

## BASIC NUTRIENT MANAGEMENT PLANNING COURSE

### Classroom Session

Bradford Technology Transfer Center, 4969 Rangeline Rd., Columbia, MO 65201

9:45 AM Tuesday March 20, 2012 to 12:30 PM Thursday March 22, 2012

Time	Session #	Title, Speaker, Resources
<b>Tuesday March 20, 2012</b>		
<b>1. Regulations and other Requirements</b>		
9:15 – 9:45 AM		Registration and Sign-in
9:45 – 10:00		Introductions
10:00 – 10:30	1 A	NRCS Nutrient Policy and Standards. Glenn Davis, NRCS, 30m.
10:30 – 11:00	1 B	Water Quality Regulatory Initiatives. John Lory, MU, 30m.
11:00 – 12:00	1 C	DNR Regulatory Requirements for CAFOs. Joe Zulovich, NRCS, 60m.
12:00 – 12:45 PM		Lunch (provided)
12:45 – 1:15	1 D	The Missouri Nutrient Management Standard for CAFOs. John Lory, MU, 30m.
<b>2. Agriculture and the Environment</b>		
1:15 – 1:45	2 A	Trends in Missouri Animal Agriculture. John Lory, MU, 30m
1:45 – 2:45	2 B	Phosphorus loss from agricultural systems and its impact on water quality. John Lory, MU, 60m.
2:45 – 3:00		Break
3:00 – 4:00	2 C	Nutrient criteria and nutrient dynamics in lakes. Dan Obrecht, MU, 60 m.
4:00 – 5:00	2 D	The role of Midwest Agriculture in Gulf of Mexico Hypoxia. Peter Scharf, MU, 60m.
5:00– 5:30	2 E	Emissions from animal production systems. Teng Lim, MU, 30m.
5:30 PM		Adjourn

**NUTRIENT MANAGEMENT PLANNING COURSE**  
**Classroom Session (continued)**

Time	Session #	Title, Speaker, Resources
<b>Wednesday March 21, 2012</b>		
<b>3. Agronomic Concepts</b>		
8:00 – 9:30 AM	3 A	Soil as a Nutrient Resource and Growing Medium for Crops. Peter Motavalli, MU, 90m.
9:30 – 9:45		Break
9:45 – 11:15	3 B	Fertilizer need and strategies for row crops. Peter Scharf, MU, 90m.
11:15-12:15PM	3 C	Fertilizer need and strategies for forages. R. Kallenbach, MU, 60m.
12:15 – 1:00 PM		Lunch (provided)
1:00 – 2:00	3 D	Soil sampling strategies and interpretation. John Lory, MU, 60m.
<b>4. Manure storage and handling</b>		
2:00 – 3:00	4 A	Characteristics and management of liquid manure storage and handling systems. Joe Zulovich, MU, 60m.
3:00 – 3:30	4 B	Characteristics and management of dry litter and deep bedded manure storage and handling systems. Joe Zulovich, MU, 30m.
3:30 – 3:45		Break
3:45 – 4:15	4 C	Animal Mortality Management. Joe Zulovich, MU, 30m.
4:15– 5:30	4 D	Calculating nutrient availability and land requirements for manure application to crops and forages. John Lory, UMC and Troy Chockley, NRCS, 90m.
5:30 PM		Adjourn

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**Classroom Session (continued)**

Time	Session #	Title, Speaker, Resources
<b>Thursday March 22, 2012</b>		
8:00 – 8:30 AM	4 E	Manure testing and interpretation. John Lory, MU, 30m.
<b>Thursday March 22, 2012</b> <span style="float: right;"><b>4. Formulating Solutions</b></span>		
8:30 – 9:00	5 A	Nutrient removal and cropping systems for manure management. John Lory, MU, 30m
9:00 – 9:30 AM	5 B	Whole farm nutrient balance assessment John Lory, MU, 30m.
9:30 – 10:15	5 C	Using feed rations to affect nutrient content of manure. Marcia Shannon, UMC, 45m.
10:15 – 10:30		Break
10:30 – 11:30	5 D	Value of manure as a fertilizer. Ray Massey, MU, 30m.
11:30 – 12:30 PM	5 E	Nitrogen vs. phosphorus based manure application strategies. John Lory, MU, 60m.
12:30 – 12:45		Wrap up and prepare for field session
12:45		Adjourn

For more information contact John Lory, University of Missouri (573-884-7815; [LoryJ@missouri.edu](mailto:LoryJ@missouri.edu)) or Glenn Davis, NRCS (573-876-0908)

To register contact Christina George (573-884-6311; [GeorgeCR@missouri.edu](mailto:GeorgeCR@missouri.edu)). Pre-registration is required.

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