



## Defending Agriculture

Legal, environmental hot button issues that impact U.S. farmers.

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### Do CAFOs Pollute?

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Concentrated Animal Feeding Operations according to the Environmental Integrity Project, "...are major sources of ammonia emissions and other dangerous air pollutants." EIP is a nonprofit organization dedicated to enforcement of the nation's pollution laws, according to its website.

In a report titled "Hazardous Pollution from Factory Farms: An Analysis of EPA's National Air Emissions Monitoring Study Data," EIP makes a number of charges against The National Air Emissions Monitoring Study, a CAFO air emissions study conducted with industry support and leadership from Purdue University.

Purdue conducted air quality monitoring over the last two years at CAFO livestock confinement sites, waste lagoons and dairies. The purpose of the study was to determine amounts of ammonia, hydrogen sulfide and PM<sub>2.5</sub> being emitted from CAFO facilities so EPA can regulate another segment of agriculture.

EIP claims the NAEMS results show CAFO emissions "...are substantial and pose a threat to public health." It claims CAFOs "...may be unsafe with levels of particulate matter, ammonia, or hydrogen sulfide at many sites well above federal health-based standards."

EIP says many CAFOs are major polluters and trigger emission reporting laws that apply to other industries.

#### A closer look at the facts

It would be helpful if EIP understood the facts regarding air emissions from CAFO's.

EIP claims "The exhaust concentrations of ammonia at some study sites also indicate potential risks to the health of neighbors and workers." The ammonia emissions are measured at most NAEMS sites inside the barn near a ventilation fan. There are not too many workers or neighbors standing for hours inside or near a ventilation fan just as you do not stand behind the tailpipe of your car or truck. Emissions from CAFO's disperse rapidly!

EIP asserts ammonia can harm a person's respiratory system and is life threatening at high concentrations, and it uses a National Institute for Occupational Safety and Health recommendation that workers be exposed to no more than 35 parts per million of ammonia in any 15 minute period.

True, but now the rest of the story.

The Occupational Safety and Health Administration sets the worker safety federal standard at 25 PPM averaged over an 8-hour work day. Even NIOSH says a person can be exposed to 25 PPM for a 10-hour day or 40-hour week.

EIP tries to create concern regarding the NAEMS study by suggesting 140 parts per billion of ammonia is an EPA determination. A part per billion is 1,000 times a part per million. Consequently, OSHA's standard for a worker inside a building is 25,000 PPB.

NIOSH is not the regulatory arm regarding worker safety in the United States. OSHA has that responsibility. EIP uses NIOSH numbers rather than the regulatory standards which have been set by OSHA.

Hydrogen sulfide as we all know can be fatal at high concentrations (500 PPM). We read too frequently about farmers being killed by entering manure pits that have high concentrations of H<sub>2</sub>S.

#### Causing confusion

EIP confuses the reader by not providing all the facts regarding occupational exposure to H<sub>2</sub>S. It cites NIOSH as recommending no more than 10 PPM or 10,000 PPB for 10 minutes, which is true at shipyards and construction sites, but OSHA sets a worker safety standard at all other industries at 20 PPM or 20,000 PPB for an 8-hour day.

Emission levels of H<sub>2</sub>S at CAFO boundaries never come close to these numbers because of dispersion.

EIP claims that ammonia and hydrogen sulfide are hazardous air pollutants, and each must be reported to government agencies pursuant to two federal statutes if a CAFO emits over 100 pounds per day. This reporting requirement applying to CAFOs has been hotly contested.

The facts!

In 1990: The Senate Committee on Environmental and Public Works, working on Clean Air legislation, declared the following "...the principle health concerns with ammonia is strictly sudden, accidental release in the atmosphere...ammonia is not carcinogenic, mutagenic, teratogenic or neurotoxic, in either low or high volumes of exposure, nor does it present any significant public health hazard or environmental hazard through chronic exposure to routine emissions...If air emissions of ammonia are hazardous at all, it is only in the case of substantial, sudden, and accidental release..."

CAFOs do not have substantial, sudden or accidental releases.

In fact, EPA recognizes that when there are releases of hazardous substances on a regular basis and in relatively stable amounts, state officials do not have to be notified nor does the Coast Guard or EPA itself.

In fact, EPA only regulates ammonia under Section 112 [r] of the Clean Air Act when there are sudden releases of 10,000 pounds or more.

EPA has exercised common sense on reporting of releases from facilities like CAFOs . Reporting is not necessary "...if the Agency determines that the federal government would never, or would only rarely, take a response action as a consequence of the harm posed by the release or because of the infeasibility of a federal response, a basis for an exemption from the section 103 reporting requirements may exist."

EIP and environmental groups want CAFOs regulated by EPA, so when reading articles about EIP's report, remember some facts are missing.

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