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## Analysis of Comments Received – LQD Coal Chapter 2

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Disposal of Wind Turbine Blades in landfills, including Coal Mine Pits. What is the approved business plan from start to end of life, disposal? Coal mines have to make millions of \$\$ bonds to insure reclamation. Our concern is this seems like a short term fix. What happens if any issues arise after the mines are closed? The state says no affect on ground pollution, however years ago we used asbestos, lead paint, Agent Orange everywhere. 30-40 years later we found it to extremely hazardous. Some say the outer sealant can affect ground water over time.

Response: The statute provisions and the proposed rules addresses these concerns by specifying only the inert decommissioned blade and tower materials may be disposed of. All electrical and mechanical materials must be removed from the blades (e.g. hydraulic pitch controls) prior to disposal. In addition, mine spoils are high in clay composition and the blade and tower materials are to be placed at a minimum of 20 feet above groundwater potentiometric surface, and 20 feet below the land surface in lifts of 15 feet in order to further encapsulate the materials. These materials are steel, fiberglass, wood, and carbon composite.

There are already recycle plants in the U.S. They make pellets to use in making concrete that reducing gases in the procedure by 27%. Also a few plants want to build a plant in WY or Colorado for recycling the blades. Why not look into that to create jobs and a "long-term" solution.

Response: Currently there are two "potential" recycling methods that are being used. One in Texas, and one in Tennessee. These process either pelletize the blades, or remove the impurities (that still require disposal) and reuse the base fibers. The problem with both technologies is they have not been able to be scaled up to meet the industrial scale disposal demand. In the event one of these technologies does become scalable, having a source of material in Wyoming might help bring such an industry to the state.

Our understanding is Colorado has a bill to NOT allow blades in landfills; why should Wyoming? We need to extensive research on long term affects and make sure the Wind Mill Industry is responsible for disposal costs and not be able to "run away" from their responsibilities like coal mines did in the Midwest many years ago.

Response: You are correct, many states are passing regulations to limit or eliminate disposal of blades in their respective landfills. This is because landfill space is at a premium in most states, especially as states regionalize their landfills. Taking up limited landfill space for inert blades that require high volume disposal area, is simply not the best use of this limited space. This is why these types of alternatives are being considered.