National Air Quality Site Assessment Tool (NAQSAT)
Screening Tool and General Instructions

Client Name: _____   Date: _____   Screener Signature: _____

√ **Determination:**   ☐ < 300 AU, NAQSAT optional   ☐ > 300 AU, NAQSAT required. Continue...

Requirements for Completing NAQSAT Reports

- When providing technical or financial assistance to an AFO or CAFO with 300 animal units and greater to address the manure or wastewater handling and storage/treatment/ and/or when providing assistance for comprehensive nutrient management (CAP and/or Practice) involving the application of manure and wastewater you must complete and provide two NAQSAT reports for each animal group for the client.

- Reports include 1) Baseline NAQSAT report (for current management conditions) and 2) Planned practices NAQSAT report (for operation with the planned management/practice changes, i.e. planned construction of building and elimination of open lots, management changes, etc.) that addresses all identified air quality resource concerns to meet the client's objectives for each animal group.

- **How to calculate total Animal Units?*** (Either Option is acceptable)

  Option 1: Animal Units = (Average weight of the animal in pounds divided by 1,000 pounds) multiplied by the total one-time animal type. Repeat for each type of animal; combine totals. Attach documentation to support your finding, or use chart in Option 2.

  Option 2: If you don't know the average weight for each species - Use the following Species Specific Conversion factors to Animal Units (Head Count x Conversion Factor = AU)

Animal Type	No. of Animals	Multiply by	Conversion factor	Equals	A.U. by Type
Dairy Mature Cow (≤ 1000 lbs.)		multiply by	1.0	equals	
Dairy Mature Cow (> 1000 lbs.)		multiply by	1.4	equals	
Dairy - Heifer		multiply by	0.7	equals	
Dairy - Calf		multiply by	0.2	equals	
Beef - Cow/Calf Pair		multiply by	1.2	equals	
Beef - Finishing Cattle		multiply by	1.0	equals	
Beef Feeder Cattle - backgrounding, heifer development		multiply by	0.7	equals	
Swine (>300 lbs.) Sows, boars		multiply by	0.4	equals	
Swine (55-300 lb.) Gilts, feeder, finishing		multiply by	0.3	equals	
Swine (<55 lb.) Nursery		multiply by	0.1	equals	
Horse		multiply by	1.0	equals	
Sheep. Lambs, Goats		multiply by	0.1	equals	
Chickens, Over 5 lbs.		multiply by	0.005	equals	
Chickens, Under 5 lbs.		multiply by	0.003	equals	
Turkeys, Over 5 lbs.		multiply by	0.018	equals	
Turkeys, Under 5 lbs.		multiply by	0.005	equals	
Ducks		multiply by	0.01	equals	
TOTAL A.U. for all Animals types (Use to determine if NAQSAT required)					

*Include all species under control by that owner, operator, or corporation.

- If the site has 300 or more A.U., interview the client and complete audit for each species.
- Access website at *naqsat.tamu.edu* with Tablet or smartphone or computer. If not possible, fill out onsite, using the NAQSAT DATA SHEETS INVENTORY found on the PA NRCS Website. Forms on Air Quality page. Each animal type has a different input sheets. Use this information to complete web-based NAQSAT at a later time.
- All questions that appear need to be answered on the web-based version. The answer may affect the next question. The data input sheets list all the questions. Fill out those as appropriate.
- Before using the software review the on-line **"Overview"** and **"User Manual"** at the *naqsat.tamu.edu* site. The program is set up to include or remove questions from view on the basis of user input. Answers to some questions will generate additional questions to be answered. The program may pause momentarily while those questions are populated.
- Pictures are used when a visual appraisal of current practices is most appropriate. Placing the cursor over the picture will generate a text description of the management practice. Clicking on the green X in the top right-hand corner of the picture will generate a larger view. Click the red X or outside of the photo to return to the data input screen.
- Save data after completing each category by clicking on the "Save Progress" button at the bottom of the page. Each NAQSAT session is assigned a unique URL. Bookmark the URL to facilitate easily returning to the NAQSAT session at a later date. Click on the red X to return to the input section and move to a new management category. This will be your baseline condition. One for each species.

- Do not use the browser "back" button. Clicking on the browser "back" button will return you to the NAQSAT home page, and all unsaved inputs will be lost.

Generating output:
- Before getting results, click on the "Save Progress" button to ensure that all inputs are saved.
- To generate results, click on the "Get Results" button at the bottom of the page.

Interpreting results:
- The effectiveness of current practices for each management category and each emission of concern is reflected by the percentage of green in the boxes under each emission. The larger the green area in each box, the more effective current management practices are and the fewer the opportunities to reduce emissions of that constituent in that management category.

- If all boxes are completely green, it does not mean there are no emissions. Fully green boxes simply indicate that the current management practices for the existing structural facilities provide few or no opportunities to reduce the emissions of that constituent in that management category. Often empty or partially filled green boxes can be made greener by selecting better management habits. Left clicking a box will show practices that could be used to reduce air quality concerns.

- "Sheet not complete" identifies some questions required to complete the analysis that were not answered in that management category.

- N/A (Not Applicable or Not Available) – Sufficient data was not available at the creation of this tool to provide the impact of a practice on emission of a specific constituent, or a selected answer in a sheet does not have an impact on emissions of a specific constituent.

- Save the existing site conditions with the assigned URL. Remember to record or save the URL. This can be printed out to document the current management or baseline of that particular animal group for that operation.

Finalizing outputs:
- You must also run and print out at least one variation for each animal group that meets the clients objectives to address identified air quality resource concerns as part of the I&E. Use "Copy Session" to start the process. This will require saving a separate URL for that animal group. The selection and implementation level will be done to meet client objectives .(National Planning Procedures Handbook and associated planning criteria. You show the client the effects of improved management or adding conservation practices by alternating back and forth in each category. They then select which ones they want to meet.
- The final selections reflect decisions made by the client to meet their objectives for dealing with the various air quality resource concerns . In many cases some of the resource concerns will be addressed. This will be your second output. Sometimes addressing one concern will affect others detrimentally. In many cases, changes in management can yield significant gains without implementation of typical conservation practices.
- Clicking on the red X in the upper right-hand corner will take users back to the input section.
- Return directly to a management category by clicking on that category on the "Effectiveness Results " page.
- Do not click on the browser "back" button.

Exiting NAQSAT:
- Save all inputs before exiting NAQSAT. Remember to copy the URL so that you can retrieve your session. Bookmark two URL's per animal group.
- All scenarios will remain active on the NAQSAT site for 30 days.
- If you re-access the data, the 30-day period starts over again.

Printing Reports:
- The "Effectiveness Results" screen contains a print button in the lower left-hand corner as well as the saved session URL (Figure 5). All inputs are printed as well as the "Effectiveness Results" page. As a minimum, you will have two printouts for each animal group at that operation. This will include the existing operation or baseline and the final planning one showing what the owner has selected to meet their objectifies. This should be noted in the report. (In the I&E, CNMP narrative, or conservation notes)