**NH3 Key Sectors Training**

Q&A May 16, 2018

**Are you starting with feed data?** Yes. The Nitrogen content of the feed, as available, is an input to the first sub-module of the overall process model.

**Only layer data was analyzed. Is that true?** No. As far as poultry goes, both layers and broilers were analyzed. But only for chickens.

 **How does meteorology play into the equation?** Meteorology is a part of the surface resistance terms and other equilibrium calculations. That’s how the model gets seasonal and daily variability.

**With regard to domination of summer emissions by swine--does this mean we're getting swine right in the inventory?** We will need to do more evaluations with the model output as we move forward. We are pretty sure that emissions from Dairy cows is low, and swine might be closer to right. Jesse added that swine tend to be in SE, and we think those are pretty good (according to air quality models).

**Are there disaggregating SCCs?** We aggregated the SCCs for CMU model outputs in the 2014 NEI. Only 5 of them for major animal types (all processes): swine dairy cows, beef cattle, layers and broilers. There are other more specific SCCs that SLTs can report into.

**Can you temporalize VOC from livestock?** VOC in the NEI was estimated as 8% of NH3. In the NEI, these estimates are stored at a county/annual level. For modeling, higher resolution is needed. VOC emissions like NH3 emissions were temporalize as needed for emissions and air quality modeling. Standard procedures of using Henry Law dynamics were used to establish the relationships.

**Is there a need to review the manure management trains**? Sometimes that level of detail is hard to find, but will try to provide the data to the states as part of review process in 2017 and work with them to get better information for the NEI.

**The USDA NAAS database has county level data for all animals...why can't we use that?** Generally, Census is more complete but it is only done every 5 years. Using NAAS survey data usually leaves a lot gaps that must be backfilled for animal counts.

**Would it help you to have photos of actual silage silos used in Iowa?** Yes, and IA agreed to provide. In Iowa they are closed, not open. Since the time of the training, IA has provided the information to EPA.

**Is there double counting between fertilizers being applied and bidirectional nature of fertilizer already in soil?** We do not double count. The livestock emissions include emissions from the application process. The fertilizer emissions are for post application when the manure is in the soil

**Did pasture and hay data affect ND?** There isn’t that much of hay in the ND area, but EPA will look into it. ND looks low due to temperature effects as well.

**Is satellite data would be available?** Jesse Bash indicated that he can provide what he gets, but not a complete dataset.