Abandoned Mines of New Jersey

Overview
New Jersey is home to several abandoned mines, including those once abundant in Copper, Iron, and Graphite. As you have learned, abandoned mines face issues with reclamation, many of which are still apparent today. These abandoned mines are environmentally detrimental to the health and well-being of many in the surrounding communities. The United States Environmental Protection Agency requests a proposal from your company to clean up and restore these sites.

EPA Background
The United States Department of Environmental Protection’s mission is to protect human health and the environment. Some of the responsibilities of the EPA include insuring:

- all Americans are protected from significant risks to human health and the environment where they live, learn and work
- environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive

We have determined that the mine sites require cleaning up so the land may be developed for other uses.

Scope of Work
Each group of three will be a different company that specializes in land reclamation. You are going to research one abandoned mine in New Jersey and assemble a proposal to share the history and your plans to reclaim the site. As most of these mines are now abandoned, you will have to dig deeper into the research and look toward historic documents for information.

In your 5 minute proposal be sure to include:

- Logistics
  - Name of Mine
  - Location (in NJ - Township and County)
  - Element Mined
  - Start and End Dates of Mining
- Rationale for mining in this location (think historically!)
  - When the mine opened, why was this resource necessary?
  - Why did they continue operating the mine into the 1900’s?
  - How did they find the location?
● Economic implications (positive and/or negative)
● Social implications (positive and/or negative)
● Political implications (positive and/or negative)
● Environmental impacts
  ○ Address as many as are relevant
    ■ Acid mine drainage formation
    ■ Erosion and sedimentation
    ■ Cyanide and other chemical releases
    ■ Fugitive dust emissions
    ■ Habitat modification
    ■ Surface and groundwater
  ○ What were the immediate impacts when the mine first opened?
  ○ What problems arose as a result of operation?
  ○ Has reclamation occurred for this mine? Why or why not? What steps did they follow for this mine?
  ○ What are the water quality concerns at mines? Which of these are applicable for this mine?
● Be sure to include images and diagrams as relevant. These may include:
  ○ Present-day location visible on map
  ○ Original maps
  ○ Original documents
  ○ Figures and/or diagrams showing environmental implications

Below is a list of suggested mines to research. You may look for others, but each mine may only be presented once (first come, first served).

● Griggstown Mine  ● Oxford Mine
● Bolmer Mine       ● Howell Farm Mine
● American Mine     ● Sussex Lead Mine (Indian Mine)
● Feltville Mine    ● Sterling Mine
● Mt. Hope Mine     ● Schuyler Mine

Below are some resources to get you started. Please note, this is not an inclusive list- you will have to do additional research.
http://www.miningartifacts.org/NewJerseyMines.html
http://ecorestoration.montana.edu/mineland/guide/problem/impacts/
http://www.njgeology.org/enviroed/minemaps.htm
http://www.miningfacts.org/Environment/What-are-the-water-quality-concerns-at-mines-/