Air Quality Issues and Animal Agriculture: EPA's Air Compliance Agreement

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Summary

From an environmental quality standpoint, much of the interest in animal agriculture has focused on impacts on water resources, because animal waste, if not properly managed, can harm water quality through surface runoff, direct discharges, spills, and leaching into soil and groundwater. A more recent issue is the contribution of emissions from animal feeding operations (AFO), enterprises where animals are raised in confinement, to air pollution. AFOs can affect air quality through emissions of gases such as ammonia and hydrogen sulfide, particulate matter, volatile organic compounds, hazardous air pollutants, and odor. These pollutants and compounds have a number of environmental and human health effects.

Agricultural operations that emit large quantities of air pollutants may be subject to Clean Air Act regulation. Further, some livestock operations also may be regulated under the release reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund, or CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA). Questions about the applicability of these laws to livestock and poultry operations have been controversial and have drawn congressional attention.

Enforcement of these federal environmental laws requires accurate measurement of emissions to determine whether regulated pollutants are emitted in quantities that exceed specified thresholds. Yet experts believe that existing data provide a poor basis for regulating and managing air emissions from AFOs. In an effort to collect scientifically credible data, in 2005 the Environmental Protection Agency (EPA) announced a plan that had been negotiated with segments of the animal agriculture industry. Called the Air Compliance Agreement, it is intended to produce air quality monitoring data on AFO emissions during a two-year study, while at the same time protecting participants through a "safe harbor" from liability under certain provisions of federal environmental laws. Many producer groups support the agreement as essential to gathering valid data that are needed for decision making. However, critics, including environmentalists and state and local air quality officials, say that the Air Compliance Agreement will grant all participating animal producers a sweeping retrospective and prospective liability shield for violations of environmental laws, yet because fewer than 30 farms will be monitored, it is too limited in scope to yield scientifically credible estimates of AFO emissions. Some industry groups have their own questions and reservations. Nearly 2,700 AFOs signed up to participate in the agreement. In August 2006, EPA finished approving agreements with 2,568 AFOs, representing more than 13,000 farms. Monitoring, involving 24 farms in 10 states, began in mid-2007. A legal challenge to the agreement by environmental groups was rejected by a federal court in July 2007.

This report reviews key issues associated with the Air Compliance Agreement. Background information on air emissions from poultry and livestock operations, relevant federal environmental laws and regulations, congressional interest, state activities, and research needs are discussed in CRS Report RL32948, *Air Quality Issues and Animal Agriculture: A Primer*, by Claudia Copeland.

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Introduction

From an environmental quality standpoint, much of the public and policy interest in animal agriculture has focused on impacts on water resources, because animal waste, if not properly managed, can adversely impact water quality through surface runoff and erosion, direct discharges to surface waters, spills and other dry-weather discharges, and leaching into soil and groundwater. However, animal feeding operations (AFO), enterprises where animals are kept and raised in confinement, can also result in emissions to the air of particles and gases such as ammonia, hydrogen sulfide, and volatile organic chemicals. At issue today are questions about the contribution of AFOs to total air pollution and corresponding ecological and possible public health effects.

The Environmental Protection Agency (EPA) has authority to address AFO air emissions under several laws—the Clean Air Act, Comprehensive Environmental Response, Compensation, and Liability Act, and the Emergency Planning and Community Right-to-Know Act. Implementation and enforcement of these laws requires scientifically credible data on air emissions and accurate measurement of emissions to determine whether regulated pollutants are emitted in quantities that exceed specified thresholds.

This report discusses a plan announced by EPA in January 2005, called the Air Compliance Agreement, intended to produce air quality monitoring data on animal agriculture emissions from a small number of farms, while at the same time protecting all participants (including farms where no monitoring takes place) through a "safe harbor" from liability under certain provisions of federal environmental laws. Some industry sectors involved in negotiating the agreement, notably pork and egg producers, strongly support it, but other industry groups that were not involved in the discussions have concerns and reservations. State and local air quality officials and environmental groups oppose the agreement, as discussed below.

A separate report,CRS Report RL32948, *Air Quality Issues and Animal Agriculture: A Primer*, by Claudia Copeland, provides general background information on air emissions from poultry and livestock operations, their sources and health and environmental effects, relevant federal environmental statutes and regulations, congressional interest in these issues, state activities, and research needs.

Background[1]

AFOs[2] can affect air quality through emissions of gases (ammonia and hydrogen sulfide), particulate matter, volatile organic compounds, hazardous air pollutants, microorganisms, and odor. AFOs also produce gases (carbon dioxide and methane) that are associated with climate change. The generation rates of odor, manure, gases, particulates and other constituents vary with

[1] For more extensive discussion, see CRS Report RL32948, *Air Quality Issues and Animal Agriculture: A Primer*, by Claudia Copeland.

[2] Under EPA regulations, an AFO is a facility in which livestock or poultry are raised or housed in confinement, and where the following conditions are met: (1) animals are confined or maintained for a total of 45 days or more in any 12-month period, and (2) crops are not sustained in a normal growing season over any portion of the lot or facility (i.e., animals are not maintained in a pasture or on rangeland). 40 CFR § 122.23(b).

weather, time, animal species, type of housing, manure handling system, feed type, and management system (storage, handling, and stabilization).

Emission sources include barns, feedlot surfaces, manure storage and treatment units, silage piles, animal composting structures, and other smaller sources, but air emissions come mostly from the microbial breakdown of manure stored in pits or lagoons and spread on fields. Pollutants associated with AFOs have a number of environmental and human health impacts. Most of the concern with possible health effects focuses on ammonia, hydrogen sulfide, and particulate matter, while major ecological effects are associated with ammonia, particulates, methane, and oxides of nitrogen.

The animal sector of agriculture has undergone major changes in the last several decades, a fact that has drawn the attention of policymakers and the public. In the United States there are an estimated 238,000 animal feeding operations where livestock and poultry are confined, reared, and fed, according to the U.S. Department of Agriculture's 1997 Census of Agriculture.

Organizational changes within the industry to enhance economic efficiency have resulted in larger confined production facilities that often are geographically concentrated.[3] The driving forces behind structural change in livestock and poultry production are no different than those that affect many other industries: technological innovation and economies of scale.[4] From 1982 to 1997, the total number of U.S. operations with confined livestock fell by 27%. At the same time, the number of animals raised at large feedlots (generally confining 300 animals or more) increased by 88%, and the number of large feedlots increased by more than 50%.[5] The traditional image of small farms, located in isolated, rural locales, has given way to very large farming operations, some on the scale of industrial activities. Increased facility size and regional concentration of livestock and poultry operations have, in turn, given rise to concerns over the management of animal wastes from these facilities and potential impacts on environmental quality.

Agricultural operations often have been treated differently from other types of businesses under numerous federal and state laws. Some laws specifically exempt agriculture from regulatory provisions, and some are structured in such a way that farms escape most, if not all, of the regulatory impact. Moreover, in implementing environmental laws, federal and state regulators have traditionally focused most effort on controlling the largest and most visible sources of pollution to the water, air, and land—factories, waste treatment plants, motor vehicles—rather than smaller and more dispersed sources such as farms.

Nevertheless, certain large animal feeding operations are subject to environmental regulation. The primary regulatory focus has been on protecting water resources and has occurred under the Clean Water Act. While air emissions from farms typically do not exceed thresholds specified in the Clean Air Act (CAA) and thus generally escape most CAA regulatory programs, facilities that emit large quantities of air pollutants may be regulated under the act and state programs which

[3] For additional information, see CRS Report RL33325, *Livestock Marketing and Competition Issues*, by Renée Johnson and Geoffrey S. Becker.

[4] Marc Ribaudo et al., U.S. Department of Agriculture, Economic Research Service, *Manure Management for Water Quality: Costs to Animal Feeding Operations of Applying Manure Nutrients to Land*, June 2003, Agricultural Economic Report 824, 87 pp.

[5] U.S. Department of Agriculture, Natural Resources Conservation Service, *Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assimilate Nutrients: Spatial and Temporal Trends for the United States*, Publication no. nps00-0579, December 2000, p. 18.

implement the CAA. A number of state air quality programs supplement federal CAA requirements with facility construction and operation permits, air quality standards for odor and certain AFO pollutants, monitoring, inspection, and testing. Some observers believe that increased federal and state attention to air emissions from AFOs, precipitated in part by structural changes in animal production and public concern, will likely lead to stricter federal regulation.[6]

Some livestock operations may also be subject to the release reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, the Superfund law) and the Emergency Planning and Community Right-to-Know Act (EPCRA). The reporting requirements of these laws are triggered when large quantities of certain substances are released to the environment, including ambient air. Livestock facilities emit hydrogen sulfide and ammonia, which are reportable substances under these laws. There has been little enforcement of these provisions against livestock operations, but in lawsuits brought by citizen groups, federal courts in two circuits have found AFOs in violation of the reporting requirement provisions of the laws. Applicability of other provisions of CERCLA to agriculture (provisions concerning liability for costs of cleanup of hazardous substance releases and recovery for damages of releases to natural resources) also have drawn attention. The net result is growing concern by the agriculture community that other legal actions will be brought, thus potentially exposing more of these operations to enforcement under federal law.

EPA's Air Compliance Agreement with Industry

Enforcement of applicable provisions of federal environmental laws such as the Clean Air Act requires accurate measurement of emissions to determine whether facilities and operations emit regulated pollutants in quantities that exceed specified thresholds. Monitoring air emissions from feedlots, waste lagoons, animal confinement buildings and other components of livestock facilities is complex and has been controversial. Resolving questions about AFOs' contribution to total air pollution and corresponding ecological and possible public health effects is hindered by a lack of adequate, accurate, scientifically credible data on air emissions. At the same time, increasing public concern about AFO emissions and a growing number of enforcement actions brought against large AFOs seeking compliance with environmental laws, have led to efforts to gather more and better data.

Early in 2002, representatives of some agriculture industry groups—especially pork and egg producers—approached EPA officials with a proposal to negotiate a voluntary agreement that would produce air quality monitoring data on emissions from animal feedlot operations. Discussions between EPA and the industry groups continued for more than two years and eventually led to a plan, called the Air Compliance Agreement, that EPA announced in January 2005. It was published in the *Federal Register* on January 31, 2005, thus triggering a period during which AFOs could sign up to participate in the agreement.[7] Concurrently, EPA solicited public comments, but comments were not expected to lead to changes to the agreement. The signup period, originally set to last for 90 days, was subsequently extended for an additional 60 days, until July 1, 2005, and the public comment period (originally set to end on April 1) was

[6] Jody M. Endres and Margaret Rosso Grossman, "Air Emissions from Animal Feeding Operations: Can State Rules Help?" *Pennsylvania State Environmental Law Review*, vol. 13, Fall 2004, p. 5.

[7] U.S. Environmental Protection Agency, "Animal Feeding Operations Consent Agreement and Final Order," 70 *Federal Register* 4958, January 31, 2005.

extended until May 2, 2005.[8] EPA further extended the deadline for signup, first to July 12 and then to August 12, 2005, in order to provide more time for AFO operators to make decisions about participation. The public comment period was not extended.

The agreement is intended to enable scientists to collect and analyze emissions data and create tools that AFOs could use to estimate their emissions, for purposes of regulatory compliance, while at the same time protecting participating AFOs under a "safe harbor" in which EPA covenants not to sue and releases participants from EPA liability for failing to comply with certain provisions of the Clean Air Act, CERCLA, and EPCRA. EPA retains the authority to respond to an imminent and substantial endangerment to public health or the environment, and participants are not protected against liability for criminal violations of environmental laws.

The agreement applies to AFOs in the egg, broiler chicken, turkey, dairy cattle, and swine industries. (It does not address AFOs that only have open-air feedlots, such as cattle feedlots.) Those that sign up to participate will pay a civil penalty ranging from $200 to $1,000, depending on the number of animals at the AFO, and will contribute $2,500 per farm to implement a nationwide air monitoring program for AFOs. EPA estimated that as many as 4,000 AFOs might sign up to participate in the agreement. Of those that sign agreements with EPA, a small number—perhaps no more than three dozen representative farms nationwide—will be selected to participate in on-farm monitoring, but all who sign up will be protected by EPA's covenant not to sue. EPA reserved the right to decide not to go forward with the agreement and monitoring study if, for example, an insufficient number of AFOs signs up to generate the $10 to $12 million estimated to be needed for the study, or if some individual animal groups were under-represented. EPA also could decline to enter into agreement with an individual AFO if, for example, it is the subject of ongoing federal, state or local environmental enforcement.

EPA expected that within 30 days after the end of the sign-up period (August 12, 2005), agency officials would decide whether to proceed with all, part, or none of the monitoring study and sign the Air Compliance Agreements submitted by industry participants. (As described in the following section, this process took longer than was anticipated.) Signed agreements would then be forwarded to the agency's Environmental Appeals Board (EAB) for final approval. Unlike civil enforcement actions that are resolved by judicially approved consent decrees, the Air Compliance Agreements are administrative agreements. Among other responsibilities, the EAB is the final EPA decisionmaker on administrative appeals under all major environmental statutes that the agency administers.

Monies collected from participants will go to a nonprofit organization (NPO) set up by the AFOs, called the Agricultural Air Research Council.[9] The NPO, in turn, will subcontract with a science advisor and independent monitoring contractor to run the monitoring study, including recommending facilities to be monitored. EPA's role will be to review and approve the contractor's study plan and, later, to use and analyze the data generated by the study. EPA also collaborated with industry and other stakeholders to develop protocols for the study, which were published with the January 2005 *Notice* of the agreement. Emissions at the facilities will be monitored at both buildings and waste lagoons and will include ammonia, hydrogen sulfide, particulate matter, carbon dioxide, and volatile organic compounds (VOCs).

[8] 70 *Federal Register* 16266, March 30, 2005.

[9] 70 *Federal Register* 4970, January 31, 2005.

EPA expected that monitoring would begin in 2006 and continue for two years. EPA will use the data and other relevant, available data to develop methodologies for estimating annual emissions. Within 18 months after the nationwide monitoring study concludes (i.e., early 2008 or possibly some time in 2009), EPA expects to publish emission-estimating methodologies for AFOs in the eligible animal groups. Once the methodologies are published, an AFO will have 120 days to apply the methodologies to its facilities, apply for all applicable air permits and comply with permit conditions, and report any qualifying releases of ammonia and hydrogen sulfide as required by CERCLA and EPCRA. The EPA covenant not to sue and waiver from liability will cover an AFO's liability for failing to comply with certain provisions of CERCLA, EPCRA, and the CAA retroactively and from the start of the agreement up to the time it reports releases and applies for and receives CAA permits (i.e., 120 days after publication of estimating methodologies) or December 31, 2011, whichever is earlier. This time period can be extended by mutual agreement of EPA and participants, without limit to how long such an extension might last.[10]

Status

The signup period for participating in the agreement closed on August 12, 2005, and EPA then began compiling and evaluating responses. Ultimately, 2,681 AFOS, representing more than 6,700 farms, signed up to participate. In November 2005, an initial group of agreements was forwarded to the Agency's Environmental Appeals Board for approval. The EAB approved the first 20 agreements on January 31, 2006, consisting of 10 swine and 10 egg-laying operations in 11 states. The EAB approved larger groups of agreements in April, May, and July, and approved a final group in August 2006. With that final action, the board ratified a total of 2,568 agreements, representing approximately 13,900 farms in 42 states. According to EPA, these farms comprise more than 90% of the largest animal feeding operations in the United States. The total consists of 1,856 swine, 468 dairy, 204 egg-laying, and 40 broiler operations. According to EPA, the EAB's determination that the agreements are consistent with applicable statutes and CAA regulations allows the monitoring study to officially begin developing quality assurance and site-specific monitoring plans for those livestock sectors.

On June 14, 2007, EPA announced that the two-year air monitoring study was ready to proceed. The study, now underway, involves 24 swine, dairy, and poultry farms in 10 states.[11] EPA worked with Purdue University, which is in charge of the study, to review the research plan for the study. Researchers from Purdue and seven other universities are carrying out the actual monitoring.

Critiques of the Air Compliance Agreement

In comments submitted to EPA, many livestock and poultry groups and individual producers supported the Air Compliance Agreement—especially those expected to participate in it. In their view, comprehensive, valid data are needed to develop appropriate public policy regarding emissions from animal agriculture operations. The air monitoring study linked to the agreement is an important effort to establish the criteria that farmers and regulators need to correctly interpret agricultural compliance requirements. Supporters believe that data from the study will enable

[10] 70 *Federal Register* 4964, January 31, 2005.

[11] California, Indiana, Iowa, Kentucky, New York, North Carolina, Oklahoma, Oregon, Texas, and Wisconsin.

EPA to produce charts that livestock and poultry producers can use to know whether their farms are subject to federal environmental laws.

Additionally, supporters said that producers need the protection provided by the agreement in order to volunteer their farms for participation in the study. Without this protection, there is no incentive for producers to participate in the research, because the potential penalties for alleged past violations are so great. Many among those who support the agreement believe that livestock operations should be entirely exempt from CERCLA and EPCRA reporting requirements because, in their view, Congress did not intend for these laws to apply to animal agriculture. Several groups, including cattle feedlots (even though they are not included in the compliance agreement) and chicken and turkey producers, have for some time requested that EPA resolve the issue for producers through a finding or guidance to clarify that animal agriculture facilities are not subject to CERCLA and EPCRA. They fear that, barring statutory change or some clarification from EPA, the courts will continue to rule that the laws do apply to animal agriculture. Thus, they view the monitoring study, and the legal protection provided under it, as an incentive to participants that will provide the data needed to determine on a national scale which farms are subject to compliance with regulatory requirements.

State and local air quality officials and members of the environmental advocacy community strongly objected to the agreement, which some characterized as a grant of "retrospective and prospective immunity from liability" for every AFO in the United States, a sweeping liability shield to the entire industry.[12] Environmental groups and air program administrators were not included in EPA-industry negotiations on the agreement, but several draft versions of the agreement document were publicly circulated throughout the period of its development. Letters to EPA objecting to the proposal were sent by both,[13] and environmental groups unsuccessfully attempted to halt the plan with a September 2003 lawsuit alleging that EPA had violated the Freedom of Information Act by failing to disclose documents about the proposed agreement. A legal challenge to the Air Compliance Agreement was brought by several environmental advocacy groups in May 2005. The lawsuit was dismissed in July 2007, when the court held that the agreements constitute an action that is not reviewable by the court, because the agreements fall within the enforcement discretion of EPA. In a dissenting opinion, one judge said that the agreement is broader than a discretionary enforcement action, because it could be in force for years while EPA formulates an emissions regulatory program tailored to livestock operations (*Association of Irritated Residents v. EPA*, No. 05-1177, D.C. Cir., July 17, 2007).

Not all industry groups were fully supportive of the agreement, for a number of reasons. Some agriculture industry groups that did not participate in negotiating the compliance agreement had a number of their own concerns. Issues presented in critical comments submitted on the January 2005 publication of the agreement addressed a number of points.[14]

[12] Brent Newell et al. (representatives of six environmental organizations), letter to Christine Todd Whitman (EPA Administrator), May 5, 2003, pp. 4-5.

[13] See, for example, Lloyd L. Eagan (President of State and Territorial Air Pollution Program Administrators) and Ellen Garvey (President of Association of Local Air Pollution Control Officials), letter to Christine Todd Whitman (EPA Administrator), April 7, 2003; Shelley Kaderly, STAPPA Agriculture Committee Chair) and Doug Quetin (ALAPCO Agriculture Committee Chair), letter to Robert Kaplan (EPA Office of Enforcement and Compliance Assistance), February 18, 2004; and Brent Newell et al. (representatives of six environmental organizations), letter to Christine Todd Whitman, May 5, 2003.

[14] Materials included in the EPA docket, No. OAR-2004-0237, can be found at http://www.regulations.gov/fdmspublic/component/main.

Environmental Advocates and Air Program Administrators

Environmental critics argued that the agreement unlawfully exempts AFOs from requirements of the Clean Air Act, CERCLA, and EPCRA. They argued that EPA has no authority to defer a major stationary source's or a facility's compliance with these laws, through permit deferrals or requirements. These opponents argued that the broad liability shield provided by the agreement is not justified by contending that there is a lack of data. They pointed to research that has been conducted for quite some time by academic and government researchers (including USDA) that has documented emissions and adverse health and environmental effects from AFO emissions. Further, they argued that EPA has authority under CAA Section 114 to require that AFOs provide emission monitoring data, without the need to provide an industry-wide exemption. In the view of environmentalists, the penalties required under the agreement (averaging $500 per farm) are a "payment to pollute," especially compared with penalties available to EPA under those laws ($27,500 for each civil violation). EPA's position is that the agreement is the quickest and most effective way to address the current uncertainties regarding air emissions and to bring the entire AFO industry into compliance with the CAA, CERCLA, and EPCRA, in contrast to lengthy litigation and case-by-case enforcement of the laws.[15]

Environmental critics also were concerned that the agreement does not require AFOs to reduce pollution. EPA's publication of emission-estimating methodologies will trigger the obligation of participating AFOs to determine their emissions and to comply with all applicable CAA requirements (including permits) and CERCLA and EPCRA reporting requirements. Critics said, however, that it does not guarantee air pollution controls at any AFO or even require participants to test technologies or management practices to reduce their emissions, although all AFOs are eligible to secure a lengthy, perhaps indefinite CAA amnesty. At the end of the study EPA could make regulatory or policy decisions that would leave AFO emissions unregulated, they said, even if monitoring indicates there are emissions in amounts that would be of concern. In addition, they were critical of the open-ended timelines in the agreement (especially the 18 months after monitoring when EPA expects to publish emission-estimating methodologies): if EPA fails to issue the methodologies, the waiver could last indefinitely, they said.

A number of commenters criticized the small number of sites that EPA expected would be monitored—fewer than three dozen, according to EPA's early indications. As noted above, in June 2007, EPA announced that the study will include 24 farms in 10 states. Such a small number, critics said, will be insufficient to develop emission-estimating methodologies for all of the covered animal sectors and possible farm configurations and geographic locations. In response, EPA said that its technical experts believe that the monitoring protocol will provide sufficient data to get a valid representative sample. Moreover, significantly increasing the number of farms to be monitored would be prohibitively expensive and would not add substantially to the value of the data collected, according to EPA.[16] Critics also said that the small sample size for monitoring is inconsistent with recommendations made by the National Research Council calling for a process-based rather than a model farm approach to estimate emissions.[17] EPA said that developing a

[15] 70 *Federal Register* 4958, January 31, 2005.

[16] 70 *Federal Register* 4960, January 31, 2005.

[17] In 2001 EPA asked the National Research Council of the National Academy of Sciences for a report evaluating the current scientific knowledge base and approaches for estimating air emissions from AFOs. Two NRC reports prepared in response to this request are discussed in CRS Report RL32948, *Air Quality Issues and Animal Agriculture: A Primer*, by Claudia Copeland.

process-based model of emissions is part of the agency's long-term strategy but will take a period of years.

Other critics said that the monitoring protocol under the agreement lacks adequate peer review and involvement of qualified, independent scientists who were not involved in its formulation. To assure the scientific rigor of the monitoring program, some commenters recommended an independent peer review process using reviewers with no active ties to the livestock industry. In June 2007, when EPA announced that the study was ready to proceed, agency officials said that Purdue and the other participating universities developed 2,000 pages of protocol for the design of the study and that it was peer-reviewed by EPA and its contractors, as well as by outside research groups. Still, some critics complained that the public had not been notified or involved in the external review process.

State and local air quality officials said that the agreement interferes with their ability to attain air quality standards and enforce air pollution control laws. In their view, several of the agreement's provisions are unclear and could be interpreted to limit the ability of states and localities to enforce air laws. These groups, along with environmentalists, were greatly concerned that the broad waiver of liability will curtail state or local and citizen enforcement, or, at the very least, create a very high hurdle for enforcement. The agreement says that it is not intended to affect the ability of states or citizens to enforce applicable state laws. However, these critics contended that, by saying that the agreement resolves an AFO's civil liability for certain potential violations, it seriously raises the bar for state or citizen enforcement, since a participating AFO might claim in an enforcement action that the agreement provides immunity from state laws or local ordinances. EPA's position is that the agreement does not undermine state or local enforcement authorities and has no impact on the most important state enforcement tools, including zoning classification, state permits, nuisance actions, workplace regulations, and health and safety laws. Further, the agreement does not affect the ability of regulators to bring an action under emergency provisions of the Clean Air Act and other statutes in order to prevent an imminent and substantial endangerment to public health, welfare, or the environment.

EPA also was criticized for failing to resolve two important definitional issues. In the *Notice* announcing the agreement, EPA said that after the monitoring study is complete, it will issue guidance or a rule on whether to treat emissions from different areas at AFOs as fugitive or nonfugitive emissions. Fugitive emissions are not counted for purposes of determining whether under the Clean Air Act a source is major or minor and, thus, subject to pollution controls. Critics said that EPA should clarify this important issue quickly, should do so in consultation with states and localities, and should take any action through a formal rulemaking, not a guidance document.

Similarly, EPA said that at the end of the monitoring study, it will issue guidance on the scope of the term "source" as it relates to animal agriculture and farm activities.[18] State and local air quality officials were concerned that, like the fugitive emissions issue, EPA could define "source" in such a way that emissions from AFOs do not rise to a threshold of regulatory concern. In their view, this would be contrary to federal court rulings in cases concerning applicability of CERCLA and EPCRA reporting requirements to AFOs. States and localities believe that the laws should be interpreted liberally to accomplish goals of cleaning up and maintaining clean air.

[18] 70 *Federal Register* 4959, January 31, 2005.

Other Animal Producers

Critical comments on the agreement also were submitted by some industry groups that did not participate in negotiations with EPA to develop the program, but might be expected to participate in the agreement. A number of commenters from the dairy farming and broiler and turkey producer industries noted confusion about many details of the agreement, especially for small farmers, resulting in uncertainty about implications and costs to them of participating in it (actual costs and transaction costs). Several asked EPA to review public comments on the agreement, make suggested changes where appropriate, and allow producers and processors additional time to sign up, once a final agreement was published. Extending the signup period would allow groups that are less familiar with the agreement the time that they need to assess it, they said. As noted previously, based partly on requests for additional time, EPA did extend the signup deadline until August 12, 2005, but the agreement remained unchanged from what was published in January 2005.

A number of industry commenters objected that the agreement requires an admission of liability and that the term "civil penalty," which participants must pay, carries negative connotations that imply guilt. Some companies objected to having to pay to resolve unproven violations. EPA responded that, by voluntarily signing the agreement, farmers are not admitting any liability or any sort of wrongdoing. Payment of a penalty is part of the process to obtain a release from liability for possible violations, according to EPA, and is not intended to be used for any purposes other than this agreement. In EPA's view, signing the agreement is not an admission that participating agricultural operations have been operated negligently or improperly or in violation of any federal, state, or local law or rule.[19]

Some dairy farmers also raised concerns that the agreement could jeopardize their role in farm programs, bank loans, and insurance policies. In response, the Secretary of Agriculture informed Members of Congress that the department had concluded that "voluntary participation in the Air Compliance Agreement by a producer or processor will not cause the producer or processor to be ineligible for USDA programs."[20]

Both poultry producer groups (sometimes called the meat-bird sector, in contrast to the egg-laying segment of poultry) and dairy groups said that they would prefer to work with a nonprofit organization of their own choosing to manage their participation (handling funding, monitoring facilities, presenting the data), rather than a single organization selected to represent all of the industry. Purdue University was selected to manage the study. The dairy industry preferred to work with its own Dairy Environmental Task Force, which already is addressing dairy air quality issues, and poultry and egg producers preferred to work with researchers that they believe are more familiar with their operations, such as scientists from the University of Georgia.

Producers in the poultry and dairy sectors also objected to the small number of sites that EPA plans to monitor (for example, the protocol calls for monitoring only four dairy farms and two broiler operations across the country), saying that the proposed monitoring program is too limited and that the data will not accurately reflect the variation or range of climatic, geographic, and

[19] U.S. Environmental Protection Agency, "Response to Public Comments on the Animal Feeding Operation Air Agreement," June 23, 2005. Available at http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-response-com.html.

[20] Mike Johanns, Secretary, USDA, Letter to the Honorable Robin Hayes, August 11, 2005.

operational factors that influence emissions from facilities. Whereas the environmentalists' concerns about the small number of sites to be monitored is that the majority of producers will benefit from the safe harbor without having to do anything, industry groups have different concerns. They fear that EPA will impose future requirements that will be both costly and scientifically inappropriate, because the limited monitoring under the protocol will not adequately reflect different types of operations within specific sectors or for all segments of animal agriculture. One commenter noted as follows:

> [A]n insufficient number of farms are included in the monitoring to allow for the development of models to estimate emissions from individual AFOs.... It is unclear how the very limited number of representative farms selected, and the resulting emission estimating methodologies, will result in data capable of accounting for the various differences in management styles, feed regimes, water control and numerous other factors that can affect emissions.[21]

Comments from poultry and dairy groups raised other concerns, including financial obstacles to participating in the agreement. Dairy farmers noted that while some animal producers are able to use funds from national check-off programs to pay for the study so that individual producers do not have to pay the costs out-of-pocket (e.g., the National Pork Board has committed $6 million of check-off funds for pork producers' participation), the national dairy check-off program may not be used to fund production-oriented research at the farm level.[22] Thus, there is no central mechanism to fund dairy farmers' participation in the monitoring study.

A group of pork producers who operate small farms, called the Campaign for Family Farms, and several individual hog farmers objected to use of mandatory pork check-off funds to support producers' participation in the EPA Air Compliance Agreement. In May 2005 they petitioned the Secretary of Agriculture to halt pork check-off commitments for expenses related to the agreement. In their view, the EPA study is beyond the type of research and promotion that is permissible under the Pork Promotion, Research, and Consumer Information Act, which authorizes the check-off. According to the petitioners, the proposed use of pork check-off funds is a means for large concentrated animal feeding operations (CAFOs) to buy legal immunity from environmental laws that will not benefit those producers who are too small to be subject to the CAA, CERCLA, or EPCRA.[23] Despite this challenge, USDA has approved use of the pork check-off funds for the study.

Proposed CERCLA/EPCRA Reporting Exemption

In 2005, a group of poultry producers petitioned EPA for an exemption from EPCRA and CERCLA emergency release reporting requirements, arguing that releases from poultry growing operations pose little or no risk to public health, while reporting imposes an undue burden on the regulated community and government responders. In December 2007, EPA responded to the poultry industry petition with a proposal to exempt releases of ammonia, hydrogen sulfide, and

[21] Comments of C. M. Williams, F. J. Humenik, directors of the Animal and Poultry Waste Management Center and the National Center for Manure and Animal Waste Management, on EPA Docket ID: OAR-2004-0237, March 2, 2005, p. 11.

[22] For background information on national check-off programs for promotion and research of crop and livestock commodities, see CRS Report 95-353, *Federal Farm Promotion ("Check-Off") Programs*, by Geoffrey S. Becker.

[23] Mark McDowell et al., and the Campaign for Family Farms, "Petition before the Secretary of Agriculture," AMA PPRCIA Docket No. 05-0001, May 5, 2005, p. 8.

other hazardous substances to the air from animal waste at farms from the notification requirements of CERCLA and EPCRA.[24] The exemption would apply to releases to the air from manure, digestive emissions, and urea, including animal waste mixed with bedding, compost, and other specified materials. EPA explained that the rule is justified because of the resource burden to industry of complying with reporting requirements, since the agency cannot foresee a situation where a response action would be taken as a result of notification of releases of hazardous substances from animal waste at farms.

The proposal drew significant public response during the public comment period, including criticism from environmental groups and others, such as states. Some argued that an exemption is premature, since EPA is moving forward with research on emissions levels under the Air Compliance Agreement, and that the Agreement could be undermined by a regulatory exemption. Industry groups support the proposed exemption. Final action on the proposal could occur before the Obama Administration takes office in January 2009, according to EPA.

In September 2008, the Government Accountability Office (GAO) issued a report evaluating EPA's activities to regulate air emissions and water discharges from animal feeding operations. GAO noted the criticism of EPA's air emissions monitoring activities and concern that the research may not produce sufficient information to shape future regulation. Moreover, GAO questioned the basis for the proposed CERCLA/EPCRA exemption. "It is unclear how EPA made this determination when it has not yet completed its data collection effort and does not yet know the extent to which animal feeding operations are emitting these pollutants."[25]

Congressional attention to the issues discussed in this report has been limited, with the result that developments have proceeded largely by administrative and some judicial actions, not through legislative policymaking. No legislation regarding the Air Compliance Agreement has been introduced. Prior to release of the agreement in January 2005, some individual Members wrote letters to EPA objecting to the pending plan. Some Members also have been critical of EPA's proposal to exempt routine animal waste air releases from CERCLA and EPCRA's reporting requirements, questioning the potential for harmful environmental and enforcement impacts of the proposal.[26] At a September 24, 2008, hearing where GAO's recent report was discussed, several House Energy and Commerce subcommittee members said that they are skeptical of the EPA's authority for a blanket exemption. Others suggested that an exemption for small farms, whose emissions are unlikely to cause environmental harm, would make sense. EPA and USDA witnesses supported the proposal, saying that the air release waiver would only affect reporting meant for emergency response situations, but would not affect requirements to report emissions of hazardous substances from other farm sources, or releases of hazardous substances from manure into soil, ground water, or surface water.

[24] U.S. Environmental Protection Agency, "CERCLA/EPCRA Administration Reporting Exemption for Air Releases of Hazardous Substances from Animal Waste," 72 *Federal Register* 73700 (December 28, 2007).

[25] U.S. Government Accountability Office, "Concentrated Animal Feeding Operations, EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern," September 2008, GAO-08-944, p. 7.

[26] Letter from Reps. John Dingell, Albert Wynn, Hilda Solis to Stephen L. Johnson, EPA Administrator, March 18, 2008.

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