
Agriculture and Nature Expert Panel Report to plenum

Nick Hutchings

Guidebook updates

- Recommend adoption of methodology for emissions of HCB (3Df)
 - Minor changes from version presented in 2019
- Recommend adoption of revised methodologies for 5B2 (biogas production), 3B (manure management) and 3D (emissions from soil)
 - Necessary to ensure a complete and consistent treatment of N gasses

Emission factor updates - NH₃ emissions

- For synthetic N fertilisers
 - Add application rate to the list of dependent variables
 - Investigate some inconsistencies in the underlying model
 - Advise delaying revision until 2022
- For emissions from livestock housing and manure storage
 - Emission factors based on median values of available measurements
 - Use mean not median values (harmonisation with IPCC)
 - 'Hidden' data?
 - Review by ad hoc group with expectation of a recommendation for adoption

Emission factor updates - NH₃ emissions

- For emissions from field-applied liquid manure
 - Ad hoc group
 - Investigate sensitivity of emissions to precipitation
 - Initially test using UK precipitation data
- For emissions from field-applied solid manure
 - "Hidden" data?
 - Use mean not median then recommend adoption

Process and resources

- Dissemination of information by Parties
 - Please ensure a wide dissemination of information concerning proposed updates and open review
 - Difficult to deal with major comments after the end of the open review
- More rigorous methodological development?
 - Suggestion that we need much more detailed development processes than has been traditional in TFEIP (i.e. closer to IPCC)
 - Not a problem – if the resources are made available



Other business

- Ammonia emissions from crops
 - Need a workshop to make progress
- Direct and indirect emissions of nitric oxide from soils
 - Hoping UK will undertake a review and methodology development
- International activities related to nitrogen
 - especially Task Force on Reactive Nitrogen

Workplan 2019-2020

- Method to estimate ammonia emissions from liquid manure applied to soil - assess sensitivity to rainfall
- Continue development of method to estimate ammonia emissions from synthetic fertilisers
- Revise methodology for direct emissions of nitric oxide
- Develop a methodology for indirect emissions of nitric oxide
- Continue the collaboration with TFRN (EPMAN/EPNB)
- Develop method to estimate ammonia emissions from crops
- Assess need for methodology for marine NH_3 emissions
- **Assess consequences of refinement of agriculture chapter of IPCC (2006) on Guidebook**