

# You should know...



North Dakota Public Service Commission

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Service Commission

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## Waste Disposal in Surface Mines

### INTRODUCTION

Concern for the environment is a common theme in our lives today and encompasses air and water quality, chemicals, the foods we eat, and the generation and disposal of waste materials. Communities and industries throughout North Dakota are affected by new and often costly requirements regarding the disposal of waste materials. The purpose of this fact sheet is to acquaint you with the waste disposal practices and policies used in regulating the state's coal mining and power industries.

### MINING AND POWER INDUSTRY WASTES

North Dakota's coal mining operations are very closely tied to the nearby electric power plants they supply. Both the mines and the plants generate a number of wastes that must be disposed of in environmentally acceptable ways. The pits created by surface mining may often lend themselves to convenient and safe permanent storage for some of the mine and power plant wastes.

Surface mining creates a certain amount of waste such as uprooted trees, dirt, boulders, tires, dragline cable, packing crates and the remains of abandoned farmsteads. Power plants create waste materials such as coal fines, fly ash, bottom ash, and sludge from flue gas desulfurization scrubbers. The ash and

sludge are commonly referred to as coal conversion wastes.

The Public Service Commission, in cooperation with the State Health Department, has developed policies and procedures that make the disposal of these kinds of materials in mined out pits feasible and safe. These policies and procedures require a solid waste management permit from the State Health Department for the permanent disposal of many of the waste materials.

### WASTE DISPOSAL REQUIREMENTS AND PRACTICES

**All coal processing and coal conversion wastes** are buried in mined-out pits under a State Health Department solid waste management permit. The permit may contain conditions relating to lining the pit and other safeguards to ensure that groundwater and other components of our environment are protected.

Public Service Commission rules allow the burial of **noncoal mine wastes and noncoal wastes from non-mining activities** in the mine permit area. However, in order to comply with more stringent State Health Department requirements, some of these wastes such as grease, lubricants, paints and flammable liquids, are disposed of by having them collected by contractors and taken off the mine site for disposal and/or recycling.

# Waste Disposal in Surface Mines (cont.)

Beginning in August 1995, the State Health Department decided that **certain kinds of noncoal mine wastes buried in the mine do not require a solid waste management permit.** These include rocks, boulders, dirt, trees and brush, inert waste from abandoned farmsteads, certain wood items (pallets, lumber, lath, cable spools and fence posts), brick, concrete block, cured concrete, and plastic materials and pipe.

Mining companies may be required to monitor the areas adjacent to mined-out pits used for waste disposal in order to detect any groundwater contamination.

Upon approval from the local authorities, some kinds of mine wastes can also be disposed of in local or regional landfills rather than in the mined-out pits.

Any materials that might be classed as toxic or hazardous wastes are taken offsite for disposal in specially constructed secure locations approved by the State Health Department. Still other materials, such as tires, are shipped elsewhere and recycled for other uses. Both the mining industry and the power industry are studying the economic feasibility of recycling items, such as dragline cable, that are now commonly buried in the mines in areas covered by a State Health Department solid waste management permit.

Mine information on the State Health Department's regulation of solid wastes can be found online at the following website: [www.ndhealth.gov/WM](http://www.ndhealth.gov/WM).