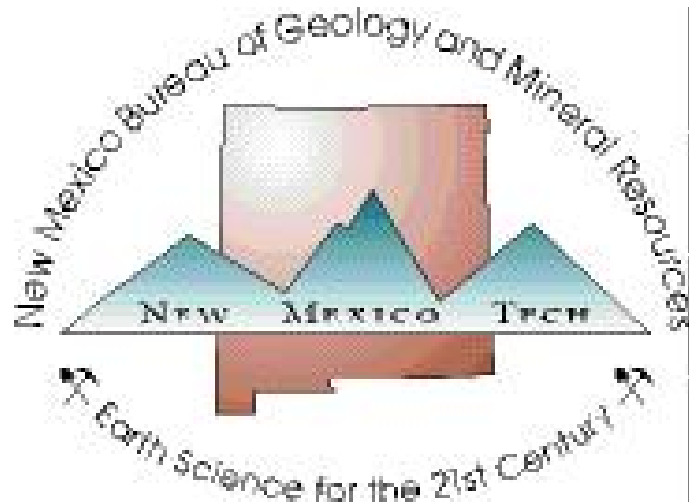


Dicalite Perlite Mine, Socorro, NM—2020



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New Mexico Tech

What is Perlite?

- Volcanic siliceous glass
- Rhyolite composition
- Commercial perlite must expand
- Vitreous, pearly luster
- Inert
- When perlite is heated rapidly in a furnace, the trapped water molecules turn to steam and expands up to 20 times its original size (like popcorn)
- 2-5% water allows it to expand similar to popcorn above 871 degrees C
- Gray, white, black, but when expanded-white
- New Mexico is the leading state in the US in perlite production

Properties of perlite

- Lightweight
- Free of organic materials
- Insulating properties
- Fireproof
- Pest-proof

PERLITE



Rock



Crushed



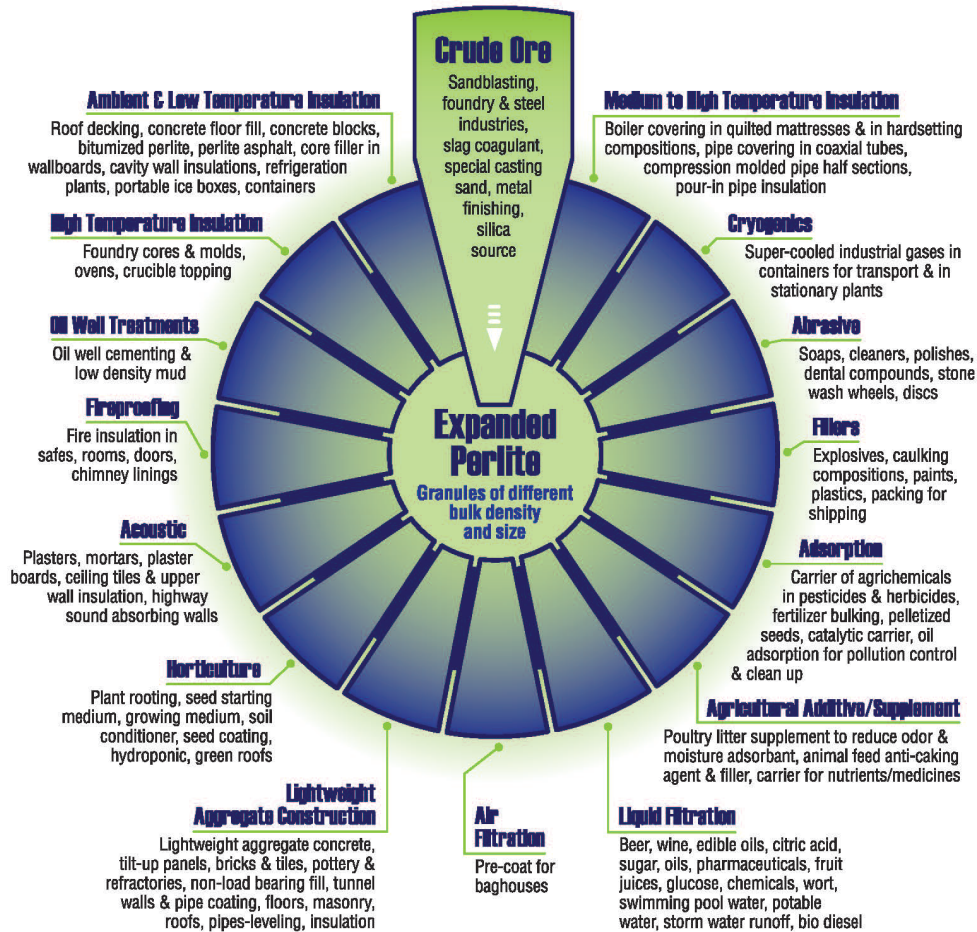
Expanded

Perlite—uses

- Building construction products (ceiling tiles, insulation, sheetrock)
- Horticultural aggregate (breaks up soils and allows for better water retention)
- Cannabis growing (ensures oxygen is provided to the roots)
- Filter aid
- Fillers
- Other (high-temperature insulation, molten metal topping)

Applications of Perlite

the Versatile Mineral



<https://s3-usa.s3.amazonaws.com/c/308462372/media/59bc047637217/Applications%20of%20Perlite.pdf>

Perlite localities
in New Mexico
(El Grande, No
Agua, and
Socorro are
active mines)

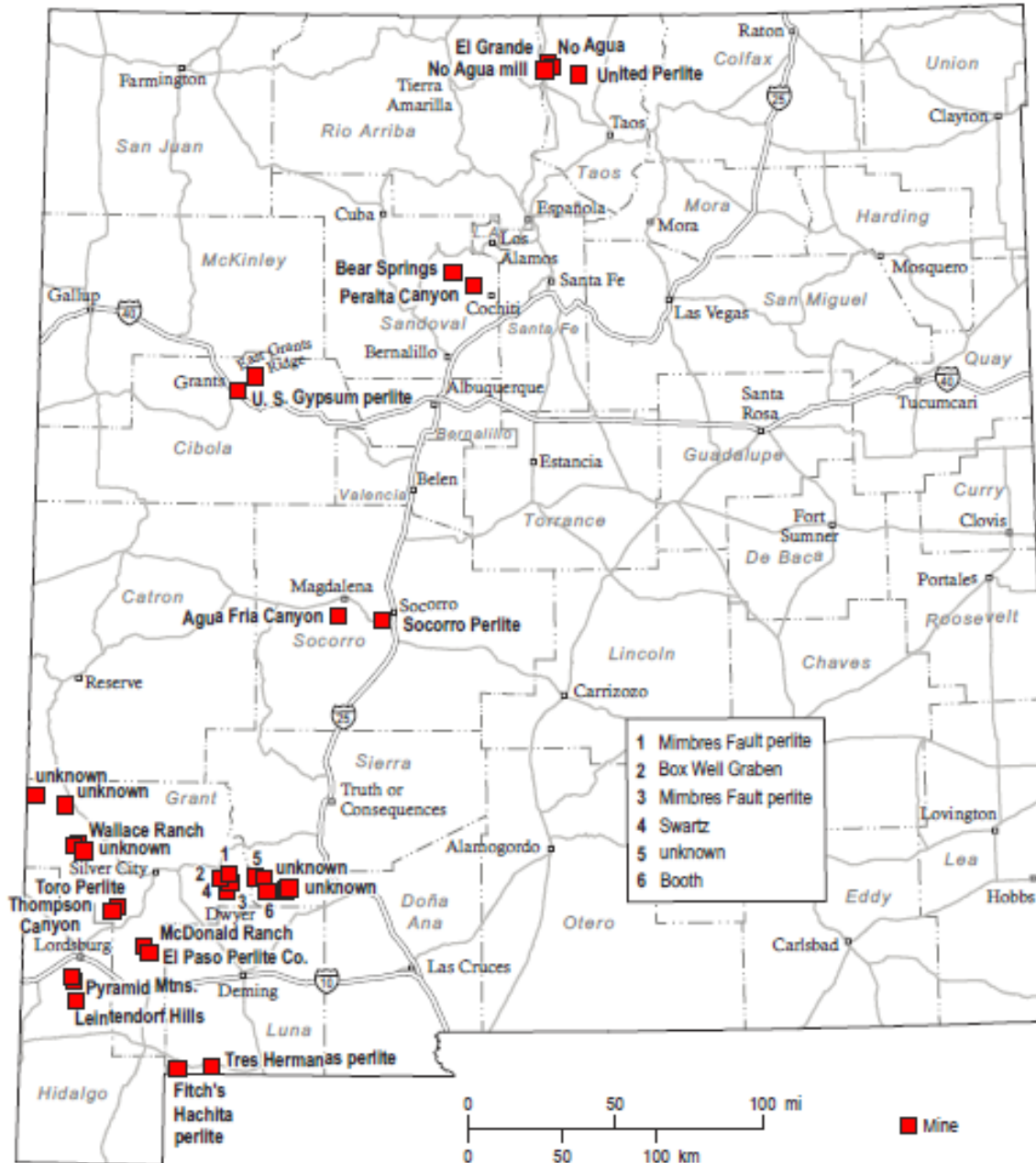


Figure 24. Perlite occurrences and mines in New Mexico.

Dicalite Management Group perlite mine, Socorro, NM

- Opened in 1949 but closed in 1961 due to a depressed market
- Reconstructed the plant and began operations again in 1975
- Has more than 30 yrs of proven reserves (more than 15 million tons) and more than 50 yrs of probable reserves
- Current demand is approximately 180,000 tons per year but the plant can operate at 250,000 tons per year
- Pit is 200 ft deep and the perlite is another 175 ft below the pit level



Dicalite Management Group perlite mine,
Socorro, NM, looking west
(<https://www.dicalite.com/dicaperl/>)

Open pit. Covered conveyor belt transports the white perlite ore to the processing plant.



Processing plant



Web page:

<https://www.dicalite.com/location/socorro-nm/>