

## NC Interagency Nutrient Management Committee - June 15, 2012

### Revised Interim Agronomic Rates for Arundo Donax

- Previous recommended interim rates for Arundo Donax were based on a single harvest. The group discussed a double harvest scenario. Based on a Chemtex draft production schedule of needed inputs, they would prefer Arundo Donax to be incorporated in the system in August.
- Due to the potential for the harvest schedule to change outside of the producer's control and considering permit compliance requirements, it is recommended that a total maximum nitrogen rate of 120/per acre be applied for double harvest scenarios; 60 lbs/ac before first cut and 60 lbs/ac after first cut. Therefore, should the window to harvest be missed, the producer would not be out of compliance for over application.
- The group reviewed the recommended interim nitrogen rates for the first year of establishment. It was discussed raising the first year rate to 60 lbs, but the data supported keeping the rate at the current 30 lbs.
- The group discussed that the application window should end on August 31 to maximize environmental and agronomic benefits, however due to limited crop growth yield data it will remain at September 30. As additional research data is provided and reviewed, the application window may be reconsidered.
- The group also expressed concern about having enough time to receive adequate NC data regarding nitrogen rate data for mature crops and identified that additional summer cut data from mature stands is needed. The current deadline for final rates to be established is December 2014.

#### Revised Interim Recommendations for Arundo Donax Nitrogen Applications

Arundo Donax (single harvest)	Nitrogen Agronomic Rates	Application Window	Harvest Window
Year One	30 lbs of N per acre regardless of soil type	March 1 – September 30	
Subsequent Years	60 lbs of N per acre regardless of soil type	March 1 – September 30	
Arundo Donax (double harvest)	Nitrogen Agronomic Rates	Application Window	Harvest Window
Year One	30 lbs of N per acre regardless of soil type	March 1 – September 30	No multiple cut during the first year.
First Harvest	60 lbs on N per acre regardless of soil type	March 1 – Thru first cut	Must be completed on or before June 30
Second Harvest	60 lbs on N per acre regardless of soil type	Following first harvest – September 30	Before March 1  If the second harvest occurs prior to September 30 then application window closes.

## **Final Recommendations for Waste Analysis Codes**

- **The following waste codes will be deleted from the Waste Information Form:**

AES	Aerobic – Lagoon Liquid Swine
ATO	Aerobic -Lagoon Liquid Other
ASW	Aerobic – Lagoon Sludge Swine
ALB	Anaerobic -Lagoon Liquid Beef
ALV	Anaerobic - Lagoon Liquid Veal
ASB	Anaerobic - Lagoon Sludge Beef
LSP	Manure Liquid Slurry Poultry
LSV	Manure Liquid Slurry Veal
SSE	Manure Surface Scraped/Stockpiled, Sheep
SSG	Manure Surface Scraped/Stockpiled, Goat
HLD	Poultry House Litter, Duck
SLB	Poultry Stockpiled Litter, Broiler
SLD	Poultry Stockpiled Litter, Duck
SLT	Poultry Stockpiled Litter, Turkey
SLO	Poultry Stockpiled Litter, Other

- **The following waste codes will be added to the Waste Information Form:**

ALF	Swine, Farrow to Wean
HBP	Broiler Pullet
HLL	Layer
HLP	Layer Pullet

- **The following waste code names will be revised:**

The word Anaerobic will be removed for both Lagoon Liquid and Lagoon Sludge categories. House Litter and Stockpile Litter will be combined to Poultry Litter.

## **Final Recommendations for Plant Availability Coefficients**

- The group discussed concern from integrators and agronomists about the recommended P coefficient. David Hardy has identified additional research that supports the initial recommendation of the coefficient of 1 for P. He is also willing to discuss with other southern states how they are addressing the P coefficient. D. Hardy, D. Crouse and J. Smyth will work together to incorporate this information into the P availability coefficient final document.
- The group also determined that meeting is needed to education integrators, agronomist and district/NRCS staff that may receive questions about the coefficient changes. It is recommended that this be about an hour conference call/ webinar. D. Crouse will schedule the meeting.

- Due to wanting to provide opportunity to educate the integrators about the coefficients, continuing to review waste volume tables, and the release of the new nutrient management software it is recommended to not release the new recommendations on July 1, 2012.

**Plant Availability of nitrogen (N), phosphorus (P) and potassium (K) from manure nutrient sources.**

Production System	NCDA&CS Waste Code	N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		Broadcast or Irrigated	Incorporated or Injected	Broadcast or Irrigated	Incorporated or Injected	Broadcast or Irrigated	Incorporated or Injected
Lagoon Liquid – Swine except Farrow to Wean	ALS	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Liquid – Swine Farrow to Wean	ALF	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Liquid – Poultry	ALP	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Liquid-Other	ALO	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Sludge – Swine (all production types)	ASS	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Sludge – Poultry	ASP	0.5	0.6	1.0	1.0	1.0	1.0
Lagoon Sludge-Other	ASO	0.5	0.6	1.0	1.0	1.0	1.0
Slurry - Dairy	LSD	0.4	0.6	1.0	1.0	1.0	1.0
Slurry - Beef	LSB	0.4	0.6	1.0	1.0	1.0	1.0
Slurry - Swine	LSS	0.4	0.6	1.0	1.0	1.0	1.0
Slurry - Other	LSO	0.4	0.6	1.0	1.0	1.0	1.0
Scraped or Stockpiled - Dairy	SSD	0.4	0.6	1.0	1.0	1.0	1.0
Scraped or Stockpiled - Beef	SSB	0.4	0.6	1.0	1.0	1.0	1.0
Scraped or Stockpiled - Swine	SSS	0.4	0.6	1.0	1.0	1.0	1.0
Scraped or Stockpiled - Horse	SSH	0.4	0.6	1.0	1.0	1.0	1.0
Scraped or Stockpiled - Other	SSO	0.4	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Broilers	HLB	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Broiler Breeders	HBB	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Broiler Pullets	HBP	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Layer	HLL	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Layer Pullets	HLP	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Turkey	HLT	0.5	0.6	1.0	1.0	1.0	1.0
Poultry Litter – Other	HLO	0.5	0.6	1.0	1.0	1.0	1.0

