

**Official USDA Agricultural Air Quality Task Force (AAQTF) Recommendations
April – September 2016**

**Submitted by Greg Johnson, Designated Federal Official
USDA-NRCS**

Washington DC, April 7, 2016:

1. Enhance the value of the AAQTF to the USDA Secretary and NRCS Chief by:
 - a. Consider amending statutory language in the 2018 Farm Bill, by amending the AAQTF charter for a period of four years, and
 - b. Appoint 50% of the members to two year terms. Renewal of members should be at the discretion of the Secretary. Additionally, the 6-year term limit should be removed in order to allow continuity and retention of institutional knowledge in light of the relatively small pool potential candidates for membership in the AAQTF.
2. The lack of air quality research funding is creating a void in air quality research capacity for agriculture. There is a need for better understanding of the interaction between agricultural activities and air quality in order to provide an avenue for measurement and accountability of science-based and proven approaches and mitigation technologies. AAQTF recommends that USDA establish separate and distinct funding areas within both NIFA and ARS, and re-instate annual funding at a minimum level of \$40 million per year, focused on criteria air pollutants and their precursors between the two research agencies. Without on-going leadership and funding by USDA, U.S. agriculture will continue to be regulated based on insufficient science.
3. While the NRCS Conservation Innovation Grant (CIG) Program has been beneficial in some topic areas, the focus on agricultural air quality issues has been minimal. AAQTF recommends that NRCS list air quality as a specific priority in the call for CIG proposals and give those proposals equal consideration in the review process.
4. In several of the previous terms on the AAQTF, members of the Task Force have worked with EPA to address the special considerations that must be considered when measuring, modeling and regulating air quality in agricultural and rural areas. The AAQTF recommends that NRCS and EPA reengage in those discussions and provide a report on the status of those issues at the next AAQTF meeting, issues such as PM sampler bias, exceptional events, prescribed burning, ozone, regional haze and carbon emissions are among those topics that need to be addressed.
 - a. The short-term priority should be to continue the particulate matter dialogue between EPA and Texas A&M University.

Sacramento CA, September 9, 2016:

Air Quality Standards Related:

1. AAQTF members in previous terms have worked with EPA to address the special circumstances that must be considered when measuring, modeling and regulating air quality in agricultural and rural areas. The AAQTF recommends that NRCS and EPA continue to engage in discussions on issues such as PM sampler bias, exceptional events, prescribed burning, ozone, ammonia measurement, regional haze and carbon emissions, among others.
2. Based on presentations provided by Dr. Ron Lacey, Texas A&M University and Dr. Bob Vanderpool, EPA at the AAQTF meeting on Sept. 8, 2016
 - a. The AAQTF recognizes the importance of continuing research of the historical issue regarding PM sampler performance for regulatory purposes with agricultural sources and Federal Reference Method (FRM) samplers in very site specific situations.
 - b. The previous coordination and collaboration between the late Dr. Brock Faulkner and Dr. Vanderpool has provided new information on the performance of PM samplers utilizing wind tunnels.
 - i. FRM samplers perform well in wind tunnel evaluations using mono or polydisperse aerosol in the range of 3 to 25 microns (i.e., intended to represent an MMD of 10 microns).
 - ii. However, it continues to be a concern that the performance of FRM samplers has not been evaluated using aerosols that would be more representative of the higher range of PM AED (i.e., closer to 40-50 microns on the high end) and larger MMD (i.e., 17 to 22 MMD) from agricultural sources.
 - c. The proper implementation of FRM samplers in a regulatory context continues to be unresolved. This issue exists in situations where samplers are placed such that an area source emitting particles with a large MMD has a primary impact on the sampler.
 - d. In addition to sampler performance in site specific situations, other unresolved issues include the implementation of the PM NAAQS, appropriate siting of samplers, and interpretation of the data.
 - e. Clarity is also needed regarding the interpretation of regulatory definition of PM vs. the technical definition of PM sampler cut-point and performance within the regulatory community.
 - f. The AAQTF recommends that the Secretary continue to communicate these issues and concerns to the EPA Administrator to ensure that PM emissions from agricultural sources are accurately monitored and evaluated for compliance.

Climate Building Block Related:

- 1) USDA AAQTF recommends NRCS "*Nitrogen Management Technical Note #6: Nitrogen Efficiency and Management*" (September 2007) be updated with current science and used as the basis for a new Technical Note specifically addressing source, rate, time and method (4R) practices with the potential to reduce cropland N₂O emissions.

This new Technical Note will serve as the basis for technology transfer and communications to NRCS field staff and Technical Service Providers who work with growers and should be the scientific foundation to:

- Better communicate cropland N₂O practices to the farm level,
- Increase technical expertise at the local NRCS level, and
- Align local funding priorities with the science.

- 2) USDA AAQTF recommends development of technical assistance capacity to write and promote Nutrient Management Plans (590 standard) that include N₂O emission reduction actions that can be used by growers. Training opportunities for individuals working with growers and outreach materials to enhance grower awareness should be developed with interested cooperative extension service, agribusiness and crop production partners to include training modules for NRCS field staff and Technical Service Providers based on the revised Technical Note.
- 3) USDA AAQTF recommends that NRCS partner with agribusiness to promote training and the [Certified Crop Adviser \(CCA\) 4R nutrient management specialty certification](#) to build technical assistance capacity for 590 Nutrient Management Plans with N₂O reduction conservation actions. The 4R nutrient management specialty certification, currently available in 10 states (primarily in the Midwest), evaluates participants on identified performance objectives closely linked to those required for [Technical Service Providers \(TSP\) working in area of Nutrient Management](#). Additionally, consideration should be provided for TSP certification maintenance requirements to remove barriers to participation.
- 4) USDA AAQTF recommends partnering with agribusiness to collect and aggregate data on grower implementation of Nitrogen Stewardship practices (non-incentivized) by NRCS that aligns with the revised Technical Note Nitrogen stewardship practices. Nutrient management data has value to not only address N₂O emission goals, but also to demonstrate source, rate, time and method practice implementation to address regional water quality nutrient reductions (ex. State Nutrient Loss Reduction goals).

In April 2015, NRCS convened a focus group of agribusiness professionals and stakeholders to discuss implementation and data collection for non-incentivized practices. TFI is convening a Partner workgroup to discuss the structure of data collection effort, including the following individuals and organizations:

- Bill Angstadt, Angstadt Consulting, Inc., Chair
- Molly Toot, SUSTAIN, Winfield Land O'Lakes (fertilizer retailer)
- Hunter Carpenter, Agricultural Retailers Association
- Dana Ashford Kornburger, Natural Resources Conservation Service
- Aaron Hunt, Agrian (ag data platforms)
- Suzy Friedman, Environmental Defense Fund
- Luther Smith, International Certified Crop Advisors
- Sarah Fox, Agrium/Crop Production Services (fertilizer retailer)
- Jason Weirich, MFA (fertilizer retailer)

- 5) USDA AAQTF recommends allocation of producer funding (Environmental Quality Incentives Plant (EQIP) & Conservation Stewardship Program (CSP)) over multiple years building on Secretary Vilsack's announcement of \$72.3 million EQIP funding for Soil Health & Nitrogen Stewardship through 4Rs practices implementation (May 12, 2016). Provide guidance to NRCS State Conservationists on the criteria for allocation of these funds and producer contract specifications, which align with the new Technical Note. EQIP could offer a "bonus" to producers that write 590 Plans with N₂O reduction practices.
 - Consider additional Air Quality Enhancements in the Conservation Stewardship Program (CSP) focused on revised Nitrogen Technical Note & data collection.

- Consider a state-focused priority round of cropland N₂O CIG proposals. The objective would be to expand state water quality certainty programs (such as MN Farm Assessment, MD FSCAP) to include air quality assessments for N₂O reductions. NRCS should consider supplementing CIG project funds with EQIP allocations – to assure producer contract available funds.
 - Investigate authority to enter into Cooperative Agreements with agribusinesses to provide technical assistance.
- 6) USDA AAQTF recommends that NRCS work with agribusiness and grower organization partners to encourage producer enrollment through outreach and education. Consideration should be given for a national recognition program aligned with the USDA Climate Hubs, specifically to work with the Coalition of Agricultural Greenhouse Gases (C-AGG) on their evolving award framework.
- 7) USDA AAQTF recommends utilizing aggregated implementation data to quantify national N₂O emission reductions resulting from N stewardship building blocks. Aggregated data would include USDA data for practice implementation on financially supported acres combined with data gathered through partnerships with agribusiness.