COAL MINING

Alaska minescape

The two largest of Usibelli coal mines, active Two Bull Ridge in the foreground, and partially reclaimed and inactive Poker Flats in the background.

Mining for coal can be divided into two major categories, underground mining and strip mining. Underground mining obtains coal by digging downwards to the level of the coal and then horizontally extracting the coal through a variety of methods. In contrast, strip mining simply removes the overlaying earth and then extracts the coal directly.

Underground mining has been the dominant method used for centuries to mine coal but currently only accounts for a third of coal production in the US.
Depending on the geology of the region, strip mines can be more economical and safer than underground mines. However, they have a much larger and more visible impact on the environment.

In strip mining, the overlaying earth "overburden" is removed using giant excavators or bulldozers and then the coal is dug out of the resulting pit and trucked out of the mine. Sometimes the overburden is loosened first by blasting with explosives. Strip mining is the technique used at Alaska's only operating coal mine, Usibelli Coal Mine, and is the method to be used at the proposed Chuitna Coal Prospect. Both underground and strip mines are regulated by the rules regarding coal mine reclamation. In the case of strip mines, the overburden is usually pushed back into the pit and then the entire area is leveled, stabilized and then planted.

Source: http://www.groundtruthtrekking.org/Issues/AlaskaCoal/CoalMining.html