

Chinese Mining Delegation Visit

December 3, 2004



Questions Posed

- How does Pennsylvania achieve the regulatory goals with small mining operations?
- How does Pennsylvania promote safety at small mining operations?



Mission Statement

The Bureau of Deep Mine Safety's mission is to reduce the possibility of accidents in the underground mines and commercial operations and to protect the property connected therewith, to provide for the health and safety of the miners and contribute to the public safety in relation to deep mining activities.



Small Mine Regulations

All underground mines are regulated equally.
The Bureau does not make a distinction
between large and small mines.



Questions Posed

How does Pennsylvania achieve the regulatory goals with small mining operations?

How does Pennsylvania promote safety at small mining operations?



Promotes Safety Through:

- Bureau Web Page
- Training Courses
- Training Exercises
- Mine Rescue Training
- Engineering/Technical Reviews



History of Coal Mining in Pennsylvania

When and where?

Significant miner safety and health events

Historical statistics on mining accidents

Regulatory standards

Technology

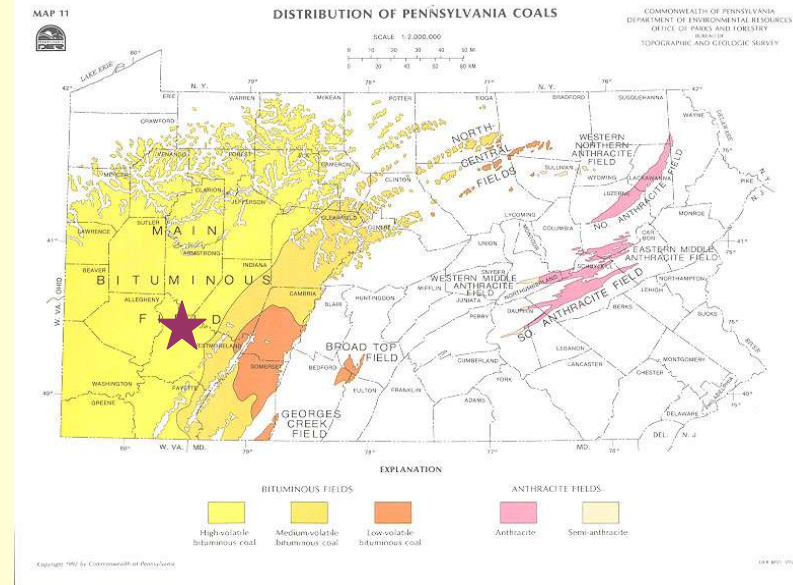
Accident reduction through training

Inter-agency cooperation

Other mining organizations

When and Where?

In 1751, John Pattin made the first reference to Bituminous Coal found along Kiskiminetas River near Saltsburg, PA

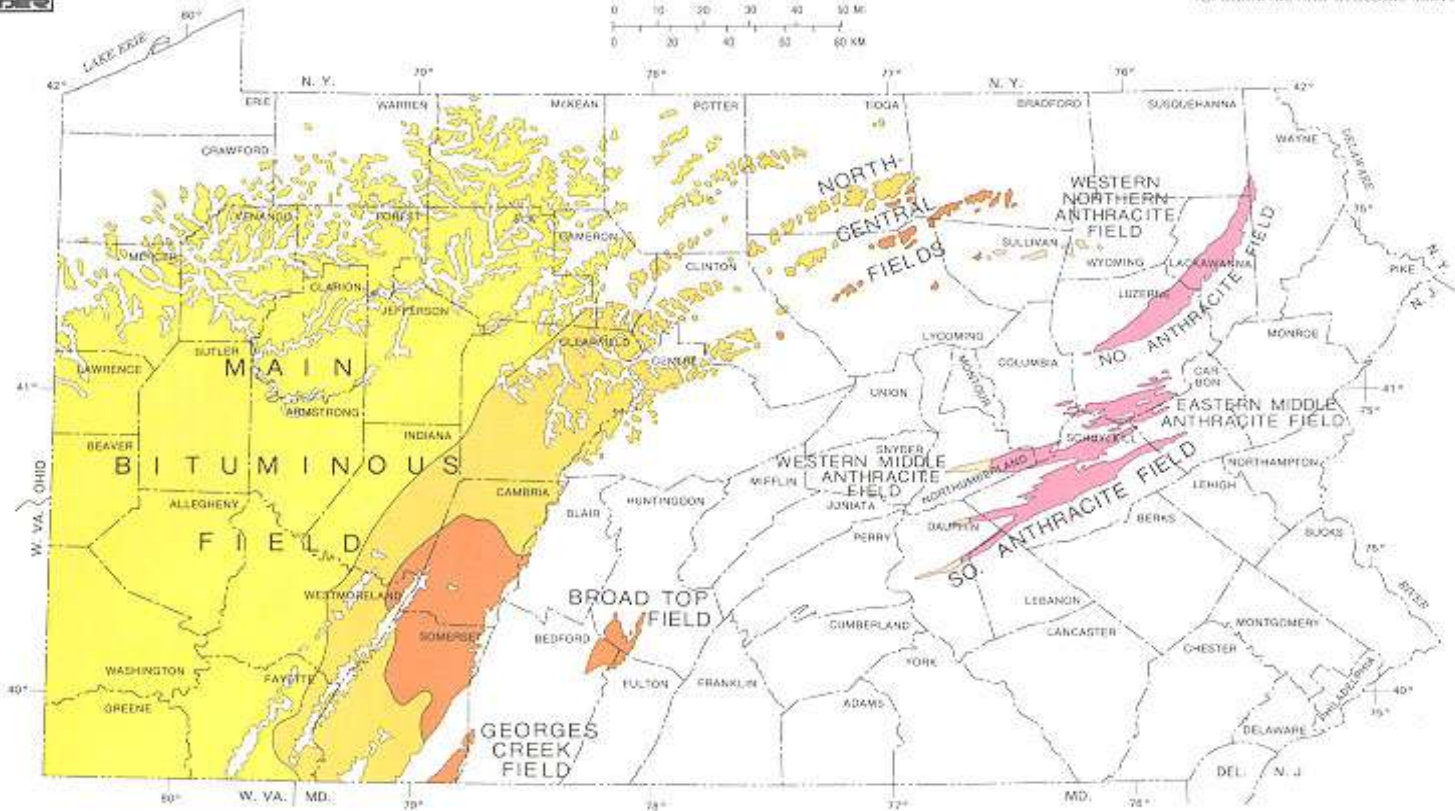
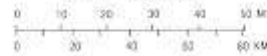




DISTRIBUTION OF PENNSYLVANIA COALS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
OFFICE OF PARKS AND FORESTRY
BUREAU OF
TOPOGRAPHIC AND GEOLOGIC SURVEY

SCALE 1:2,000,000



EXPLANATION

BITUMINOUS FIELDS



ANTHRACITE FIELDS



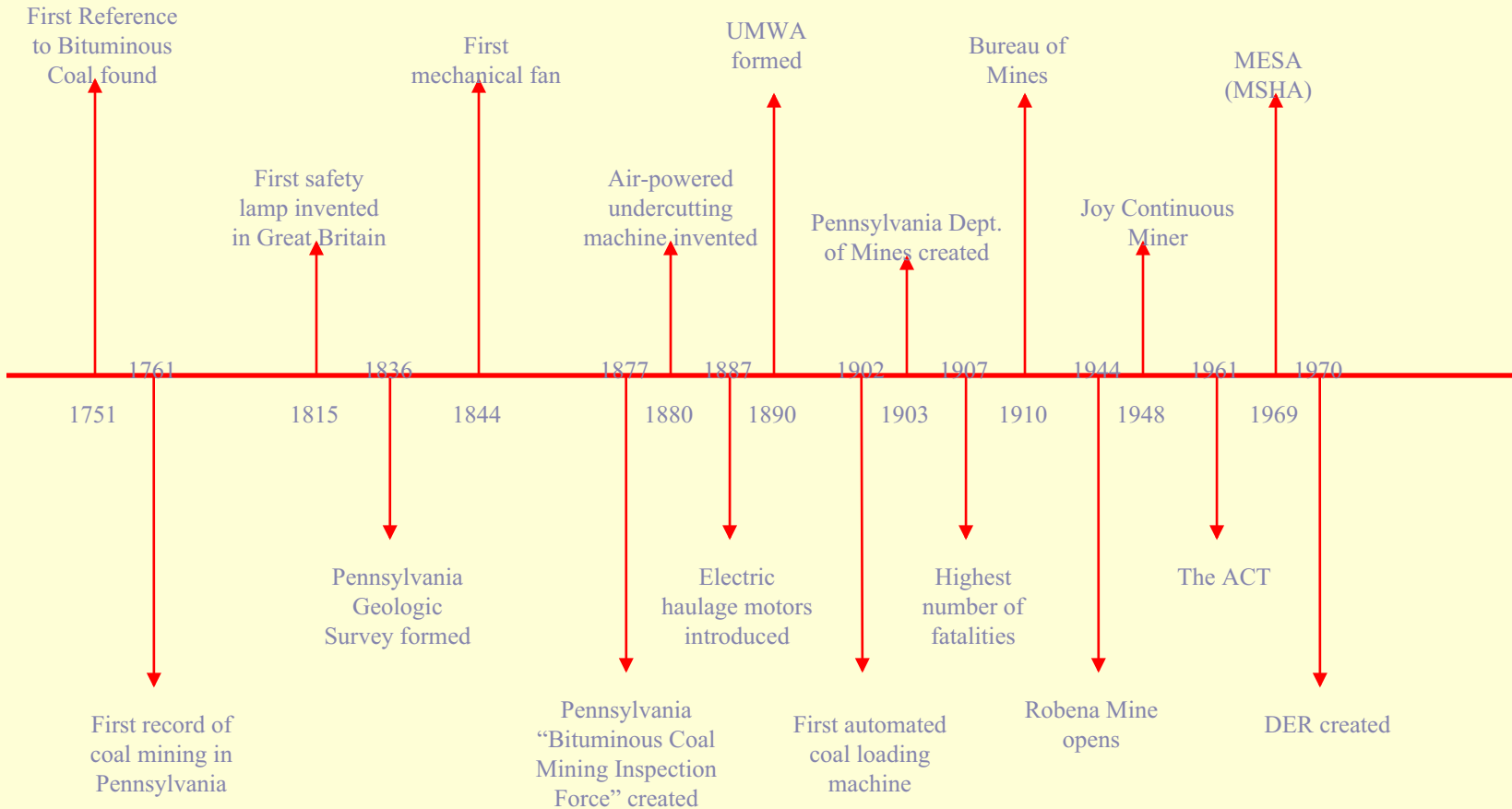


History of Coal Mining in Pennsylvania

When and where?

Significant miner safety and health events

A Timeline of Mining History





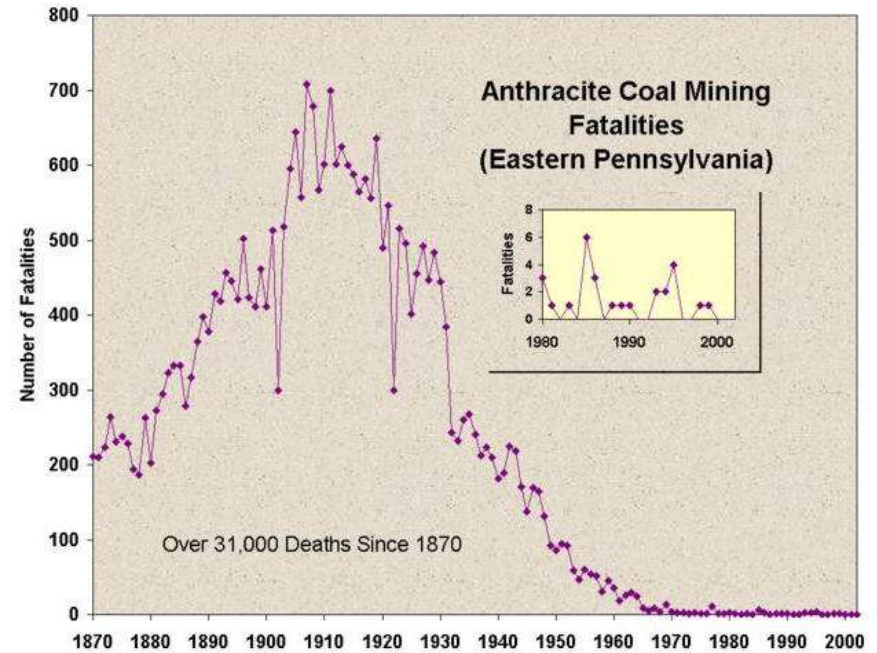
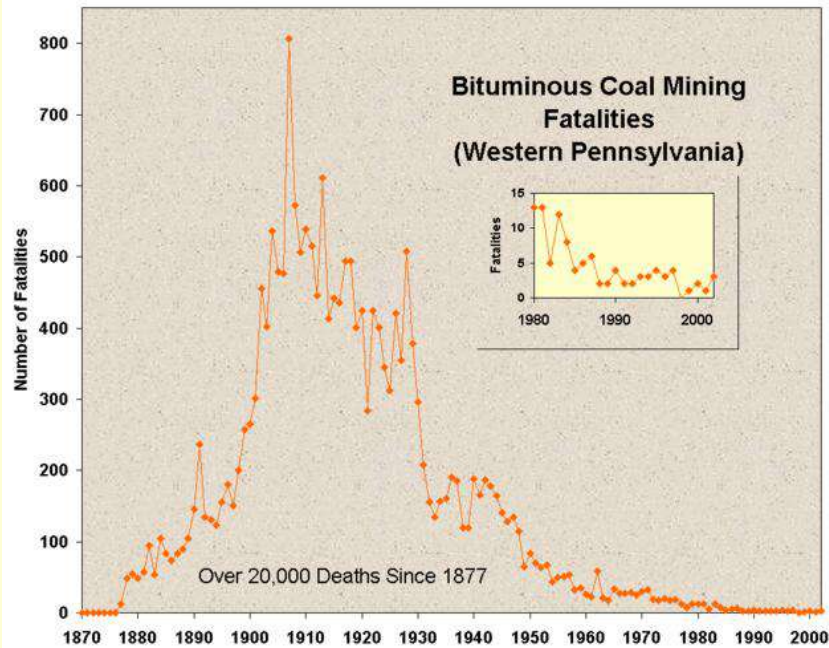
History of Coal Mining in Pennsylvania

When and where?

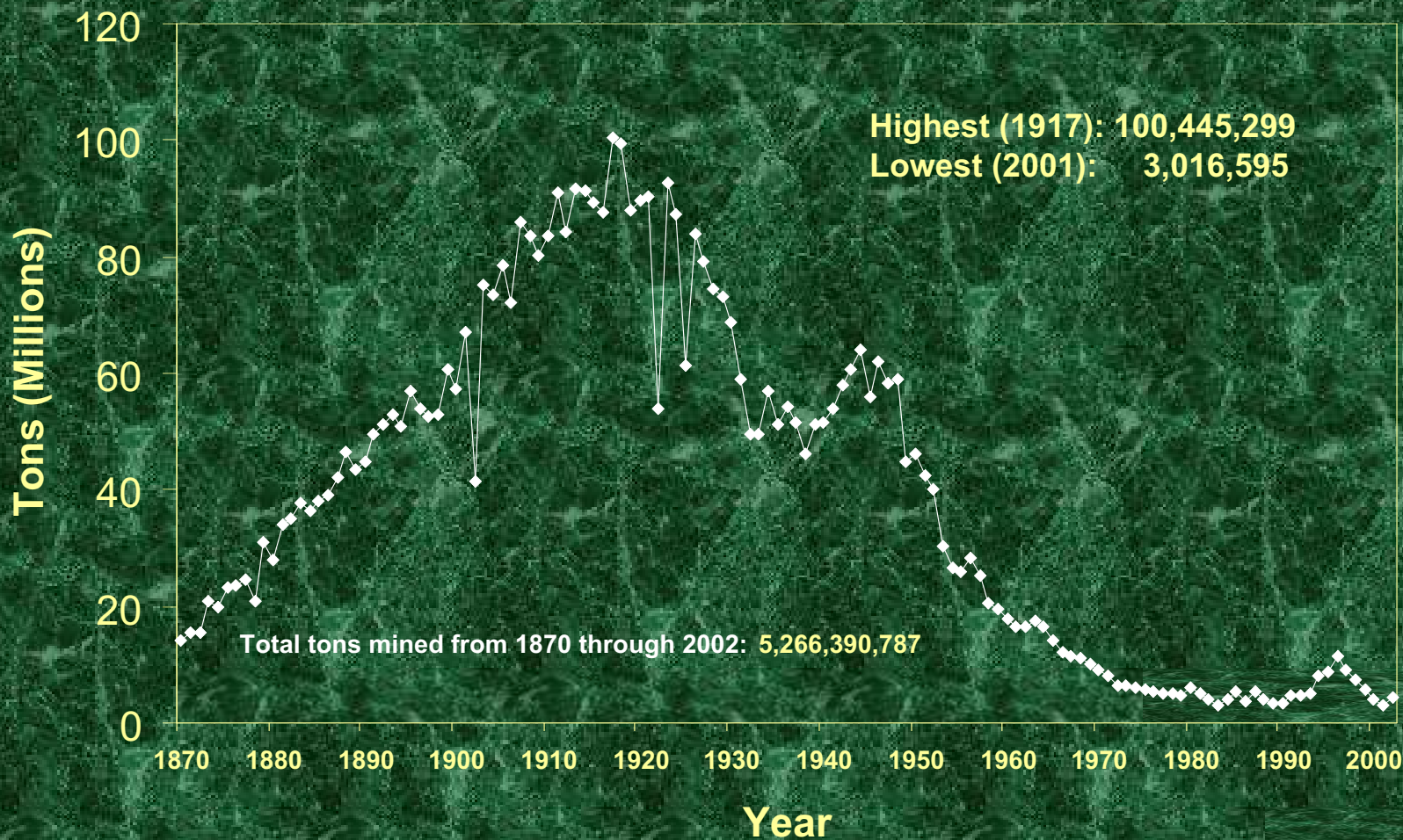
Significant miner safety and health events

Historical statistics on mining accidents

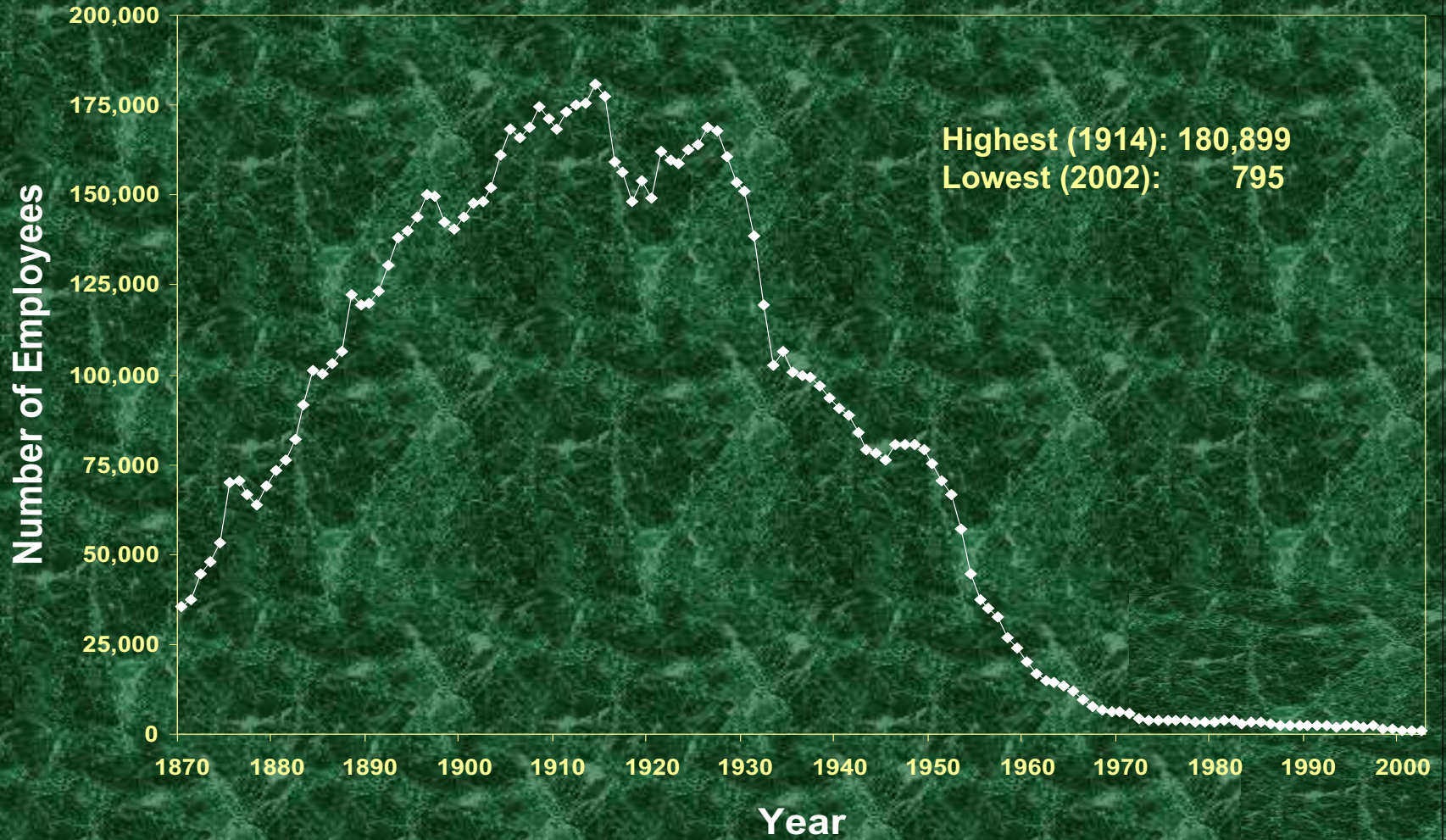
Coal Mining Fatalities



Anthracite Coal Production

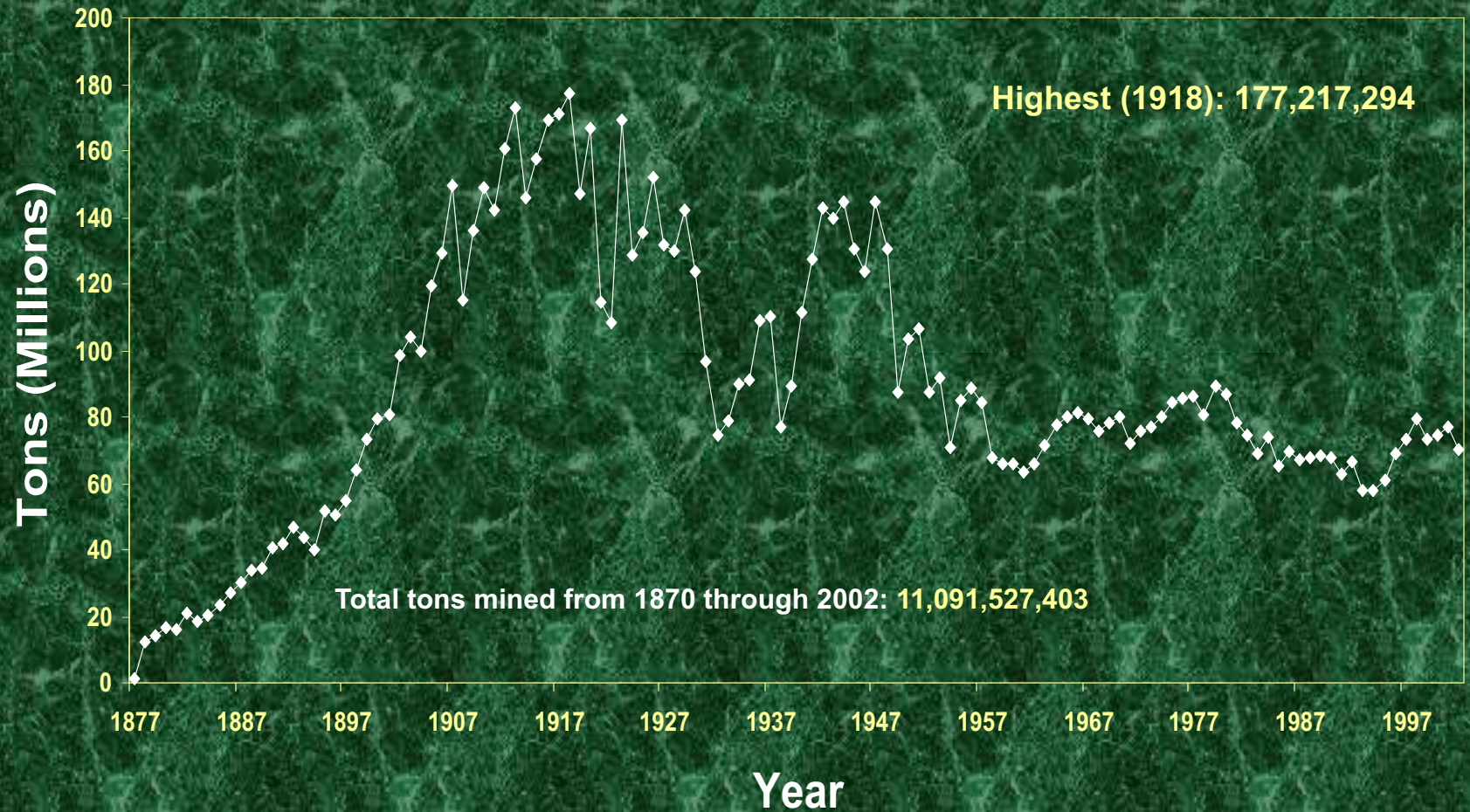


Anthracite Employment

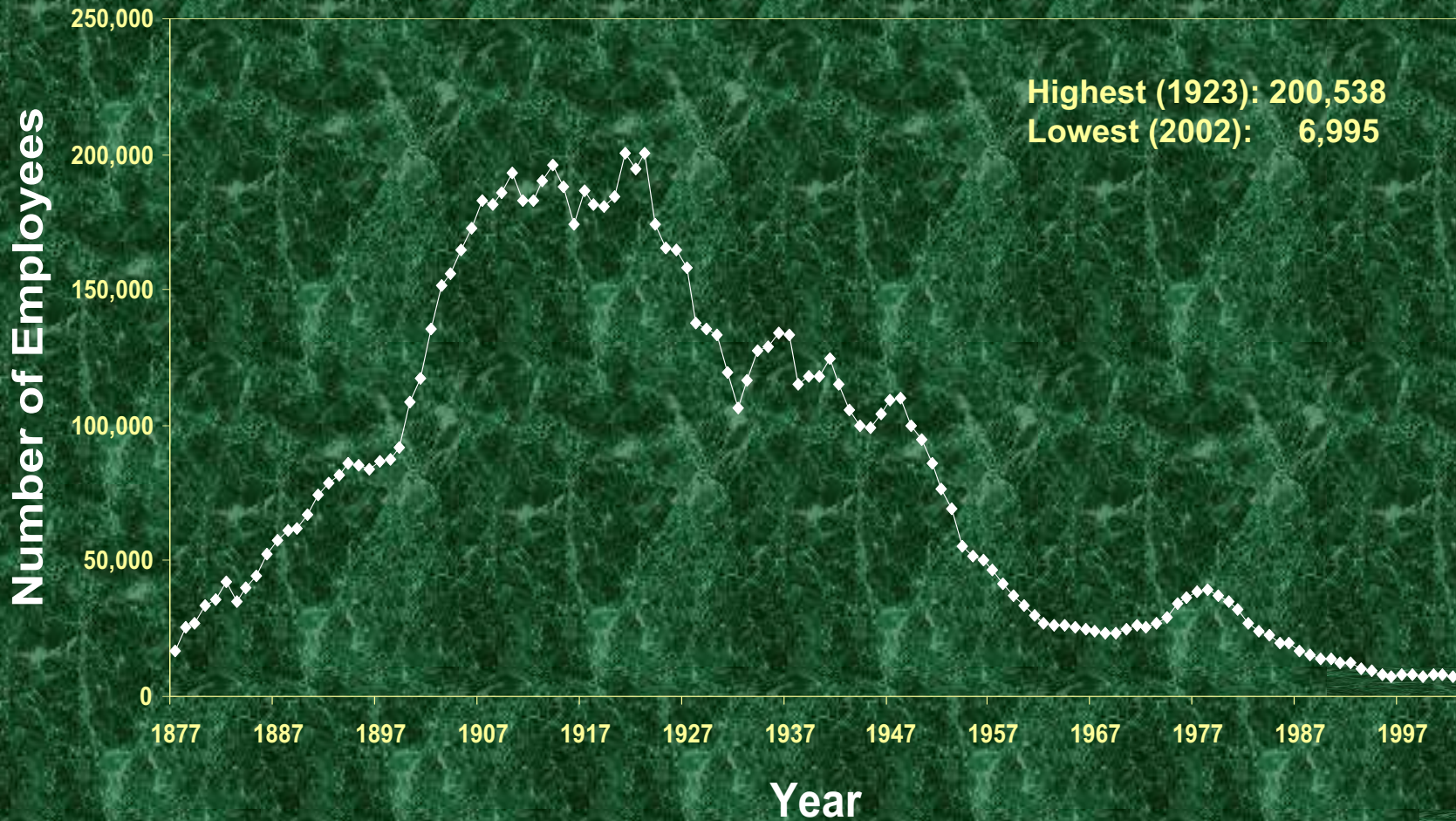


Highest (1914): 180,899
Lowest (2002): 795

Bituminous Underground Production



Bituminous Underground Employment



Pennsylvania Department of Environmental Protection
Bureau of Deep Mine Safety



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Regulatory Standards

- Organization Chart
- Mining Office Locations
- Rules governing mining

Organization Chart





Mining Offices

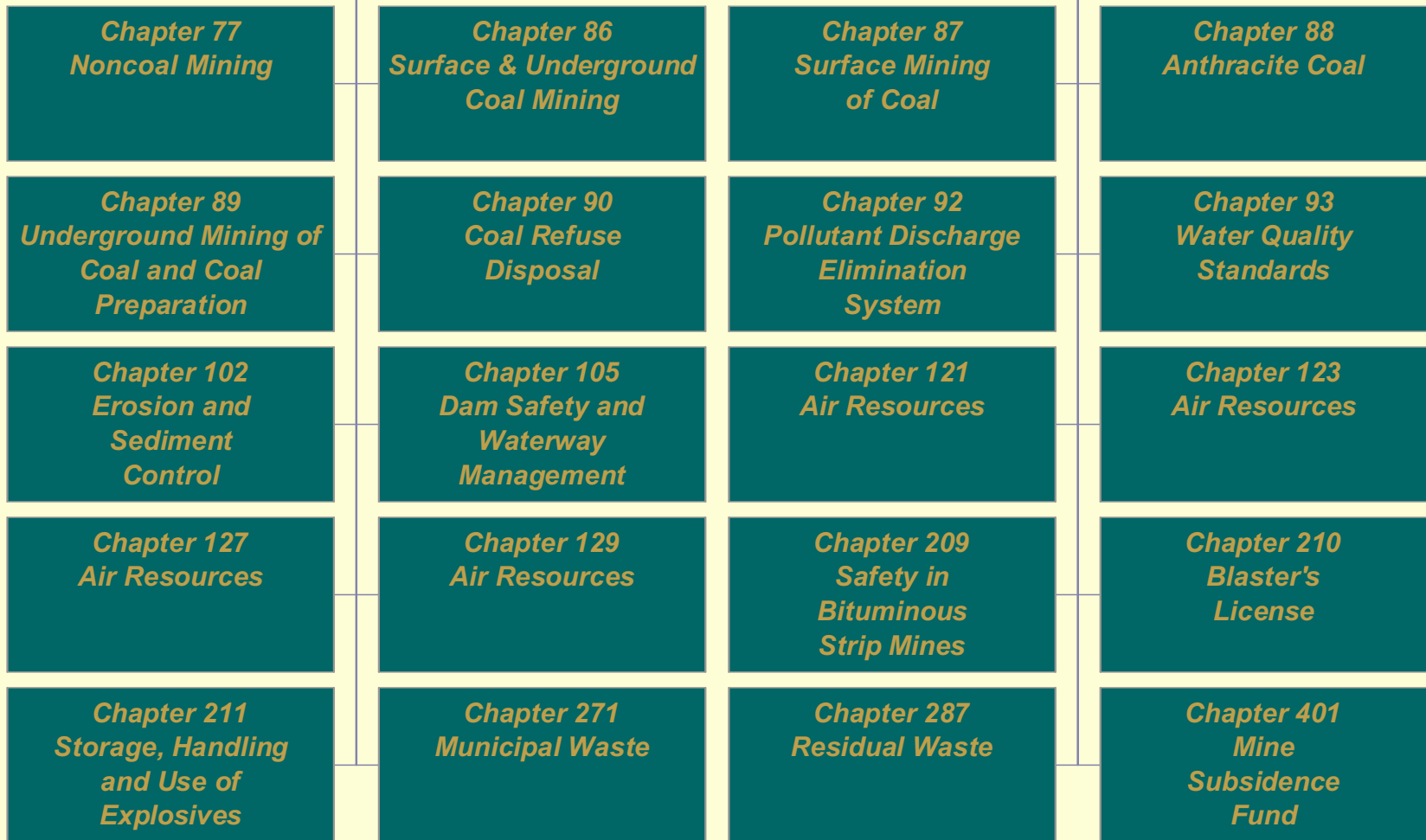




Rules Governing Mining

- Environmental
- Health and Safety

Environmental Regulations





Health and Safety Laws

- Bureau of Deep Mine Safety
- Mine Safety and Health Administration



Bureau of Deep Mine Safety

- Bituminous Coal Mining Laws of Pennsylvania
- Anthracite Coal Mining Laws of Pennsylvania



Bituminous Coal Mining Laws

Establishes the State's responsibilities regarding worker safety

- Secretary
- Inspectors
- Inspection Reports
- Findings
- Discretionary Powers of the Inspector
- Reports of Operating Mines
- Mine Rescue Stations
 - Equipment
 - Instructors
 - Rescue Teams



Bituminous Coal Mining Laws

Referred to as the ACT

Enacted in 1961

- Health & safety of persons employed in underground mines
- Protection of property
- Prescribes penalties



Anthracite Mining Laws

Referred to as the ACT

Enacted in 1954


- Sets health and safety standards governing anthracite coal mining within the Commonwealth



Mine Safety & Health Administration

Federal Coal Mine Health and Safety Act of
1969

Federal Mine Safety and Health Act of 1977



Federal Coal Mine Health and Safety Act of 1969

Written in response to the Farmington Mine
Disaster

Written to provide for the protection of the
health and safety of persons working in the
coal mining industry of the United States



Federal Mine Safety and Health Act of 1977

- Renamed the Federal Coal Mine Health and Safety Act of 1969
- Merged with the Metal and Non-Metallic Mine Safety Act of 1966
- Provides for the protection of the health and safety of persons working in the mining industry of the United States



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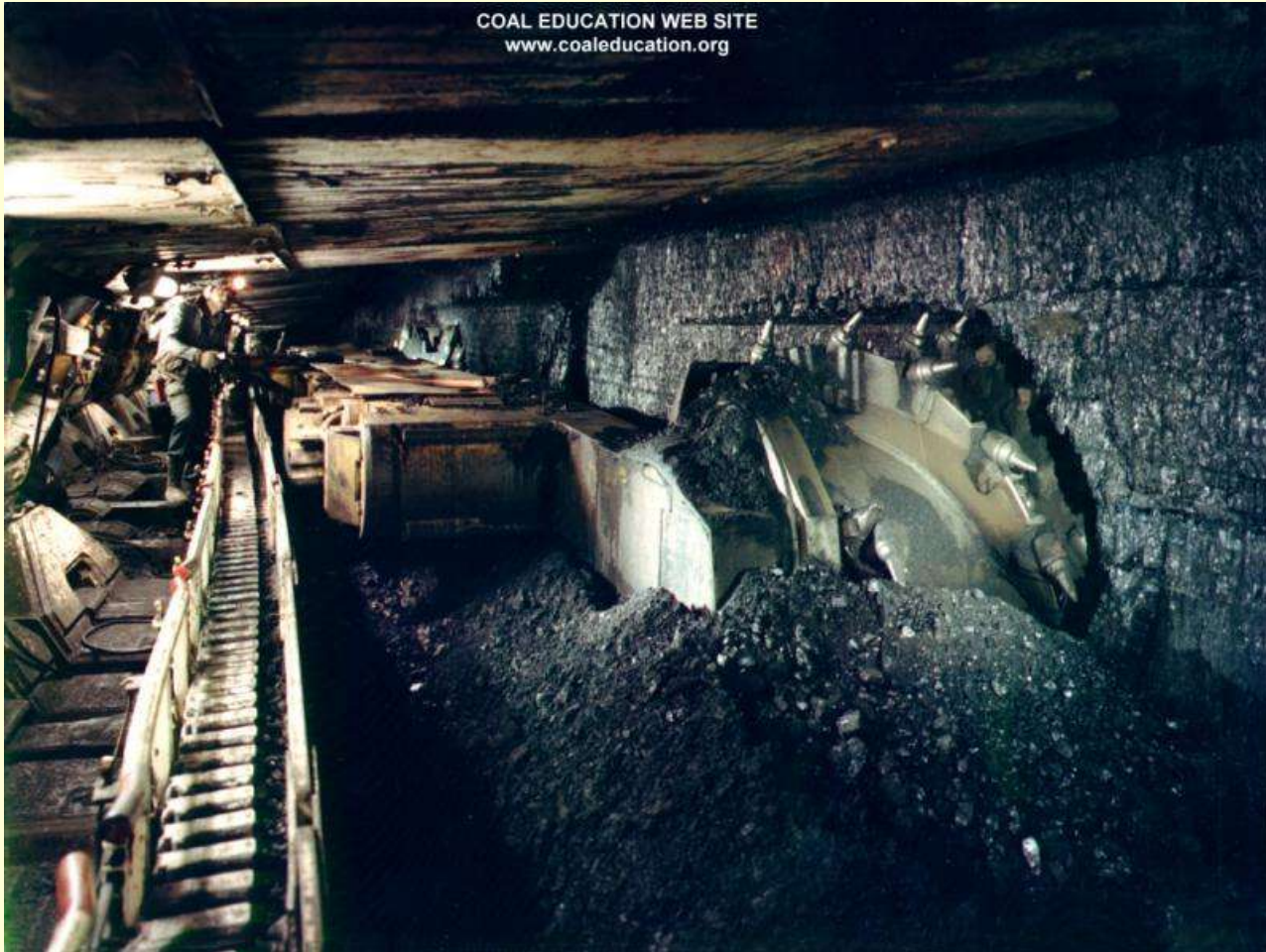
- Ventilation
- Gas Detection
- Dust Suppression
- Ground Control
- Electrical Equipment
- Diesel Equipment

Then



Pennsylvania Department of Environmental Protection
Bureau of Deep Mine Safety

And Now



COAL EDUCATION WEB SITE
www.coaleducation.org

Pennsylvania Department of Environmental Protection
Bureau of Deep Mine Safety



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Accident reduction through training



Accident Reduction Through Training

- Miner Certification
- Mine Officials Certification
- Hazard Training
- Annual Refresher



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Inter-Agency Cooperation

Accident Investigations

Health and Safety Training

Funding

Accident Statistics

Hazard Awareness



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Other mining organizations



Other Mining Organizations

Pennsylvania Coal Association

United Mine Workers of America

Office of Surface Mining

Pennsylvania Coal Mining Institute of America

Holmes Safety Association

NIOSH

USMRA



Summary

All underground mines are regulated the same, regardless of size.

The elimination of accidents, injuries, and fatalities is a common goal shared by the various groups associated with mining. The collaborative effort from the State/Federal agencies, mining companies, mining organizations, mine labor, safety and health organizations, and academia has shown to be effective in promoting and achieving safer mines.