-ir.net/media\\_files/irol/65/65476/reports/ar04.pdf](http://media.corporate-ir.net/media_files/irol/65/65476/reports/ar04.pdf).

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<sup>16</sup> Pedersen S., et al., Progress in Research into Ammonia and Greenhouse Gas Emissions from Animal Production Facilities, Agricultural Engineering International: the CIGR Journal of Scientific Research and Development. Invited Overview Paper. Vol. VI., Aug. 2004.

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<sup>18</sup> Id.

<sup>19</sup> Schiffman, S.S., et al., Health Effects of Aerial Emissions from Animal Production and Waste Management Systems, [http://www.cals.ncsu.edu/waste\\_mgt/natlcenter/summary.pdf](http://www.cals.ncsu.edu/waste_mgt/natlcenter/summary.pdf).

<sup>20</sup> Iowa State University and The University of Iowa Study Group, Iowa Concentrated Animal Feeding Operations Air Quality Study (Feb. 2002), at 123 [hereinafter Iowa Air Quality Study].

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<sup>22</sup> Donham, K. et. al., Exposure Limits Related to Air Quality and Risk Assessment, [http://www.public-health.uiowa.edu/ehsrc/CAFOstudy/CAFO\\_8.pdf](http://www.public-health.uiowa.edu/ehsrc/CAFOstudy/CAFO_8.pdf).

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<sup>24</sup> See, e.g., Memo from Mario Jorquera to Scott Clardy (December 2, 2002) In response to documented ammonia levels downwind of a swine operation ranging from 153 to 875 ppb, EPA noted that “a conclusion could be drawn that a *public health hazard* did exist at the time the... data was acquired.”

<sup>25</sup> Secret Declaration at ¶ 9.

<sup>26</sup> Id.

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- <sup>42</sup> 50 Fed. Reg. 13,456 (April 4, 1985) (final rule).
- <sup>43</sup> Sierra Club v. Tyson Foods, et al., 299 F. Supp. 2d 693, 706 (W.D.Ky. 2003).
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- <sup>46</sup> Sierra Club v. Tyson Foods, et al., 299 F. Supp. 2d 693, 714 (W.D.Ky. 2003).
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- <sup>58</sup> Id.
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- <sup>60</sup> Schiffman, S.S., et al., *Health Effects of Aerial Emissions from Animal Production and Waste Management Systems*, [http://www.cals.ncsu.edu/waste\\_mgt/natlcenter/summary.pdf](http://www.cals.ncsu.edu/waste_mgt/natlcenter/summary.pdf).
- <sup>61</sup> 63 Fed. Reg. at 13, 468.
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- <sup>65</sup> Iowa Air Quality Study at 203.
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- <sup>71</sup> See e.g., 63 Fed. Reg. at 13,470.
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- <sup>78</sup> NAS Report, BOX 5-1 Sample Calculations of Whole-Farm Nitrogen Balance, at 116-117.
- <sup>79</sup> 42 U.S.C. § 9603(a).
- <sup>80</sup> 42 U.S.C. § 9603; 40 C.F.R. § 302.4.
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