

TO: Local Emergency Planning Committee:

Method of Delivery and Tracking No.:

State Emergency Response Commission:

Method of Delivery and Tracking No.:

FROM: _____

RE: Continuous Release Report

Dear Sir or Madam:

This continuous release report is submitted pursuant to 40 CFR 355.32 and the final rule published on December 18, 2008, 73 Fed. Reg. 76948 (EPA Final Rule). This final rule exempted our facility from reporting hazardous substance releases under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), but did not provide such an exemption for reporting under the Emergency Planning and Community Right to Know Act of 1986 (EPCRA). The attached reporting information reflects our good faith estimate of ammonia and hydrogen sulfide emissions from our operations, in accordance with the EPA Final Rule.

While we do not believe that agricultural operations such as ours are required to report ammonia and hydrogen sulfide emissions from the decidedly naturally occurring processes of swine urination, defecation and flatulence under either CERCLA or EPCRA, we are nonetheless filing the enclosed report under EPCRA given the uncertainty created by the EPA Final Rule over whether EPA believes that we have a legal obligation to report these naturally occurring releases which happen during routine agricultural operations. The EPA Final Rule pointedly noted that it was not “defining facility, normal application of fertilizer, or routine agricultural operations”, 73 Fed. Reg. at 76951, and yet each of these definitions is key to a determination of whether we have a legal obligation to report these releases under either CERCLA or EPCRA.

In the past, we have relied on legal analyses concluding that we do not have an obligation to report these releases under either CERCLA or EPCRA because of the various exemptions and exceptions for naturally occurring substances, normal application of fertilizers and pesticides, and routine agricultural operations, as well as the intended focus of the statutes and the protections contained in the statutes and legislative history for agricultural operations suggesting that Congress never intended that emissions from swine defecation, urination and flatulence be required to be reported in the same manner as man-made chemical accidents, spills and releases. Since the publication of the EPA Final Rule and the uncertainty it created over whether we are required to report ammonia and hydrogen sulfide emissions from swine operations, we have assembled available data to make our good faith estimates of these emissions for the purposes of making the attached continuous release reports.

Thank you.

**Swine Operation – Continuous Release Report
Emergency Planning and Community Right-to-Know Act (EPCRA)**

- Complete and sign this form.
- Call the Local Emergency Planning Committee (LEPC) and State Emergency Response Commission (SERC).
- Mail this one-page form to the LEPC and SERC (certified mail—return receipt or other verifiable means).

TYPE OF REPORT: <input type="checkbox"/> Initial written notification <input type="checkbox"/> Written notification of a change to initial notification				
SECTION 1. LOCATION		SECTION 2. INITIAL PHONE REPORTS		
Swine Farm name:		LEPC Location:		
Person in charge:		Person contacted:		
Physical address:		Date:		
Mailing address:		Signature:		
City:				
State:		SERC Location:		
Zip:		Person contacted:		
Office phone:		Date:		
Cell phone:		Signature:		
Latitude:				
Longitude:		Dun and Bradstreet Number, if available:		
SECTION 3. SOURCE AND RELEASE DESCRIPTION				
Description:	This location is a swine production farm. Swine are maintained and fed for meat production. This report is being submitted in response to a clarification of EPCRA provided by EPA in a final rule effective January 20, 2009. Ammonia emissions are naturally occurring and are emitted from the cattle digestive process and decomposition of manure.			
Type of release:	<input type="checkbox"/> Air	Health effects:	<input type="checkbox"/> None	
Time & duration:	<input type="checkbox"/> Continuous, low level	Precautions:	<input type="checkbox"/> None	
Population Density (within 1 mi. radius):	<input type="checkbox"/> 0-50 persons <input type="checkbox"/> 101-500 persons <input type="checkbox"/> greater than 1,000 persons			
	<input type="checkbox"/> 51-100 persons <input type="checkbox"/> 501-1,000 persons <input type="checkbox"/> Other:			
Sensitive population or ecosystems (within 1 mi. radius):	Elementary school: _____	Hospital: _____		
	Retirement community: _____	Wetland: _____		
	Other: _____			
SECTION 4. SUBSTANCES CONTINUOUSLY RELEASED (ESTIMATES)				
	Chemical name	CASRN#	Lower Bound (pounds/day)	Upper Bound (pounds/day)
Substance No. 1:	<input type="checkbox"/> Ammonia (NH ₃)*	7664-41-7		
Substance No. 2:	<input type="checkbox"/> Hydrogen Sulfide (H ₂ S)*	7783-06-4		
*Estimates of ammonia and hydrogen sulfide emission rates are based on an analysis of air quality research data collected from a number of funded studies. Research is on-going. The estimated total annual amount released last year could be estimated as: (1) a range represented by the daily lower bound and upper bound levels multiplied by 365 days, or (2) the average of the daily lower bound and upper bound levels multiplied by 365 days.				
SECTION 5. SIGNED STATEMENT				
The hazardous substance releases described above are continuous and stable in quantity and rate as determined by EPA in its final rule, 73 FR 76948 (Dec. 18, 2008). To the best of my knowledge, I certify that all information submitted in this report is a good faith estimate of air emissions based on currently available scientific information. I reserve the right to raise any objections to the application of these laws and regulations to the facility listed.				
Name (printed):		Title:		
Signature:		Date:		

Calculation Worksheet – Ammonia and Hydrogen Sulfide Emissions

Swine Operations – Confinement with liquid manure management systems

KEEP THIS WORKSHEET FOR YOUR RECORDS-DO NOT SUBMIT WITH YOUR REPORT

The final rule on EPCRA reporting issued by EPA on December 18, 2008 and effective January 20, 2009 requires reporting of ammonia and hydrogen sulfide emissions **if** the swine facility has 2500 or more swine over 55 pounds, or 10,000 swine under 55 pounds; **and** the ammonia exceeds 100 lbs/day **or** the hydrogen sulfide exceeds 100 lbs/day. If the ammonia or hydrogen sulfide is less than 100 lbs/day, enter “N/A” in the appropriate cell in the reporting form.

Swine Facility Name: _____ **Date:** _____

The emissions estimates are derived from research reported by:

Gay, S.W., D.R. Schmidt, C.J. Clanton, K.A. Janni, L.D. Jacobson, S. Weisberg. 2003. Odor, Total Reduced Sulfur and Ammonia Emissions from Animal Housing Facilities and Manure Storage Units in Minnesota. Applied Engineering in Agriculture, 19(3) 347-360, ASABE, St. Joseph, MI.

and:

Jacobson, L.D., A.J. Heber, S.J. Hoff, Y. Zhang, D.B. Beasley, J.A. Koziel, and B.P. Hetchler. 2006. Aerial Pollutants Emissions from Confined Animal Buildings. Summary report, Ag Air Workshop, USDA-IFAFS research and demonstration program.

These values are a good faith estimate of emissions from swine operations using typical confinement housing and manure storages and located in a temperate climate.

AMMONIA (NH₃) EMISSIONS ESTIMATE

Enter your head count and multiply times the appropriate Emission Rate (from Table 1) to equal the emission estimate for the facility.

AMMONIA (NH ₃) EMISSIONS ESTIMATE		
Lowest Head Count	Lower Bound NH ₃ Emission Rate (pounds/hd/day)	NH₃ Lower Bound (pounds/day)
NH₃ Lower Bound =	X	=
Permitted Head Count	Upper Bound NH ₃ Emission Rate (pounds/hd/day)	NH₃ Upper Bound (pounds/day)
NH₃ Upper Bound =	X	=

Hydrogen Sulfide (H₂S) EMISSIONS ESTIMATE

Enter your head count and multiply times the Emission Rate (from Table 1) to equal the emission estimate.

Hydrogen Sulfide (H ₂ S) EMISSIONS ESTIMATE		
Lowest Head Count	H ₂ S Emission Rate (pounds/hd/day)	H₂S Lower Bound (pounds/day)
H₂S Lower Bound =	X	=
Permitted Head Count	H ₂ S Emission Rate (pounds/hd/day)	H₂S Upper Bound (pounds/day)
H₂S Upper Bound =	X	=

Table 1. Swine facility per-animal emission constants. Liquid Manure Systems. Housing and manure storage estimates are combined.

Management group	Pull-plug, scrape, flush, shallow pit		Deep Pit	
	Upper bound	Lower bound	Upper bound	Lower bound
Breeding & gestation	NH ₃ 0.098 H ₂ S 0.016	NH ₃ 0.0098 H ₂ S 0.0016	NH ₃ 0.052 H ₂ S 0.0085	NH ₃ 0.0052 H ₂ S 0.00085
Farrowing	NH ₃ 0.16 H ₂ S 0.030	NH ₃ 0.016 H ₂ S 0.0030	NH ₃ 0.022 H ₂ S 0.0028	NH ₃ 0.0022 H ₂ S 0.00028
Nursery	NH ₃ 0.019 H ₂ S 0.0043	NH ₃ 0.0019 H ₂ S 0.00043	NH ₃ 0.0046 H ₂ S 0.0020	NH ₃ 0.00046 H ₂ S 0.00020
Grow-finishing	NH ₃ 0.055 H ₂ S 0.0104	NH ₃ 0.0055 H ₂ S 0.00104	NH ₃ 0.037 H ₂ S 0.0080	NH ₃ 0.0037 H ₂ S 0.00080

