

Interstate 79

Longwall Mining

Pennsylvania Department of Environmental Protection
Bureau of Mining and Reclamation

2004



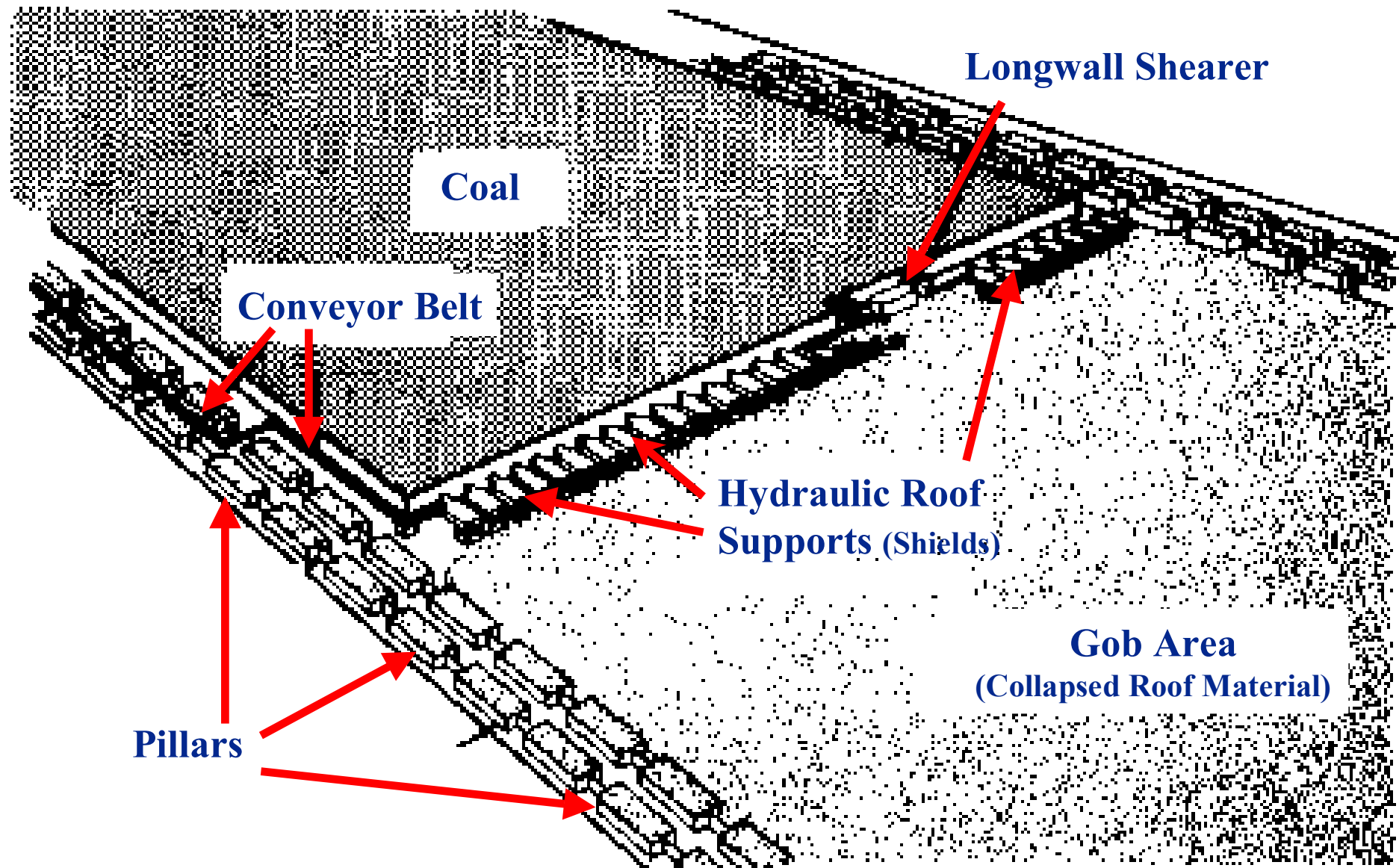
*What is
Longwall Mining?*

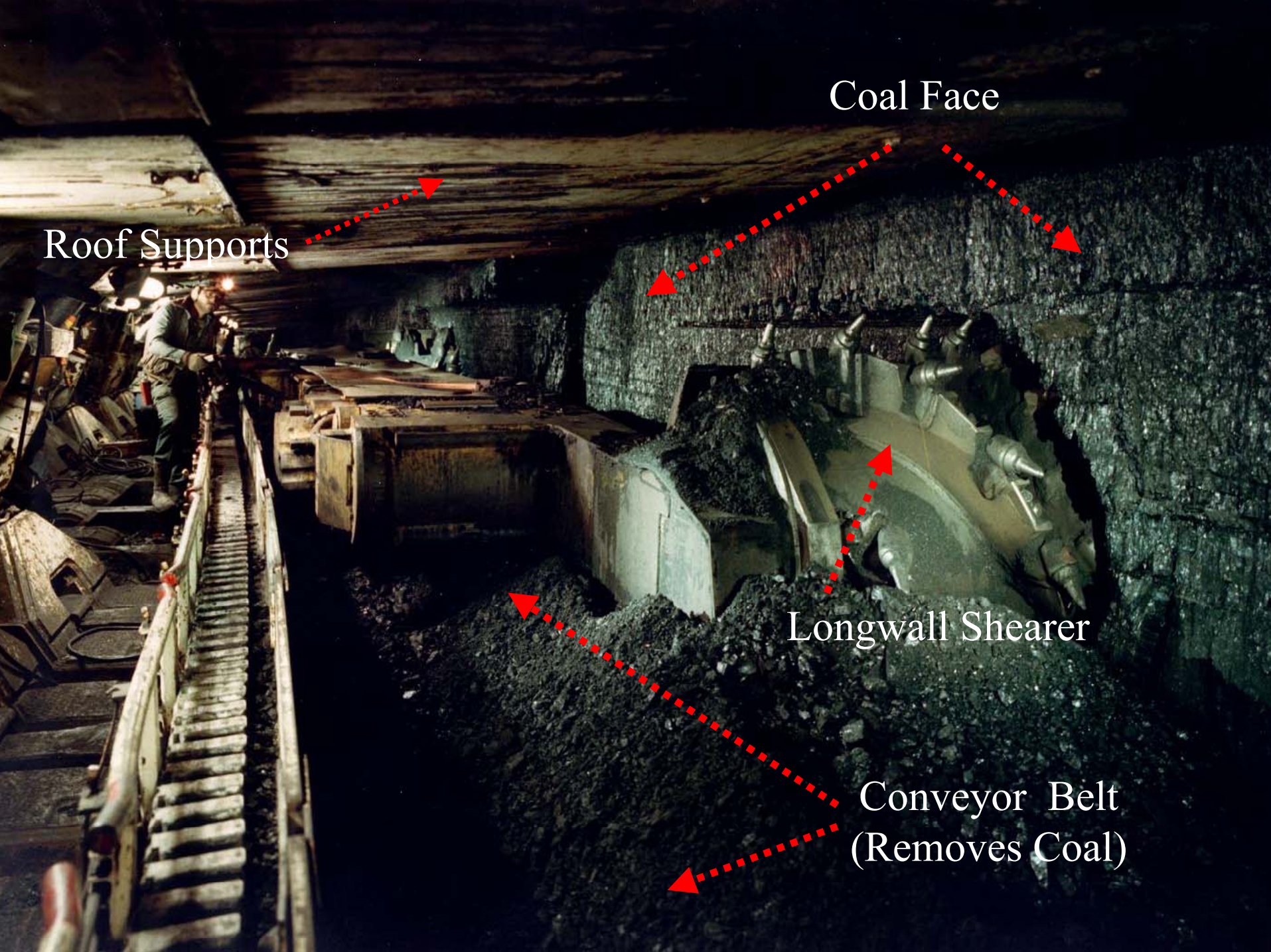
Longwall Mining

In longwall mining, a large panel of coal is isolated by the development of entries and crosscuts called mains. The longwall mining shearer is then set up along the coal face. This face can be anywhere from 800 to 1,500 feet wide.

The coal is removed by a longwall shearer. This shearer continuously moves across the width of the panel and removes the coal face. The mined coal is then hauled by a conveyor along the length of the face and removed from the mine. The roof is supported by special hydraulic supports and shields that are advanced as the mining progresses. The mine roof is allowed to collapse behind in a carefully controlled manner.

TYPICAL LONGWALL SECTION



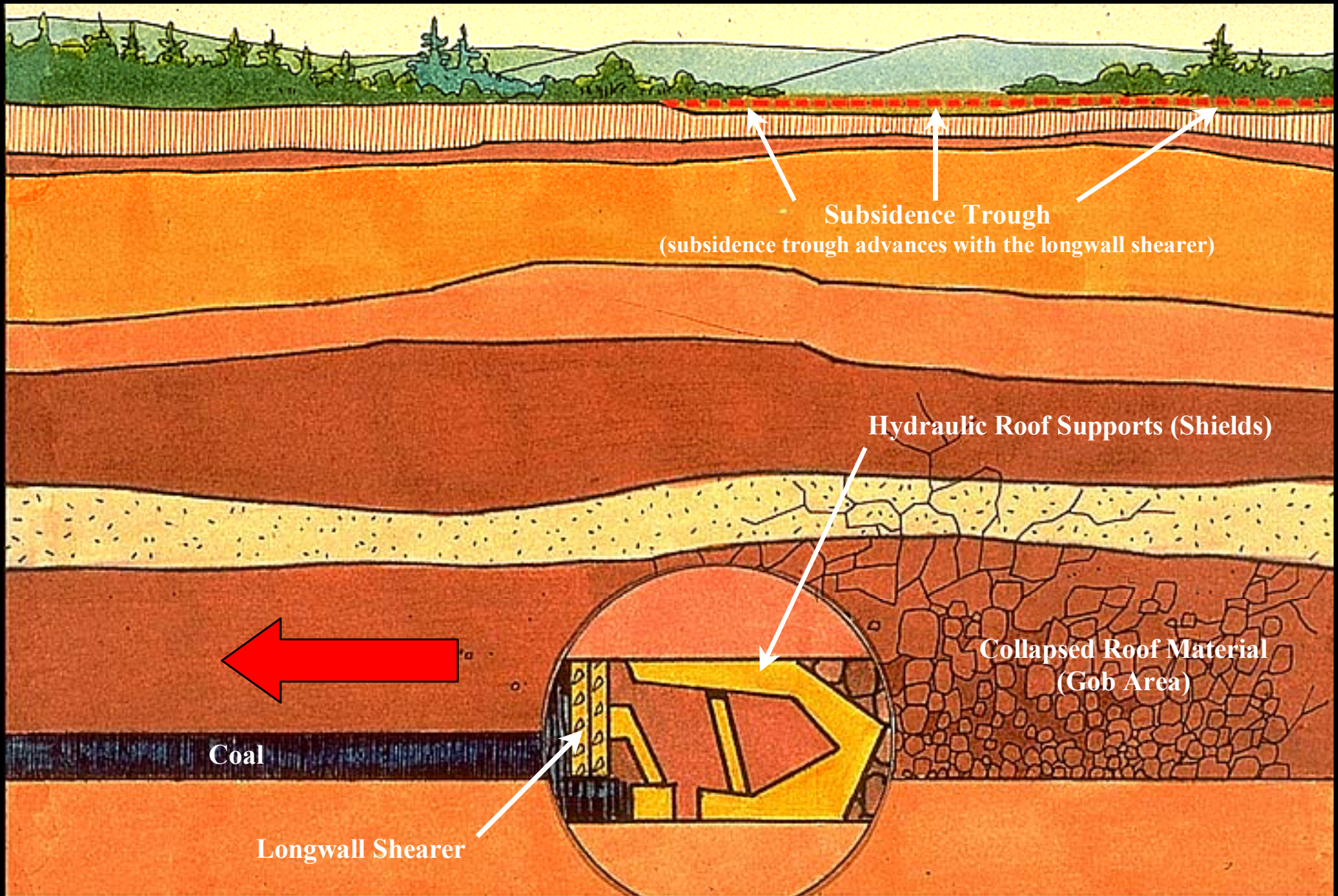


Coal Face

Roof Supports

Longwall Shearer

Conveyor Belt
(Removes Coal)



Longwall Mining



**To learn more about underground mining, visit
PADEP's:**

Bureau of Mining and Reclamation at:

<http://www.dep.state.pa.us/dep/deputate/minres/BMR/BMRhome.htm>