## FACT SHEET

## AIR POLLUTION FROM FACTORY FARMS

- Most meat, milk, and eggs produced in the United States come from animals raised in industrial factory farms facilities that confine hundreds, thousands, or even millions of animals.
- EPA estimates that there are approximately 20,000 of these facilities throughout the country, and many are geographically clustered in certain regions and communities.<sup>i</sup>
- Factory farms (also called concentrated animal feeding operations or CAFOs) produce more than 300 million tons of manure every year, which is more than three times the amount of waste produced by humans.<sup>ii</sup> The waste is often stored in enormous sewage pits or "lagoons" before being spread, effectively untreated, on crop land.
- Factory farms emit a large number of air pollutants, including hydrogen sulfide (which causes extreme odors for downwind residents, and contributes to acid rain and regional haze), ammonia (which causes respiratory problems in farmers and neighbors), particulate matter (which can trigger asthma and heart attacks), volatile organic compounds (which can cause headaches, nausea, and increased risk of cancer), and greenhouse gases (which cause a warming of the climate often referred to as climate change). These dangerous air emissions emanate from various areas on the facility, with some of the greatest releases coming from the animal confinement areas and waste impoundments.
- Factory farm emissions of two greenhouse gases methane and nitrous oxide are a significant driver of climate change. Nitrous oxide has more than 300 times the global warming potential of carbon dioxide, and methane has more than 20 times the potential. In 2006, factory farms in the U.S. were responsible for emitting almost nine million tons of methane, or almost 185 million tons of carbon dioxide equivalent, according to EPA.<sup>iii</sup>
- Ammonia and nitrogen oxide gases from factory farms contribute to water pollution and "dead zones" in estuaries and lakes. Nitrogen from these gases binds to rain drops, where, upon precipitation, it is washed into waterways and feeds the growth of algae blooms, which die and rot, sucking oxygen out of the water.
- In addition to causing health and quality of life problems, air pollution from factory farms also drive down the real estate values of nearby residents. University of Missouri researchers found that every factory farm in that state depresses surrounding property values by \$2.68 million.<sup>iv</sup>
- Despite clear scientific evidence that industrial animal operations contribute significantly to nationwide air pollution that negatively affects human health and welfare, EPA currently does not require factory farms to meet any testing, performance, or emission standards under the Clean Air Act, which was enacted nearly 45 years ago. However, as the petitions make clear, the Clean Air Act has two at least programs that EPA could use to regulate factory farm air pollution.

<sup>&</sup>lt;sup>i</sup> EPA, NPDES CAFO Reporting Rule, 76 Fed. Reg. 65431, 65445 (Oct. 21, 2011).

<sup>&</sup>lt;sup>ii</sup> Pew Commission on Industrial Farm Animal Production. "Putting meat on the table: industrial farm animal production in America." April 2008 at 23.

<sup>&</sup>lt;sup>iii</sup> EPA, Overview of Greenhouse Gases, <u>http://epa.gov/climatechange/ghgemissions/gases/ch4.html</u>.

<sup>&</sup>lt;sup>1</sup> Mubarak, H., T.G. Johnson, and K.K. Miller. 1999. *The impacts of animal feeding operations on rural land values*. Report R-99-02. College of Agriculture, Food and Natural Resources, University of Missouri–Columbia.