U.S. EPA Air Quality Compliance Agreement for Animal Feeding Operations

Informational Fact Sheet for Minnesota Animal Producers[1]
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Larry D. Jacobson and Kevin A. Janni
BAE Dept., University of Minnesota

What is this Compliance Agreement about?

The U.S. Environmental Protection Agency (EPA) published the Air Quality Compliance Agreement for Animal Feeding Operations (AFOs) in the Federal Register on Jan 31, 2005. This "Agreement", formerly known as "Safe Harbors" or "Consent Agreement", requests ***voluntary*** participation from livestock and poultry producers in return for protection from EPA enforcement of air emission violations from animal production units (buildings and associated manure storages) that occurred prior to and during the Agreement period. The Agreement also calls for an industry funded two-year national monitoring study for measuring air emissions from representative AFOs.

What are the deadlines for participating?

Originally, the Agreement called for a 30-day comment period and a concurrent 90-day signup period, however, ***the comment and signup periods have both been extended.*** The EPA is reopening the ***comment period from April 1 to May 2, 2005***. The deadline for animal producers to signup was May 1, 2005 but ***will be extended until July 1, 2005***.

Why is there a concern over air emissions from animal operations?

The consolidation of AFOs and their growth in size has resulted in an increase in citizen complaints and concern over human health impacts of air emissions from AFOs. A 2002 National Academy of Sciences report recommended that EPA improve its method of estimating air emissions from AFOs and find ways to control airborne pollutants from these sources. Certain hazardous compounds and pollutants (ammonia (NH_3), hydrogen sulfide (H_2S), and particulate matter (PM)) from AFOs may trip thresholds limits of the Clean Air Act (CAA) and notification provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA). Though enforcement action against some AFOs has occurred, EPA needs more emission data to determine if specific operations are in violation.

[1]**This fact sheet is for informational purposes only and is not an endorsement of the Agreement whether expressed or implied**

What animal operations are included?

Animal Feeding Operations (AFO's) in the swine, dairy, egg, broiler, and turkey industries may participate in the Agreement. Open feedlots (primarily beef) and land application of manure are ***excluded*** from the Agreement.

What are the threshold limits for CERCLA, EPCRA, and CAA?

The reporting threshold for CERCLA and EPCRA of ammonia (NH3) and hydrogen sulfide (H2S) from any one source (such as a farm) is 100 lbs/day. This can be as infrequent as one 24-hour period during a calendar year. The Clean Air Act (CAA) threshold for these gases and particulate matter (PM) is 250 tons/year in attainment areas and 100 tons/year or less in non-attainment areas (places like southern California that has many other emission sources). By far, the most restrictive of these thresholds is the CERCLA and EPCRA 100 lb/day limit for NH_3. Only the very large operations would reach the CAA limits (250 tons/year) and then only in non-attainment areas that would lower the limit to 100 tons/year or less.

What is the minimum size of operation to reach the 100 lbs/day thresholds for NH_3?

Unfortunately we don't have a clear answer to this question since we have only limited data on air emissions from barns and manure storages. This lack of data is why the monitoring study is part of the Agreement, to build a better database of air emissions for animal production systems. Listed below are ROUGH ESTIMATED sizes for typical swine buildings with various types of manure storage options that would be common in Minnesota (based on preliminary air emission measurements and assembled by Steven Hoff, Iowa State University) that may produce sufficient NH_3 emissions to reach the 100 lbs/day reporting limit for CERCLA and EPCRA:

Pig Operation	Deep Pit	Outside Manure Storage	Deep Bedded
Finishing*	2,000	1,200	1,500
Nursery*	6,700	4,000	5,000
Gestation*	2,500	1,500	1,800
Farrow to Finish**	225	225	-
Farrow to Wean**	1,800	1,800	-
Farrow to Feeder**	1,000	1,000	-

*baseline data from the Ammonia Estimator Tool developed by the University of Nebraska (Koelsch, et al.)
**from University of Kentucky Extension fact sheet (Coffey, et al.)

Estimates for building ONLY sizes for other animal species are:

Dairy cows	200 head
Laying hens	50,000 birds
Turkeys	70,000 birds
Broilers	70,000 birds.

Since the dairy and poultry estimates are only for buildings; any associated manure storages that may be on the farm site will also need to be added**.** When manure storage emissions are added, this could reduce the dairy and poultry numbers significantly from those indicated above. Please remember that it takes only a single 24-hour emission event in a calendar year to be in violation of the federal air regulation that can easily occur when manure storages are agitated and emptied.

How much are the fees to participate if I sign up?

Two one-time fees are required to participate in the Agreement, a civil penalty and a monitoring study fee. The civil penalty is for the legal protection and varies from $200, $500 to $1000 per farm, with $200 for all farms under the federal CAFO size limit of 1000 animal units, $500 for farms at or above the CAFO size limit but below 10,000 animal units, and $1000 for farms at or above the 10,000 animal unit size. The payment of this penalty fee is not an admission that your farm has violated any air emissions regulations. The monitoring study fee per farm will depend on the number of participating AFOs per animal species. Check-off dollars will probably fund the monitoring studies for the pork and egg producers, while a maximum of $2,500 per farm will apply to the other animal species.

What else does signing up mean?

If you sign up for the Agreement you also make your farm available for the monitoring study, although only a few farms (28 has been mentioned but the final number will be determined by how many and what type of farms signup) will be included so the chance of being selected is very low.

How do I submit comments on this Agreement?

You can submit comments by May 2, 2005 by going to the EPA website:
http://www.epa.gov/airlinks/afo_howtocomment.html

Where can I get more information about the Agreement?

Go to the following EPA website for more information about and a copy of the Consent Agreement.
http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html

How can I make an informed decision?

The bottom line is that EPA officials are stating that existing federal laws will be enforced for air emissions from animal operations. EPA realizes that more data is needed to determine which AFOs are affected. Whether you participate or not is a personal decision, but you should weigh your options carefully and make an informed decision since this will have long-term consequences. You may want to contact your commodity organization (Minnesota Pork Producers Association at 1-800-537-7675, Minnesota Milk Producers Association at 1-877-577-0741, and Minnesota Turkey Growers Association and the Broiler and Egg Association of Minnesota, both at 763-682-2171) for input into the decision process.