



## **Water Quality Enhancement Activity – *WQL06-Apply Controlled Release Nitrogen Fertilizer***

### **ATTACHMENT A – Montana Enhancement Activity Sheet Supplement**

**NOTE: For small grains (to minimize the effect of salts on germination), a maximum of 20 total actual pounds of Nitrogen (N), Potassium (K) or Sulfur (S) can be applied as a starter fertilizer at planting. For example, applying 100 pounds ammonium sulfate with a formulation of 21-0-0-26 (N, P, K, S respectively) would result in an application of 21 lbs of N and 26 lbs of S for a total of 47 pounds. This would be too high of a rate to apply with the seed and could result in reduced germination. The maximum amount of ammonium sulfate that could be applied to meet the criteria for this activity would be 40 lbs which would be a total of 18.8 lbs actual (8.4 lbs N + 10.4 lbs K). All fertilizer guidelines and special conditions in “Fertilizer Guidelines for Montana Crops” Montana State University Extension Service Publication # EB 161<sup>(1)</sup> should be followed.**

### **Controlled Release Nitrogen Fertilizer for Montana<sup>(2) (3)</sup>**

<u>Common Name</u>	<u>Chemical Name</u>
ESN	Polymer-coated (PCU)
Polyron	Polymer-coated (PCU)
Duration	Polymer-coated (PCU)
SCU	Sulfur-coated
Tricote	Polymer and Sulfur-coated
Poly-S	Polymer and Sulfur-coated
Nitroform	Urea formaldehyde
Nutralene	Methylene Urea
N-Sure	Triazone

### **Montana Documentation Requirements for Controlled Release Nitrogen Fertilizer**

1. A map showing where the activities are applied.
2. Fertilizer product used. **This includes name and formulation of product.**
3. Treatment acres
4. Soil test results
5. Crop grown and yields (both yield goals and measured yield)
6. Calibration of fertilizer application equipment
7. Nutrient application rates / amounts and application dates for each treatment area.

**Water Quality Enhancement Activity – WQL06-Apply Controlled Release Nitrogen Fertilizer (cont)**

- (1) **“Fertilizer Guidelines for Montana Crop” Montana State University Extension Service Publication # EB 161<sup>(1)</sup>** March 2005, Jeff Jacobsen, Grant Jackson and Clain Jones. Website: <http://www.msuxextension.org/store/Departments/Agriculture-Topic-Categories/Fertilizers.aspx?sortorder=1&page=8>
- (2) This may not be a complete list as new products or formulations are being developed.
- (3) **“Enhanced Efficiency Fertilizers” Montana State University Extension Publication EB0188** July 2009, Kathrin Olson-Rutz, Clain Jones and Courtney Pariera Dinkins. Web site: <http://www.msuxextension.org/store/Departments/Agriculture-Topic-Categories/Fertilizers.aspx>