

March 24, 2008

Ms. Lynn Beasley  
Superfund Docket  
U. S. Environmental Protection Agency  
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RE: Docket ID No. EPA-HQ-SFUND-2007-0469  
CERCLA/EPCRA Administrative Reporting Exemption for Air Releases  
of Hazardous Substances From Animal Waste

Dear Ms. Beasley:

Please see attached the response of the National Council of Farmer Cooperatives and the National Milk Producers Federation to EPA's request for comments on the Agency's proposal to exempt certain air releases from emergency release reporting requirements under the federal CERCLA and EPCRA laws. We appreciate the opportunity to submit these comments.

Sincerely,

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Senior Vice President, Scientific & Regulatory  
National Milk Producers Federation

Jackie Klippenstein  
Vice President, Government Affairs  
Nat'l Council of Farmer Cooperatives

**COMMENTS ON PROPOSED CERCLA/EPCRA ADMINISTRATIVE  
REPORTING EXEMPTION FOR AIR RELEASES OF HAZARDOUS  
SUBSTANCES FROM ANIMAL WASTE**

Docket ID No. EPA-HQ-SFUND-2007-0469  
72 Fed. Reg. 248, 73700-73708 (December 28, 2007)

Submitted by:  
**National Council of Farmer Cooperatives  
National Milk Producers Federation  
March 24, 2008**

**I. Introduction**

The following comments on the proposed “Administrative Reporting Exemption for Air Releases of Hazardous Substances from Animal Waste under the Comprehensive Environmental Response, Compensation, and Liability Act and the Emergency Planning & Community Right-to-Know Act” (“CERCLA/EPCRA”) (referred to below as the “proposed rule”) 72 Fed. Reg. 248, 73700-73708 (December 28, 2007), are being submitted by the National Council of Farmer Cooperatives (“NCFC”), and the National Milk Producers Federation (“NMPF”). We appreciate the opportunity to submit these comments. Below we describe our organizations and our members.

**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.

Nearly 80% of this country’s milk is marketed through a farmer-owned cooperative. The prevalence of cooperatives in the dairy industry led the NCFC to spearhead an intensive educational effort called “waste to wealth.” This initiative has brought together experts from the public and private sectors to investigate opportunities to minimize the environmental impacts of the dairy sector by exploring practical options to capture methane and/or generate energy.

## **B. National Milk Producers Federation**

The National Milk Producers Federation, based in Arlington, VA, 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.

Furthermore, NMPF and the Dairy Environmental Task Force have determined that a scientific tool is necessary for dairy producers and their consultants to help them estimate air emissions from dairy operations. As a result, a research project was established from part of the one-time use of dairy check-off money to develop a process-based model computer program. NMPF is overseeing this three-year research project and funding.

## **II. Summary of the Proposed Rule**

This proposal involves adoption of an administrative reporting exemption from particular notification requirements under CERCLA/EPCRA. Specifically, the exemption would apply to the release to the air of gaseous substances from animal manure and related animal wastes. This proposed exemption from administrative reporting under CERCLA/EPCRA is not intended to and will not limit in any way the Agency's ability to require farmers to take response and abatement actions (CERCLA sections 104 and 106), or to impose CERCLA liabilities for the release of hazardous materials, or to administer any other provisions of CERCLA/EPCRA. Given that the releases to the air (emissions) exempted from these reporting requirements do not pose emergency risks to human health and the environment, this proposal is consistent with the Agency's goal to protect human health and the environment. Furthermore, the proposal is

consistent with the Agency's goal to reduce reporting burdens under CERCLA/EPCRA where there would likely be no Federal, state or local emergency response to these release reports. By not tying up scarce emergency response agencies' resources in accepting and managing these unnecessary reports and the information they contain, these agencies are better able to deal with those CERCLA/EPCRA releases that could in fact call for a response.

### **III. Summary of Comments**

The proposal to exempt livestock and poultry producers from the CERCLA/EPCRA release reporting requirements is sound and should be adopted in a final rulemaking. Our reasons for this position are as follows:

- The Agency has the authority under CERCLA/EPCRA to grant such an exemption and there is precedence for doing this in the case of radionuclides.
- Those in our communities that care to find out where our operations are located can do so, if they do not already possess such information. Simply, there is no mystery about our locations. Also, in almost all instances, the state authorities have publicly available information about our locations as a result of the Grade A certification program. Also, informing such considerations is the additional public and easily available data collected by USDA about the number of animals on operations, in most instances reported to county level detail.
- While the exact quantities of our releases can, at best, be imprecisely estimated in their quantity, there is no uncertainty as to their chemical composition and properties. As a result, those in our communities know, or can easily learn if they do not already know, what is being released from animal manure. There is no mystery here either.
- As such, reporting dairy farmer releases from their animals' manure to the emergency response authorities generates superfluous and unneeded information.
- As noted in the proposed rule, this exemption in no way diminishes the Agency's ability or authority to take enforcement action under CERCLA/EPCRA against producers should that prove needed, however unlikely that may be.
- To the extent that our emissions need to be regulated to help attain certain important environmental objectives, the appropriate vehicle for that is the Clean Air Act, and this is in fact happening in California.

CERCLA/EPCRA release reporting information does not add information to the implementation of this Act that is not already available.

- The releases from manure do not constitute an acute threat to the general public. Also, the considerable, available monitoring data, when compared to the best available chronic health guidelines indicate that our releases are also not a chronic health threat.
- There are no circumstances that we can conceive of where the federal, state and local emergency response authorities would take an action based on our release reporting information.
- The current release reporting requirement, when imposed, creates a significant burden, some of which is quantifiable but there is also an important element to this burden that is unquantifiable and should also be taken into account.

#### **IV. Detailed Comments**

##### **A. EPA Authority to Grant Reporting Exemptions**

The major purpose of the CERCLA/EPCRA release reporting requirements is to ensure that EPA and the related institutions know of releases into the environment. Then EPA exercises its broad statutory authority to get the responsible parties to take corrective action. But EPA has established exemptions to these reporting requirements in cases or categories of activity where the releases would be highly unlikely to ever prompt a response under CERCLA/EPCRA, and where the public health and environment risks would not justify such a response.

The already instituted release reporting exemptions involve certain forms of radionuclides. This rulemaking effort started with a proposed rulemaking in November, 1992 (57 FR 56726), a request for further comments in August, 1995 (60 FR 40042), and concluded with a final rulemaking on March 19, 1998, (63 FR 13459). As the Agency noted in the proposed rule that is the subject of these comments, "These exemptions were granted for releases of hazardous substances that pose little or no risk or to which a Federal response is infeasible or inappropriate." (See 72 FR 73701).

The exemption from reporting requirements in this proposed rule conform to these previous circumstances, as described below. In meeting the conditions established by the Agency's decision regarding radionuclides, this proposal merits adoption in final form.

## **B. CERCLA/EPCRA Informational Needs Already Met**

Perhaps even more importantly, the informational purposes served by the CERCLA/EPCRA reporting requirements (which are intended to facilitate appropriate Agency and other authorities' enforcement responses) are already being addressed. There is commonly available knowledge of our dairies' locations and also of the gaseous substances that are routinely emitted by the manure and related wastes generated by our animals. Requiring individual dairy farmers to comply with these CERCLA/EPCRA reporting requirements is simply unnecessary and superfluous to this CERCLA/EPCRA purpose. The Agency already has available to it the information it needs about our operations and the gases emitted to undertake at any time whatever enforcement actions it deems necessary under CERCLA/EPCRA.

### **1. Grade A Dairy Licensing Records**

With respect to the commonly available information as to the location of our dairies, please see the materials in Appendix A that summarize how nine of the largest dairy producing states in the country make available information to the public about the location of our operations. This information is collected by states as part of their Grade A milk program. Grade A milk is regulated by the Pasteurized Milk Ordinance and is generally used for fluid milk and similar products (e.g., yogurt, dried milk, cottage cheese, etc.). States have strict laws governing the licensing of dairies that produce such milk. The limited number of facilities producing only Grade B milk (milk regulated by State law only which can only be used for further processed products like cheese and ice cream) are also commonly brought into the states' Grade A licensing programs. As a result, the vast majority of all dairy farms in the country are covered by these state programs and that data is publicly available.

In the case of the nine states in Appendix A, as of the date of the submission of these comments and as shown in Table A-1:

- Three will mail the list of dairies to interested parties, free of charge (NY, MI and WA).
- Two will email the list of dairies to interested parties, free of charge (TX and MN).
- Four will mail the list of dairies to interested parties, for a fee (CA, WI, ID and NM).

### **2. USDA National Agricultural Statistics Service Data**

Furthermore, the USDA National Agricultural Statistics Service (NASS) provides accurate and up-to-date census and survey data on the number of

milking animals that are present in the vast majority of US counties. Such county-specific information can and does serve as foundational information for many efforts to understand the nature of our sector and the location of our animals. For example, the USDA-NASS website supplies to the general public this information (<http://www.nass.usda.gov/>). The “Quick Stats” option ([http://www.nass.usda.gov/Data\\_and\\_Statistics/Quick\\_Stats/](http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/)) can be used to select state/county specific datasets with information about the number of cows in a county. See, for example, Appendix B for a printout of the query for county level specifics for the number of milk cows, by country, in New York.

### **3. Composition of the Releases to the Air from Dairy Cow Manure**

As noted above, with regard to the Agency’s need to be able to respond appropriately under CERCLA/EPCRA to releases that constitute a public health or safety threat, the key criteria are whether the Agency knows where the release occurred and its components. In the case of this latter criterion, the chemical nature of the releases to the air from dairy cow manure is well known and understood. Certainly the Agency and the general public do not need dairy farmers to tell them that the decomposition of cattle manure generates ammonia and hydrogen sulfide. Information concerning the nature of these constituents is readily and publicly available.<sup>1</sup>

### **4. Agency’s Authority to Respond is Effectively Intact**

We concur with the core thrust of this proposed rule, that there will be no incidents involving releases to the air from our animals’ manure that would warrant a CERCLA/EPCRA emergency response. Also noted in this proposed rule, the reporting exemption would not diminish the Agency’s ability to use its CERCLA/EPCRA authorities to enforce against our dairy facilities to address threats to human health and environment from our facilities (72 FR 73704), should they ever arise no matter how improbable (see Section III below for a discussion of these health considerations). But just as important as the fact that this enforcement authority remains is the reality that the Agency has at its disposal at least as much information needed to exercise that authority as it would if releases were being reported by individual dairies. Again, requiring

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<sup>1</sup> See, for example, Table ES-1 from “Air Emissions from Animal Feeding Operations: Current Knowledge, Future Needs”, <http://books.nap.edu/catalog/10586.html>.

individual dairies to report releases generates superfluous information not required to support the most important functions and objectives of CERCLA/EPCRA.

### **C. No Acute Risks to General Public from Air Emissions from Manure to Atmosphere outside our Buildings**

Recent press reports have attempted to create the impression that there are acute public health threats from releases associated with animal manure, and that these threats can even be fatal in consequence. These press reports and the impressions they leave with respect to the risk of death faced by the general public are absolutely false. There is no documented incident of deaths occurring as a result of these releases to the atmosphere outside of our buildings. These press reports confuse general public health threats with the very real, tragic and unfortunate instances where dairy farmers, family members, as well as farm workers and rescuers have been overcome by manure-generated fumes in enclosed, unventilated spaces.

The hydrogen sulfide, ammonia, methane or carbon dioxide produced by the decomposition of stored manure represent a very serious workplace safety hazard on our farms and, if not managed properly, can cause death by asphyxiation (the most common cause) or direct toxicity. Fortunately, these workplace safety risks are able to be managed using standard and well understood manure management procedures on the farm. For example, the National Institute for Occupational Safety and Health (NIOSH) issued last year an update to remind dairy farmers and others that manage animal manure about these risks and how they are managed.<sup>2</sup> This update, in its opening paragraph states:

*The tragic deaths of four members of a Virginia farm family and a farm employee on July 2, 2007, highlight the importance of vigilance when entering manure pits or tanks. Accumulations of methane, hydrogen sulfide, carbon dioxide, and ammonia can pose a life-threatening risk of suffocation and other dangers. The immediacy and magnitude of the hazard may not be readily apparent.*

The report goes on to discuss the standard procedures to be followed to avoid injury in similar circumstances. In regard to these workplace safety risks,

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<sup>2</sup> [NIOSH Update: Preventing Deaths of Farm Workers in Manure Pits](#); July 3, 2007.



our dairy farms are very similar to any workplace with closed or unventilated spaces and these risks are understood and managed accordingly.<sup>3</sup>

We appreciate the fact that the Agency does not make the error of equating these real workplace safety risks with acute threats to the general public. These real workplace risks are unrelated to the objectives and issues addressed by CERCLA/EPCRA and it is sound policy not to use them as a basis for requiring reporting of the release of the materials involved into the atmosphere.

#### **D. Clean Air Act is Proper Place to Deal with the Chronic Risks, if Any, to Public Health**

As a matter of public policy, the quantities of ammonia and hydrogen sulfide released from our animals' manure and mixing with the atmosphere outside our buildings and manure storage structures will result in concentrations that generally fall well below all relevant, scientifically established human health standards. This fact provides further justification for the Agency proposal not to require the reporting of these releases by dairy producers. There is an emerging body of thought under the Clean Air Act (CAA) about the role of ammonia emissions and its impact on fine particulate matter formation. To the extent that this effect is present, or where it might be occurring and leading to non-attainment of the applicable CAA standards, the proper place for the regulation of these emissions is the CAA. Such regulation under the CAA, involving the imposition of mandatory air emission mitigation requirements, is already a very real occurrence for many dairy farms in California. The reporting of the releases to the atmosphere from our manure under CERCLA/EPCRA would add no value to this CAA regulatory process.

##### **1. Ammonia Emissions and Human Health**

Ammonia is both a component of animal manure and it is also released as the manure decomposes during the storage or treatment processes. Ammonia is a well-known human toxin that in sufficient concentrations can cause either direct injury to tissue or asphyxiation through displacement of oxygen in enclosed or unventilated spaces. The current Occupational Safety and Health

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<sup>3</sup> See [ALERT: Preventing Occupational Fatalities in Confined Spaces](#); DHHS (NIOSH) Publication No. 86-110 (1986). Also see [ALERT: Preventing Carbon Monoxide Poisoning from Small Gasoline-Powered Engines and Tools](#); DHHS (NIOSH) Publication No. 96-118 (1996).

Administration (OSHA) standard for acute ammonia exposures is 50 ppm (permissible exposure limit for general industry for an 8 hour exposure). NIOSH recommends a lower standard of 25 ppm (10 hour average). The Agency has recommended as reference concentration for chronic inhalation of ammonia of 1.4 ppm. The Agency for Toxic Substances and Disease Registry (ATSDR) has recommended a standard of 300 ppb for chronic exposures.<sup>4</sup>

Studies that have monitored ammonia emissions from dairy facilities have found ammonia levels consistently below these health standards when measured at locations nearby to the facilities but consistent with possible community exposure. Similar findings have been reported for a beef feedlot and also for swine facilities. These findings support the Agency proposal to exempt the reporting of ammonia releases from livestock facilities on the grounds that their release do not represent a human health threat that would warrant an emergency response under CERCLA/EPCRA. These findings are summarized below:

Washington Dairy: Ammonia was measured in the fall of 1999 through the summer of 2000 at a 190 cow Washington state dairy (with 200 replacement heifers). Ammonia concentration measurements were made over the various settling lagoons, downwind from the lagoons, in the operations area of the dairy, and during the application of lagoon slurry to fields. Summer ammonia fluxes ranged from 30 to 75 ppb from one of the settling lagoons for the 390 cow dairy.<sup>5</sup>

California Dairy: Ammonia was measured in February 1999 upwind and downwind of an open-lot dairy in California. Ammonia fluxes were calculated from concentrations measured at three locations on the downwind edge of the dairy and at six additional locations. Ammonium nitrate concentrations measured downwind of the dairy ranged from 26 to 0.26 ppb. Measured ammonia fluxes showed that liquid manure retention ponds represented relatively minor sources of ammonia in winter on the dairy studied.<sup>6</sup>

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<sup>4</sup> See "[Iowa Concentrated Animal Feeding Operations Air Quality Study – Final Report](#)"; Iowa State University and The University of Iowa Study Group, February 2002, Chapter 6, page 123.

<sup>5</sup> See [DOAS Measurement of Atmospheric Ammonia Emissions at a Dairy](#). G. H. Mount, B. P. Rumburg, B. L. Lamb, J. R. Havig, H. Westberg, K. A. Johnson, R. L. Kincaid, Washington State University. Presented at the EPA sponsored 10th International Emission Inventory Conference - "One Atmosphere, One Inventory, Many Challenges", May, 2001.

<sup>6</sup> See "[Ammonia Flux from Open-Lot Dairies](#)"; Development of measurement methodology and emission factors; Journal of the Air & Waste Management Association, 2005, vol. 55, n°6, pp. 816-825.

Washington Dairy: An aeration experiment in a dairy lagoon with two commercial aerators was performed for 1 month. Liquid concentrations of ammonia, total nitrogen, nitrite and nitrate were monitored before, during and after the experiment and atmospheric ammonia was measured downwind of the lagoon. The average atmospheric ammonia concentration 50 meters downwind was about 300 ppb.<sup>7</sup>

## **2. Hydrogen Sulfide Emissions and Human Health**

Reported monitoring data around dairy facilities and their manure storage areas indicate that ambient hydrogen sulfide (H<sub>2</sub>S) levels in the airspace outside of dairy facilities or downwind fall below the applicable ambient air standards. The NAEMS effort referenced earlier will also provide up to two years of H<sub>2</sub>S monitoring data from six dairy locations. There is also H<sub>2</sub>S ambient monitoring data available from swine and cattle operations, and these findings are relevant to the consideration of the H<sub>2</sub>S that may be present outside of dairy buildings. These findings indicate clearly that the chronic levels of H<sub>2</sub>S from our livestock operations are well below the available standards relevant to the general public's health. This is the case when these levels are considered in the context of 1) the applicable federal workplace safety standards; 2) the enormous degree of dilution that occurs when these releases enter the broader atmosphere; and 3) the results of monitoring data at a livestock facility's property line or adjacent to neighboring homes.

The H<sub>2</sub>S standards set to date by the federal government relate to workplace safety. The Occupational Safety and Health Administration (OSHA) has set an acceptable ceiling limit for hydrogen sulfide of 20 parts hydrogen sulfide per 1 million parts of air (20 ppm) in the workplace. The National Institute for Occupational Safety and Health (NIOSH) recommends a 10-minute ceiling limit of 10 ppm in the workplace.<sup>8</sup>

Generally, the ambient air standard necessary to protect the public health is set lower than the workplace standard to reflect 1) the increased duration of exposure; 2) the possible presence of more sensitive individuals; and 3) the fact that those working in the workplace are there by choice and the general public cannot opt out of being exposed to these materials or shouldn't be expected to

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<sup>7</sup> See "[Liquid and atmospheric ammonia concentrations from a dairy lagoon during an aeration experiment.](#)" Atmospheric Environment, 2004 (Vol. 38) (No. 10) 1523-1533.

<sup>8</sup> See "[ToxFAQs™ for Hydrogen Sulfide](#)", DHHS-ASTDR, CAS#: 7783-06-4, July 2006.

have to make that choice. Even in light of these considerations, it is completely appropriate to note that once hydrogen sulfide in a dairy facility or associated with manure storage is vented or migrates to the broader airshed, the degree of dilution will quickly create concentrations that are several orders of magnitude smaller than those in the workplace itself.

As discussed above, there are H<sub>2</sub>S ambient monitoring data available from dairy, swine and cattle operations. Our search indicates that the dairy study below is the only one to date that has been published. As noted above, the NAEMS results will offer data in this regard. Also, the USDA-NRCS has a Conservation Innovation Grant in Wisconsin that will include as part of its efforts ambient H<sub>2</sub>S monitoring at six to eight dairies. The results of that effort are expected this year.

Minnesota Dairy: Ambient H<sub>2</sub>S air concentrations were measured continuously for approximately 30 days around a manure storage facility at a 700-dairy in Minnesota. Barn emissions contributed little to the H<sub>2</sub>S measurements obtained at the manure storage facility. Average H<sub>2</sub>S concentrations downwind of the barn were between 0.02 and 5.7 ppb, while mean H<sub>2</sub>S concentrations around the storage varied between 0.9 and 20 ppb.<sup>9</sup> The applicable ambient air H<sub>2</sub>S standard in Minnesota is 50 ppb.

Iowa Swine: In 2002, the Iowa Department of Natural Resources started monitoring H<sub>2</sub>S concentrations at the property line of or at residences near to swine animal feeding operations. In 2002, two sites were monitored and in no instance were levels found in excess of Iowa's 30 ppb standard, and in most cases the levels detected were below 10 ppb, with the majority of these below 5 ppb.<sup>10</sup> This monitoring continued through 2007, and in 2007 ten sites were monitored located near some of the largest animal feeding operations in the state. In 2007, there were no exceedances of the health effects standard that would lead to regulatory action. The vast majority of the observations were at or below 5 ppb.<sup>11</sup>

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<sup>9</sup> See ["Odor and Hydrogen Sulfide Emission from a Dairy Manure Storage"](#), ASABE, Pp. 368-375 in Fifth International Dairy Housing Proceedings of the 29-31 January 2003 Conference (Fort Worth, Texas USA).

<sup>10</sup> See [Iowa DNR CAFO Monitoring, 2002](#).

<sup>11</sup> See [Iowa DNR CAFO Monitoring, 2007](#).

Iowa Swine: In 2004, researchers at Iowa State University reported the results of monitoring six swine finishing sites for H<sub>2</sub>S. Each site was observed four different times with readings taken over a 36 hour period. Hydrogen sulfide was measured at the building edge and downwind 100 and 500 feet. The site averages for hydrogen sulfide were found to range from 25 to 228 ppb at the building edge, 2 to 11 ppb 100 feet downwind and 4 to 8 ppb 500 feet downwind.<sup>12</sup> Again, these findings were well below the ambient air regulatory standard in Iowa.

Texas Beef Feedlot: In 2004, the American Society of Agricultural and Biological Engineers reported on H<sub>2</sub>S monitoring results for a beef feedlot in Texas. Concentrations of H<sub>2</sub>S were measured at a 50,000-head cattle operation in the fall of 2002, and the winter and spring of 2003. The average H<sub>2</sub>S concentrations for the fall, winter, and spring based on hourly-averages were 7.73 ppb, 0.73 ppb, and 2.45 ppb, respectively. The highest hourly average of 34.9 ppb for H<sub>2</sub>S was measured in the spring 2003, followed by the 29.6 ppb in the fall 2002.<sup>13</sup> The regulatory standard in Texas for ambient H<sub>2</sub>S is 80 ppb for residential, business or commercial areas, and 120 ppb for all other downwind areas.

In summary, these monitoring results indicate that the ambient H<sub>2</sub>S levels are below the regulatory action standard for ambient air, and three to four orders of magnitude below that set for workplace safety. These findings support the Agency's position that the releases from our facilities would ever warrant an emergency response by the Agency or applicable authorities.

### **3. Regulation of Livestock Air Emissions under the Clean Air Act**

We believe that the Clean Air Act (CAA) is the more suitable federal context for the regulation of air emissions from the dairy industry if in fact emission controls are needed. The CAA provides for a science-based process to establish the hazards that may be present for particular classes of emissions and for full notice and comment with respect to the plans to implement and require emission control practices. Nothing in this proposed rule diminishes, legally or substantively, the possible and actual application of the CAA requirements to our industry. Certainly, and as noted above, exempting from CERCLA-EPCRA reporting requirements releases to the air from our animals' manure and related

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<sup>12</sup> See "[Survey Monitoring of Air Quality from Bedded Swine Systems](#)", A.S. Leaflet R1924, Iowa State University Animal Industry Report, 2004.

<sup>13</sup> See "[Ambient ammonia and hydrogen sulfide concentrations at a beef cattle feedlot in Texas](#)", ASABE Paper number 044112, 2004 ASAE Annual Meeting.

wastes does not hinder the federal-state CAA regulatory community's ability to know where we are located and what we emit to the atmosphere. Indeed, in the case of California, these mandatory requirements are already being imposed on dairy and other livestock and poultry producers.

In 2003 state legislation adopted in California ended an agricultural exemption from CAA permitting requirements for both major and minor sources. In addition to the general particulate matter requirements, Confined Animal Facilities (CAFs) would be required to install and use practices to reduce emissions of volatile organic compounds (VOCs), as these are considered precursors to ozone formation in the state's ozone nonattainment areas. These changes provided for enforceable rules and regulations applicable to agriculture and CAFs in particular. Five elements of a California dairy operation would come under regulation with these changes; the milking center, cow housing/feeding areas; manure storage piles, manure and waste water lagoons, and land application areas.

In the San Joaquin Valley, up to 1,100 CAFs were thought to be subject to the requirements to adopt Best Available Retrofit Control Technology (BARCT), and about 350 large CAFs subject to the permitting requirements. These requirements are quite detailed, as shown in Appendix C, which is a checklist that the San Joaquin Air Pollution Control District provides to dairy operations to help them comply with these requirements. The checklist is not the actual permit, and the permit would be the document that specifies the final list of practices to be implemented for a particular operation.

If the extraordinary step must be taken to require air emission reductions from dairy facilities, the CAA has all the authorities and procedural elements necessary to provide for this being done. The CAA has procedures for evaluating emissions, their contributions to the nonattainment status of certain airsheds, and the practices that are technologically applicable, feasible and affordable to be required of producers. These are extraordinary and expensive requirements for dairy producers, and as such great care must be exercised by regulatory authorities before such a step be taken. The above discussion clearly indicates the scope and depth of what can be required of dairy producers under these circumstances. We believe that the CERCLA/EPCRA release reporting requirements do not add materially to these CAA considerations.

Furthermore, Federal law requires that any operations that are subject to federal New Source Review (NSR) may be required to offset their increases in

emissions by simultaneously providing emission reductions. This is generally done with emission reduction credits, or ERCs. There are very strict federal requirements for the "quality" of ERCs that can be used to offset emissions increases under NSR. The emission reductions must be (1) real, (2) permanent, (3) quantifiable, (4) enforceable, and (5) surplus.

#### **E. Burden of reporting**

We fully concur with the findings that the proposal will result in a significant reduction in expenditures in the livestock and poultry community, and an associated reduction in federal, state and local agency personnel staff time and costs spent in dealing with the release information (72 FR 73705). Our own producers' experience, as part of the Air Consent Agreement (ACA) referenced in the introduction to these comments, confirms that considerable time and effort will be saved simply by not having to deal with the mechanics of reporting. When those producers participating in the Air Consent Agreement did attempt to report their releases to the National Response Center (NRC), the local emergency planning committees (LEPC) and the State emergency planning commission (SERC), as required under the ACA, one of the most frustrating and time consuming aspects of this exercise was the time spent dealing with the confusion on the part of the NRC, SERC and LEPC staff. They did not understand why the dairy was reporting releases from their animals' manure, and this added time, confusion and uncertainty. It certainly also created the distinct and understandable impression among our producers that the release information was unimportant to these authorities.

But just as important as this direct time, expense and NRC, SERC and LEPC confusion was during the last cycle of reporting will be the considerable ongoing uncertainty and anxiety in the farmer community over how to properly comply. No one who is required to report information of a substantially indeterminate nature to a governmental authority, under penalty of law, will ever find the process easy or simple. This is a particular disturbing exercise when a farmer knows that the release information is a good estimate, and is necessarily incorrect relative to the actual releases. These stresses create real burdens and also should be taken into account by the Agency in its final decision with respect to this proposal.

The uncertainty is due to the fact that the releases information for a particular operation will, in every case, never be better than an informed estimate. The precise and actual amount of ammonia or hydrogen sulfide released by our dairy operations will fluctuate from day to day, and season to

season in ways that are always going to be imprecisely understood. Small variations in feed composition, temperature, moisture content, humidity, atmospheric pressure, ventilation fan speed, wind speed and direction do occur from day to day and can never be precisely accounted for even though they have a major impact on release rates. The information generated by the NAEMS study referenced in the introduction to these comments will make these estimates more precise through the development of emission factors that should be representative of specific classes of dairy operations. As such the emission factors should provide a good estimate for our entire industry when applied across the entire dairy sector. But these emission factors will be averages, and only an attempt to approximate the releases from our individual farms. Every number these emission factors generate will be strictly imprecise, and therefore technically incorrect.

The CERCLA/EPCRA release reporting requirements state that facilities should submit their best approximation of their releases, and, on its face, this provision should address this concern. But there is no way for a dairy farmer to feel on solid ground when their estimates of their release numbers are reported to emergency response authorities. They will feel at risk because anyone could challenge the accuracy of the numbers and such challenges will occur. The farmer, despite their best and good faith efforts, will know their numbers are necessarily wrong. This is a very onerous burden to quantify, but very real nonetheless.

In summary we fully concur with the Agency's finding that there is a considerable burden resulting for the release reporting requirements. The costs associated with the direct time and expense involved in the mechanical aspects of reporting need to be considered to the added problems that dairy farmers will experience every reporting cycle due to the unavoidably imprecise nature of their release estimates. The Agency should take all of these burden factors into account as it makes its final decision on the proposed rule.

Lastly, while this proposed rule is specific to air emissions, we believe that agricultural operations and waste should be exempt from all of the reporting requirements under CERCLA/EPCRA. The Clean Air Act and Clean Water Act are the appropriate places to address emissions from agricultural operations and this proposed rule should be extended to include all CERCLA/EPCRA reporting. We continue to believe that rules governing water and air should be considered together, rather than apart from each other as changes to one will impact the other.



## Appendix A – Public information about dairy facilities from state licensing records

The information in the table below summarize how nine of the largest dairy producing states in the country make available information to the public about the location of dairy operations. This information is collected by states as part of their Grade A milk program. Grade A milk is regulated by the Pasteurized Milk Ordinance and is generally used for fluid milk and similar products (e.g., yogurt, dried milk, cottage cheese, etc.). States have strict laws governing the licensing of dairies that produce such milk. The limited number of facilities producing only Grade B milk (milk regulated by State law only which can only be used for further processed products like cheese and ice cream) are also commonly brought into the states' Grade A licensing programs. As a result, the vast majority of all dairy farms in the country are covered by these state programs and data is publicly available about the dairy farms that are covered.

Table A-1

State	Agency	Contact Person	Phone Number	Address	Website	Permit information
<b>California</b>	Milk & Dairy Foods Safety Branch, Div. Of Animal Industry, CA Dept. Of Food & Agriculture	Stephen Beam, PhD	(916)653-6681	1220 N Street Sacramento, CA 95814	<a href="http://www.cdfa.ca.gov/AHFSS/Milk_and_Dairy_Food_Safety/MDFS_Home.html">http://www.cdfa.ca.gov/AHFSS/Milk_and_Dairy_Food_Safety/MDFS_Home.html</a>	A mailing list is available for \$50 from Milk Pooling 916-341-5901
<b>Wisconsin</b>	Food Division, WI Dept. Of Agriculture	Mr. C. Thomas Leitzke, Director	(608)224-4701	P.O. Box 8911 2811 Agricultural Drive Madison, WI 53708-8911	<a href="http://datcp.state.wi.us/">http://datcp.state.wi.us/</a>	The report is \$15.05+ tax, Call open records: 800-362-7253
<b>New York</b>	NY Dept. Of Agriculture & Markets Division of Milk Control & Dairy	Mr. Will Francis, Dir.	(518)457-1772	10B Airline Drive Albany, NY 12235-0001	<a href="http://www.agmkt.state.ny.us/">http://www.agmkt.state.ny.us/</a>	Submit a written request on their web site—100 copies are free: www.agmkt.stat

State	Agency	Contact Person	Phone Number	Address	Website	Permit information
	Services					e.ny.us
<b>Idaho</b>	Bureau of Dairying ID Dept. Of Agriculture	Mr. Marv Patten, Chief	(208)332-8550	2270 Old Penitentiary Road Boise, ID 83712	<a href="http://www.idahoag.us/Categories/Animals/Dairy/indexdairyMain.php">http://www.idahoag.us/Categories/Animals/Dairy/indexdairyMain.php</a>	Call 208-327-7050 to obtain a mailing list for \$150
<b>Minnesota</b>	MN Dept. Of Agriculture Dairy, Food and Meat Inspection Div.	Dr. Nicole Nesser, Program Director	(651)201-6027	625 North Robert Street Saint Paul, MN 55155	<a href="http://www.mda.state.mn.us/index.htm">http://www.mda.state.mn.us/index.htm</a>	Available via email - contact: <a href="mailto:Nicole.Neesser@state.mn.us">Nicole.Neesser@state.mn.us</a>
<b>New Mexico</b>	Dairy Division NM Dept. Of Agriculture	Mr. Alfred E. Reeb, Div. Director	(505)841-9425	2604 Aztec N.E. Albuquerque, NM 87107	<a href="http://nmdaweb.nmsu.edu/animal-and-plant-protection/Dairy.html">http://nmdaweb.nmsu.edu/animal-and-plant-protection/Dairy.html</a>	Fax in the NMDA form and \$35
<b>Texas</b>	PSQA-Milk Group-Exchange Bldg. TX Dept. Of State Health Services	Mr. Gene Wright, Group Manager	(512)834-6758 ext. 2570	PO Box 149347 Austin, TX 78714-9347	<a href="http://www.dshs.state.tx.us/">http://www.dshs.state.tx.us/</a>	Available for free, by mail or email: <a href="mailto:Jim.Fraley@dshs.state.tx.us">Jim.Fraley@dshs.state.tx.us</a>
<b>Michigan</b>	Food and Dairy Division MI Dept. Of Agriculture	Mrs. Susan Esser, Program Manager	(517)373-1060	P.O. Box 30017 Lansing, MI 48909	<a href="http://michigan.gov/mda/0,1607,7-125-1572_2875-8211--,00.html">http://michigan.gov/mda/0,1607,7-125-1572_2875-8211--,00.html</a>	Call (517) 373-9740 or go on-line. Available for free.

State	Agency	Contact Person	Phone Number	Address	Website	Permit information
Washington	WA Dept. Of Agriculture Food Safety Program	Mrs. Claudia G. Coles	(360)902-1905	1111 Washington Street P.O. Box 42560 Olympia, WA 98504-2560	<a href="http://agr.wa.gov/FoodAnimal/">http://agr.wa.gov/FoodAnimal/</a>	Submit a public disclosure request form

## Appendix B – Example of county level dairy information available from USDA-NASS

New York State, 2006 County Level Milk Yield, Production and Cow Numbers: Source – USDA-NASS. [http://www.nass.usda.gov/Data and Statistics/Quick Stats/](http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats/)

County	Annual Milk Per Cow (pounds)	Annual Milk Production (1000 pounds)	Annual Average Milk Cows (number)
Jefferson	20,000	607,000	30,400
Lewis	16,900	485,000	28,700
St. Lawrence	17,300	655,000	37,800
Clinton	19,200	354,500	18,500
Essex	18,800	32,000	1,700
Franklin	18,300	283,500	15,500
Erie	20,800	270,000	13,000
Genesee	22,100	466,000	21,100
Livingston	21,000	362,000	17,200
Monroe	26,300	84,000	3,200
Niagara	23,500	195,000	8,300
Ontario	23,000	365,000	15,900
Orleans	28,900	55,000	1,900
Seneca	19,000	110,000	5,800
Wayne	24,300	158,000	6,500
Wyoming	21,400	999,500	46,700
Yates	21,200	197,500	9,300
Cayuga	20,800	709,000	34,100
Chenango	18,000	270,000	15,000
Cortland	19,100	270,000	14,100
Herkimer	14,600	220,000	15,100
Madison	16,500	330,000	20,000
Oneida	19,300	408,000	21,100
Onondaga	22,300	384,000	17,200
Oswego	16,100	50,000	3,100
Otsego	15,600	266,500	17,100
Albany	13,900	25,000	1,800
Fulton	24,600	56,500	2,300
Montgomery	21,500	290,000	13,500
Rensselaer	21,200	208,000	9,800
Saratoga	20,900	146,000	7,000

<b>County</b>	<b>Annual Milk Per Cow (pounds)</b>	<b>Annual Milk Production (1000 pounds)</b>	<b>Annual Average Milk Cows (number)</b>
Schenectady	21,700	13,000	600
Schoharie	16,200	115,000	7,100
Washington	15,400	355,000	23,000
Allegany	14,000	140,000	10,000
Cattaraugus	20,100	322,000	16,000
Chautauqua	16,100	339,000	21,000
Steuben	16,300	336,000	20,600
Broome	18,100	127,000	7,000
Chemung	16,700	45,000	2,700
Schuyler	17,400	87,000	5,000
Tioga	17,500	136,500	7,800
Tompkins	19,000	169,000	8,900
Columbia	15,000	123,000	8,200
Delaware	17,200	182,000	10,600
Dutchess	13,200	45,000	3,400
Greene	16,100	22,500	1,400
Crane	15,400	107,500	7,000
Sullivan	15,600	50,000	3,200
State Total	18,879	12,045,000	638,000

# Dairy Compliance Checklist

Name of Dairy:

NOTE: Not all the measures listed below have to be performed. Only keep records on the measures that you have chosen

The measures that you have chosen will be listed on your Permit to Operate or your temporary permit also known as an Authority to Construct. Remember that the measures that you have chosen must be followed at all times**If you wish to change to a different measure, a permit application must be submitted and approved by the Air District**

Please contact the San Joaquin Valley Air Pollution Control District if you have any questions about record keeping. Modesto office-209-557-6446, Fresno office-559-230-5888, Bakersfield office-661-326-6969

## MY MEASURES

Daily*	Weekly*
--------	---------

**OR**

**OR**

**OR**

### Check Day of the Month the Mitigation Measure is Performed

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
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### FEED CHECKLIST:

- |   |  |  |
|---|--|--|
| 1. Check day uneaten feed is removed from feed lanes (must be at least every 14 days)             |  |  |
| 2. Check day spilled feed is removed from equipment travel areas (must be at least every 14 days) |  |  |
| 3. Check day uneaten feed is removed after rain event within 24 hrs (leave blank if no rain)      |  |  |
| 4. Check day mixed rations are eaten or disposed of no later than 48 hrs after of mixing          |  |  |
| 5. Check day when grain is stored in a weatherproof structure (October thru May only)             |  |  |

**OR**

**OR**

**OR**

**OR**

**QR**

**SOLID WASTE CHECKLIST:**

- |  |  |  |
|--|--|--|
| 1. Check day separated solids from the dairy were removed (within 72 hrs of drying the solids) |  |  |
| 2. Check day dry animal waste piles outside the pens are covered (from October through May)    |  |  |
| 3. Check day dry separated solid piles are covered (from October through May only)             |  |  |
| 4. Check day manure removed from facility (within 72 hrs of removal from corrals)              |  |  |

**OR**

**OR**

**OR**

**OR**

**LIQUID WASTE CHECKLIST:**

- |  |  |  |
|--|--|--|
| 1. Check day fields were visually inspected to verify that liquid animal waste did not remain in the fields for more than twenty-four (24) hours after irrigation. |  |  |
|--|--|--|

**OR**

**MILK PARLOR CHECKLIST:**

- |  |  |  |
|--|--|--|
| 1. Check when parlor is flushed either before, during, or after each milking |  |  |
|--|--|--|

**OR**

**OWNER/OPERATOR SIGNATURE**

**I have reviewed the above and I certify  
that the recordkeeping for this month is  
correct**

\*By Checking daily and/or weekly, I certify that I perform these mitigation measures on either a daily basis (if daily checked) or on a weekly basis (if weekly checked)









