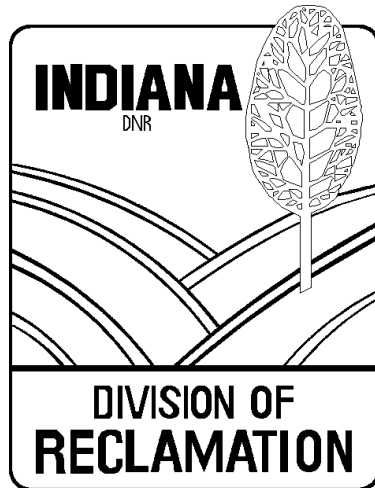


DEPARTMENT OF NATURAL RESOURCES

Visit us on the Web at
<http://www.IN.gov/dnr/reclamation>
for more information about mining and
classroom activities.



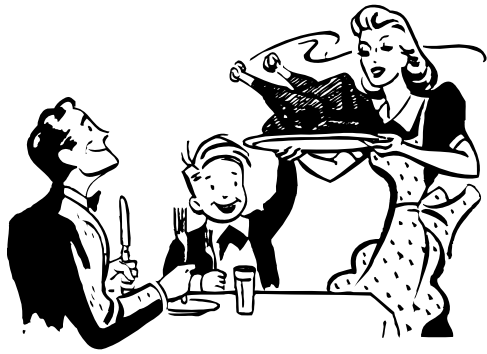
**DIVISION OF RECLAMATION
FIELD OFFICE
RR 2 Box 129
Jasonville IN 47438-9517
(800) 772-MINE (In Indiana only)
(812) 665-2207**

Division of Reclamation



Facts about Coal in Indiana

An Information Guide for Students



Early Hoosier settlers burned coal for heating and cooking. Coal is a fossil fuel. It is a nonrenewable natural resource. Coal was and still is a vital energy source for Indiana.

Coal was formed when vegetation grew in swamps that covered many parts of America about 300 million years ago. The vegetation absorbed and stored the sun's energy. Then, peat deposits were built up as vast amounts of vegetation died and accumulated at the bottom of swamps to form spongy, brown material. Geological forces buried the peat deep under the surface of the earth. There, the layers of peat further compacted by pressure and heat. Next, coal formed from the compressed peat after millions of years under the earth's surface. The amount of the heat and pressure determined the hardness the coal. This process of coal formation was repeated sporadically for thousands of years, resulting in the formation of multiple horizontal seams separated by varying thicknesses of dirt and rock.

There are four major types of coal. Coal is classified by hardness. The harder the coal, the less moisture it contains and the more efficient it is as fuel. The four major types are lignite, sub-bituminous, bituminous, and anthracite. Lignite coal contains a lot of moisture. It's brownish-black and crumbles easily. It's primarily used at electricity generating plants. Sub-bituminous coal has much less moisture than the lignite coal. It's used mostly to produce steam for electricity generation. Bituminous coal contains very little moisture and has high heat value. It's widely used to generate electricity and to make coke used in the steel industry. Anthracite coal has a very high heat value. It burns slowly and makes a good home heating fuel. All coal produced in Indiana is ranked as bituminous coal.



Surface or strip mining is the preferred method of coal extraction in Indiana due to the relatively shallow depths of coal seams here. First, the coal is uncovered by earthmoving machines, such as scrapers or bulldozers. Then draglines will strip off the earth and rock (overburden) that covers the coal. The rock layer may need to be broken using a blasting material. The topsoil is set aside and the rock goes into already mined areas. The coal is then removed and loaded into trucks by smaller power shovels. After the coal is removed, the overburden is bulldozed back into the pit. Then the overburden is graded and contoured for drainage and to blend with surrounding landscape. The topsoil is replaced over the land in preparation for seeding and planting. Management of reclaimed land continues for years after the first seeding. Mined land is generally used for growing crops like corn or soybean, pastures, and even trees.

Though coal mining alters the landscape, federal and state laws now require all mined land to be restored to its original condition. The land may be left in better condition than before mining started. Mining is only a temporary land use. There are many uses for reclaimed land, such as farming, camping, and fishing & wildlife.



The Division of Reclamation ensures that the mining is conducted in an environmentally safe manner and the land is restored for future productive use.