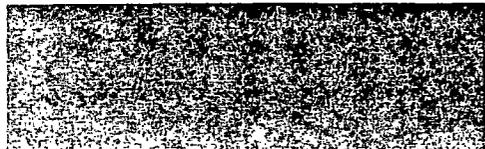


# BLUEWATER VALLEY DOWNSTREAM ALLIANCE



History, Current Proposals, & How You Can Help

# Who We Are

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- 6<sup>th</sup> generation New Mexicans
- Rural backgrounds and cultures
- Former underground uranium miners
- Ranchers
- Farmers
- Environmentalists
- Business owners
- Wage earners

# Our Community

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- Traditionally a farming community with domestic wells for:
  - ▣ Drinking
  - ▣ Livestock
  - ▣ Irrigation
- Irrigation methods
  - ▣ Originally with Bluewater Lake runoff
  - ▣ Later with community irrigation well
- Home gardens
  - ▣ Food
  - ▣ Canning

# The Regulators

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- United States Environmental Protection Agency  
(EPA) Region 6  
Main contact: Sai Appajii
- New Mexico Environment Department  
(NMED)  
Secretary Ron Curry
- Nuclear Regulatory Commission  
[Formerly Atomic Energy Commission (AEC)]  
(NRC)  
Main contact: Von Till
- Department of Energy  
(DOE)  
Main contact: Unknown

# The Company

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- Homestake Mining
- Bought out in 2001 by Barrick Gold  
[www.barrick.com](http://www.barrick.com)
- ▣ Total Sales
  - 2004 – \$1.9 billion
  - 2005 -- \$2.3 billion
  - 2006 -- \$ 5.6 billion
- ▣ Net Income for 2006 was \$ 1.5 billion.

Source: Barrick Gold 2006 Annual Report

# History of the Contamination-- 1

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- 1956, Homestake Mining (Barrick Gold) located uranium mill tailings facility less than 1/2 mile NE of Murray Acres—part of our community.
- Purpose:
  - ▣ Process uranium ore
  - ▣ Provide tax dollars for Cibola County (formerly Valencia County)
  - ▣ Earn money for company
- Unlined tailings pond seepage
- Uncovered windblown tailings

# History of the Contamination--2

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- 1961—Homestake (Barrick Gold) received word from the New Mexico Public Health Service noting a serious health risk due to pollution of alluvial aquifers
- 1975—NMED/USEPA advise residents the drinking water is unsafe
- Homestake/Barrick Gold provides bottled water for residents
- 1983—Group of Murray Acres residents file suit against Homestake/Barrick Gold for contamination of the Alluvial aquifer

# History of the Contamination--3

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- ❑ 1985 Lawsuit settled with provisions:
- ❑ Homestake/Barrick Gold provides Milan water to residents and pays residential water bill for 10 years
- ❑ Promises (verbally) to fully restore clean water within 10 years
- ❑ Residents believed promise because the site is simultaneously listed as a federal EPA Superfund site and believed the EPA would successfully regulate Homestake/Barrick's remediation efforts
- ❑ Residents assured only Alluvial aquifer (top) had been affected. No other aquifers in danger.

# 1995 Cleanup Date Passes

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- 1995 – Homestake/Barrick's remediation efforts unsuccessful
- Residents' wells still unusable
- Property devalued due to publicity from the lawsuit and local knowledge of contamination

# Contamination Worsens--1

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- Homestake/Barrick, knowing it cannot meet earlier promises, asks for a more lenient cleanup standard
- Not only Alluvial Aquifer, but also Upper, Middle, and Lower Chinle Aquifers contaminated.
- Possible contamination of San Andres Aquifer
- NRC, with consent of the USEPA and NMED concludes the Homestake/Barrick Gold site has suffered from upstream contamination by other companies
- Therefore Homestake/Barrick Gold only responsible for cleanup standard far below safe drinking water standards

# Contamination Worsens--2

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- 2007--Review of the Second Five-Year Report for Homestake Mining Company Superfund Site, Grants, NM. NMED DP-200, NRC License SUA-1471 and Discharge Permit Application DP-???

## BVDA Findings:

- Chinle aquifers improperly evaluated
  - Requires background upgradient/Point of compliance downgradient
- Homestake/Barrick Gold's Injection Wells/Drilling Practices for remediation actually adding to Chinle Aquifer pollution

# BVDA Findings continued-- 1

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- 2007--Review of the Second Five-Year Report for Homestake Mining Company Superfund Site, Grants, NM. NMED DP-200, NRC License SUA-1471 and Discharge Permit Application DP-725

## Findings (continued)

- Mist from evaporation jets extending beyond site berms
- Unknown effects of potential radon exposure from windblown tailings
- Undetermined extent of structural damage to houses in nearby communities from injection wells and concomitant changes in local geohydrology

## BVDA Findings continued--2

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- 2007--Review of the Second Five-Year Report for Homestake Mining Company Superfund Site, Grants, NM. NMED DP-200, NRC License SUA-1471 and Discharge Permit Application DP-725

### Findings (continued)

- Homestake/Barrick's proposed evaporation pond sizes inadequate to reduced contamination
- Number of Homestake/Barrick's existing remediation/injection wells unregulated

# Contamination Spreads--1

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- Contamination, once  $\frac{3}{4}$  mile from the mill tailings site, is now 2 miles below tailings site, polluting additional wells.
- This contamination, pushed through and around our communities, now mixes with the Rio San Jose Alluvial flow from the Anaconda/ARCO (now a DOE-controlled) millsite, proceeding south to the community of Milan, polluting more wells on the way.
- Pollution currently 2 miles west and 2 miles southwest of original site.  $1\frac{1}{2}$  miles above village of Milan, NM, threatening approximately 2,000.

# Contamination Spreads--2

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- Currently no monitoring downstream of known pollution, which would allow legitimate future background determinations
- No information on potential damage to San Andres Aquifer
- No identification of other upstream polluters besides Homestake/Barrick Gold.
- If upstream sources contributed and are allowing Homestak/Barrick to bear a reduced share of cleanup, these other former mining companies should be identified and involved in cleanup efforts.

# Contamination Spreads--3

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- ❑ Contamination from Homestake/Barrick now mixing with DOE-controlled Anaconda (now Atlantic Richfield Oil—ARCO) and polluted additional communities
- ❑ This problem not addressed by any regulating agencies thus far

# Solutions

- NMED should recommend the USEPA designate the area from Milan, NM to Bluewater Village, NM to San Mateo, NM, to Ambrosia Lake, including the Homestake/Barrick Gold site, as a Superfund District, with provisions for cost recovery
- USEPA Region 6 should extend the Superfund designation, enact cost recovery mechanisms and move the tailings to a lined pond
- NRC and DOE should participate in remediation of former Anaconda/ARCO mill tailings
- An additional source(s) of water should be identified for Grants/Milan
- If cleanup considered unlikely, US Congressional delegation should work with responsible parties and US government to compensate communities

# The Future--Prevention

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- If Uranium Mining returns to New Mexico, it must do so under conditions that prevent such disasters in the future
- New Mexico Legislators must demand the following:
  - ☛ Only water that meets safe drinking water standards can be released from any site, mine or mill.
  - ☛ All tailings must be placed in a lined pond(s) located on a dry, shale bed that is 300-400 feet thick.
  - ☛ All ground water in the areas that may be effected will have a baseline quality data set by adequate monitoring wells that will be able to effectively identify any pollutants that may be escaping completed and on file before construction begins
  - ☛ All ore and or waste piles will be placed in a bermed area to prevent any runoff erosion. All materials will be placed on liners within the bermed area(s) to prevent seepage into the underlying formations.

# What You Can Do

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- Write or call your elected officials
- Ask them to sponsor legislation to:
  - Extend the Homestake/Barrick Superfund site to a Superfund District and enact cost recovery mechanisms for other responsible parties
  - Hold DOE/NRC responsible for mill tailings contamination from the Anaconda/ARCO site
  - Compensate community if their water wells cannot be restored
  - Enact strict controls on future Uranium Mining in NM