

SUMMARY OF GROUNDWATER MANAGEMENT AREA PHASES

PHASE I

Area with groundwater contamination less than 60% of MCL

- would be the entire NRD except for 60 square miles of a Phase II area near DeWitt
- permits required from NRD for wells that pump greater than 50 gpm
- operators would use voluntary measures to present and reduce contamination
- NRD would increase public education activities relating to groundwater

PHASE II 60% TO LESS THAN 90% MCL

1. Operator Certification
 - A class every 4 years on current and new BMPs, including the benefits of deep soil sampling, water sampling, irrigation water management, fertilization practices, manure analysis, etc.
 - Any owner/operator who applies or oversees the application of nitrogen fertilizer to fields larger than 20 acres
2. Fall application of commercial nitrogen fertilizer delayed until after November 1st.
 - Exceptions – fall seeded crops (wheat) and when applications are 30 pounds per acre or less.
3. Demonstration Field.
 - Operator will use his largest irrigated corn or grain sorghum field larger than 20 acres to adopt the following BMPs. If no irrigated field, then largest dry land field will be used. This “demonstration field” will be continued indefinitely during Phase Two. Operator will be required to have one demonstration field for each landlord.

Annual Reporting Requirements to NRD March 1st

- irrigation water analysis for nitrate – NRD
- basic surface soil test every 4 years – organic matter
- deep nitrate soil analysis 0-8” and 8-36”
- realistic crop yield goal – 5 year average +5%
- commercial nitrogen fertilizer recommendation using UNL guidelines
- actual rate of fertilizer applied
- estimated amount of water applied
- actual yield
- other BMPs proven effective

PHASE III GREATER THAN 90% MCL

All of Phase II requirements with the addition of:

1. Application of commercial nitrogen fertilizer prohibited until after March 1st.
2. Annual reporting required on all corn and grain sorghum fields larger than 20 acres.
3. Spring nitrogen application requirements:
 - Split application (pre-plant or pre-emergent/post emergent) with no more than 50% applied as pre-plant or post-emergent when 100 pounds per acre or more is required.

OR
 - Use of approved inhibitor if more than 50% is applied pre-plant or pre-emergent and provide proof that inhibitor was used.

OR
 - All nitrogen fertilizer applied as side dress post-emergent.