

**National Air Quality Site
Assessment Tool
NAQSAT**

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 National Air Quality Site Assessment Tool 

Background

- Livestock producers are under increasing pressure to mitigate air emissions:
- Concern over regulatory requirements
 - 2005 Consent Agreement – Industry & EPA CERCLA, EPCRA and CAA
 - National Air Monitoring Study (NAEMS)
 - <https://engineering.purdue.edu/odor/NAEMS/>
 - 2009 Non-participating farms complied with EPCRA requirements
- “Good Neighbor Policy”

Background

- Mitigation strategies are expensive to implement
 - Identify opportunity for greatest impact
 - Select correct management action to control emission of concern
- Because of management and structural variability in operations, these are site specific decisions.

Funding

- USDA-NRCS Conservation Innovation Grant and partners



Partners

- C.E. Meadows Endowment, Michigan State University
- Colorado Livestock Association
- Iowa Turkey Federation
- Iowa Pork Producers
- Iowa Pork Industry Center
- Iowa State University Experiment Station
- Michigan Milk Producers Association
- Michigan Pork Producers Association
- Michigan State University Extension
- National Pork Board
- University of California, Davis
- University of Georgia Department of Poultry Science
- University of Maryland Department of Animal and Avian Sciences
- Nebraska Environmental Trust
- Western United Dairymen

University partners

- Colorado State University
- Iowa State University
- Michigan State University
- Oregon State University
- Penn State University
- Purdue University
- Texas A&M University
- University of California, Davis
- University of Georgia
- University of Maryland
- University of Minnesota
- University of Nebraska



Project components

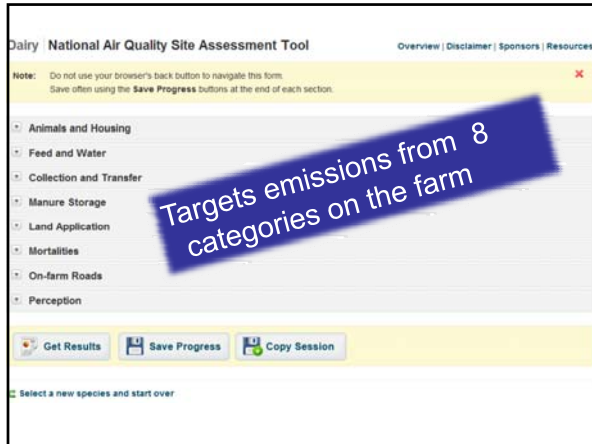
Development of an on-farm air quality assessment tool designed to evaluate where mitigation strategies will have the greatest impact

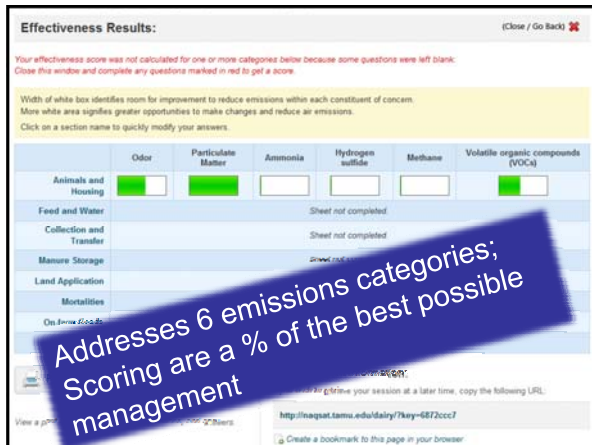
Goals

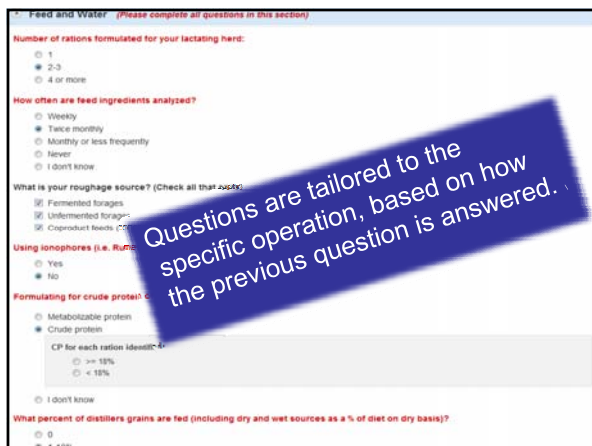
- Online availability (free!)
– <http://naqsat.tamu.edu/>
- Farmer friendly
- Site specific
- Must compliment currently available tools
– Iowa State “Air Management Practices Assessment Tool”¹











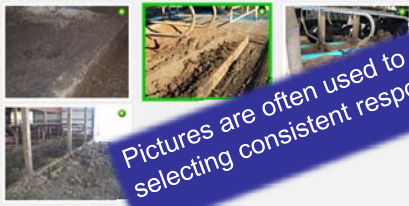
Animals and Housing

Note to User: Many farms may use more than one of the listed choices below. In order to allow the use of NAQSAT as a "What If" tool only one of the choices can be selected at a time. The user can click on "Get Results" for that selection and see how changing the answer will affect their results. If only a general overview is desired, identifying the predominant practice will accomplish that result.

Housing type: Select the photo that best represents your facility for each set of photos revealed below.

Pasture
 Freestall/Restall/Stanchion/Confinement

Bedding conditions: (Click on an image below; your selection will highlight in green.)



Percentage of floor manure covered:

Up to 25%
 25 to 50%
 >50%

Pictures are often used to assist in selecting consistent responses.

Effectiveness Results: (Close / Go Back)

Your effectiveness score was not calculated for one or more categories below because some questions were left blank. Close this window and complete any questions marked in red to get a score.

Width of white box identifies room for improvement to reduce emissions within each constituent of concern. More white area signifies greater opportunities to make changes and reduce air emissions. Click on a section name to quickly modify your answers.

	Odor	Particulate Matter	Ammonia	Hydrogen sulfide	Methane	Volatile organic compounds (VOCs)
Animals and Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feed and Water	Sheet not completed					
Collection and Transfer	Sheet not completed					
Manure Storage	<input type="checkbox"/>	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mortalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On farm Roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	<input type="checkbox"/>
Perception	<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A

Print My Report

Saved Session Information:
 If you wish to return your session at a later time, copy the following URL:

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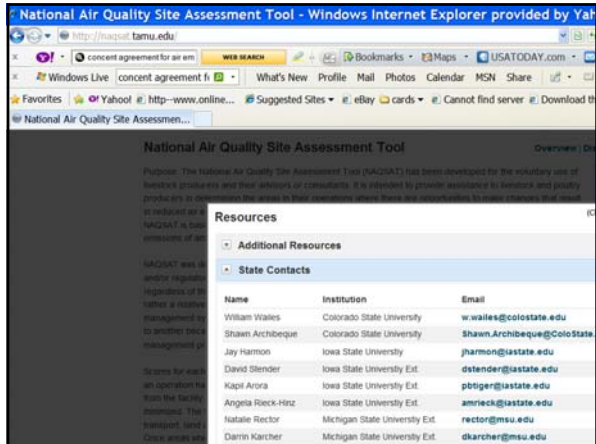
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How well current management and technology are working. Room for improvement



Train the Trainer

- Available free: <http://naqsat.tamu.edu>
 - (That's Texas A&M's web site)
- Training opportunities:
 - Today's web cast features dairy and beef examples
 - Oct. 15th web cast features poultry and swine
 - Both are archived for train the trainer learning on demand
 - ASABE's 2010 International Symposium on Air Quality and Manure Management for Agriculture
 - Wednesday, Sept. 15th for registered participants
- Additional resources
 - Found within the tool:
 - Resources
 - State contacts

Thank you

Background photos credit:
Ben Darling, MSU
