

CB States Discussion on Soil Amendments

August 26, 2019

Attendees:

- Frank Schneider, PA
- Jill Whitcomb, PA
- Tim Sexton, VA
- Chris Brosch, DE
- Jason Dalrymple, WV
- Lorretta Collins, CBPO

Charge:

The AgWG jurisdictions will informally discuss management of soil amendments in their respective states. They will come back to the AgWG with information to drive a conversation for next steps toward quantification of soil amendments at a future meeting.

What are we considering a soil amendment?:

- Compost
- Mortality Compost
- Spent Mushroom Soil (SMS)
- Food Processing Residuals (FPR)
- Sewage Sludge / Bio-solids (may be part of bay modeling, it is believed it is)
- Recycling Lime
- Gypsum
- Humic and Fulvic Acids

How states handle:

- **PA**
 - Soil amendments need to be register with Department of Agriculture
 - Tracks all fertilizer and soil amendment by Plant Industry
 - Compost, FPR, etc. not tracked per PA Dept of Ag, unless they claim a N-P-K component
 - Soil amendments are accounted for in Nutrient Management Plans (NMPs), Nutrient Balance Sheets (NBSs), and Manure Management Plans (MMPs) as either:
 - Their own manure group (even though not really manure)
 - As additional fertilizer, like we would treat commercial fertilizer
 - Biosolids
 - Permit
 - Written in NMP, NBS, or MMP
- **DE**
 - Tracks all fertilizer and soil amendment by state chemist
 - Compost, FPR, etc. not tracked per DE Dept of Ag, unless they claim a N-P-K component
 - If it does have a N-P-K component its counted as a commercial fertilizer in the NMP.
 - If no N-P-K component and not manure, not in NMP and not on annual report

- Biosolids
 - Permit
 - Written in NMP
- **MD**
 - Tracks similar to DE
 - Soil amendments included into NMP similar to PA, DE, VA, NY, WV
 - Biosolids
 - Permit
 - Written in NMP
- **VA**
 - Soil amendments included into NMP similar to PA, MD, DE, NY, WV
 - Carbon to Nitrogen needs to be below 20:1 in NMP, above 20:1 doesn't need to be included.
 - Biosolids
 - Permit
 - Written in NMP
- **NY**
 - The approach in NY seems similar to those outlined by the other states.
 - Fertilizer and lime products must be labeled and meet the certified analysis per NYS Dept. of Agriculture and Markets Law (www.agriculture.ny.gov/PI/commodities.html).
 - Biosolids, food processing residuals, and composts are regulated by NYS DEC Part 360 Regs (www.dec.ny.gov/regulations/81768.html).
 - 360 Regs require nutrient analyses and NMP limits when on a non-CAFO permitted farm and similar requirements are integrated into the CNMP when on a CAFO permitted farm.
- **WV**
 - Soil amendments included into NMP similar to PA, MD, DE, VA, NY
 - Biosolids
 - Permit
 - Written in NMP

Recommendations to AgWG:

- **Should we look at soil amendments to include as an input into the bay model (Phase 7)?**
 - No, the quantities are not enough to move the needle in one direction or the other.
 - Even if we tracked it, the bay model doesn't use tons of N, rather it needs ammonium, nitrate and organic fractions to simulate the nitrogen cycle.
 - If a soil amendment has an analysis then it is treated as a fertilizer and is either tracked by the state chemist or in the states NMP program.
- **Should we split soil amendments out from other nutrient sources?**
 - Bio-solids already accounted for.
 - Data and time intensive for each state. Is the return worth the exercise?

9/10/19

- Should possibly consider at a future time, when more pressing issues are completed.
- **Other Considerations.**
 - Soil amendments are being tracked by the states as part of Nutrient Management and this would just add another step with little return.
 - 3rd party technologies could still get credit in the model by the state following the approved technology review and approval process.