## **Lignite Mining & Reclamation Process**

- Increased surface mining in the early 1900s led to passage of the first reclamations laws in the
  1930s in the East
- There are still 14,000 acres of abandoned mined lands or "orphan spoils" still in North Dakota. Much of this land is managed by the Game & Fish Department for wildlife habitat and hunting
- Regulatory Developments
  - o 1969 North Dakota Strip Mined Lands Act
  - o 1971 Grade spoils to accommodate farm machinery
  - o 1973 Save and replace topsoil
  - o 1975 Mined lands must be returned to 100% of pre-mine productivity
- The Federal Surface Mining Control and Reclamation Act (SMCRA) was passed in 1977
  - The US Department of the Interior oversees the Office Of Surface Mining which oversees the North Dakota Public Service Commission
- Determining where to establish a coal mine:
  - Minimum of 10 feet cumulative thickness in not more than two beds
  - More than 25 feet beneath the surface
  - Not more than 175 feet beneath the surface
  - A stripping ratio of not more than 10:1 (not more than 10 feet of overburden per every foot of coal)
- Two mining methods: Underground Mining and Surface Mining
- Process of mining and reclamation
  - 1. Obtain mining rights and regulatory approvals
  - o 2. Establish water management
  - o 3. Remove topsoil and subsoil
  - o 4. Move overburden and remove coal
  - o 5. Grade spoils to approximate original contour
  - o 6. Spread subsoil and topsoil and seed with grasses or crops
  - o 7. Obtain bond release
- Mining companies have 3 years after the coal removal to grade and seed the land.
- North Dakota coal mines have released more than 20,000 acres from bond.