

# Discussion Group:

Recommended Option to the Workshop:

Recommendation for Acceptance:

Accept today as part of the standardized protocol for  
GHG emissions reduction

This option will be acceptable but needs more work  
following the workshop

# Discussion Group:

Summary of Gaps in Research or Knowledge:

# Discussion Group:

## 4.4.3

### **RECOMMENDATION:**

1. Use of ammonium-based formulations, but AN and UAN need to be included in for surface applied application
2. Use of controlled release formulations
3. Use of split applications in irrigation and high-moisture eco-zones
4. Banding (up to 10 cm and need input on SBU)
5. Application rates specific to landscape position
6. Application to cool soils in fall
7. Apply in spring
8. Include use of nitrification inhibitors (urease and N inhibitors)
9. Include use of manure with determination of N content

### **GAPS:**

1. Pulse crops need to be reviewed in terms of economic and market impact
2. Some S and P products show promise in slowing nitrification, but more research needed.

# Discussion Group:

4.4.4a

RECOMMENDATION: NERP should be designed with simple, intermediate and advanced levels **with modifiers for each eco/climatic zone**

GAP: Chart on page 20 needs work

# Discussion Group:

5.0

RECOMMENDATION:

N plans should be developed as follows:

- General guidance provided (Agree)
- Content prescribed (agreed)
- Advisor approved (Optional)

# Discussion Group:

Recommended steps forward to address gaps:

Discussion points

Recommendation: ensure NPKS sufficiency to achieve realistic target yields

GAP: Need more work on N balance in pulses

Recommendation: For the intermediate level, must determine concave and convex field sectors and **other spatial characteristics, i.e. salinity**

GAP: The term “N efficiency” needs further definition

GAP: We are unsure that the N<sub>2</sub>O emissions under long-term No-till are fully understood particularly in Eastern Canada.