

Safety of Our Drinking Water Supply

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Overview

- Background
- Safe
- Comparison
- Potential risk
- Testing
- Available options

Background

- DPU took over the drinking water supply system in 2001
- 12 wells pump water from Pajarito Plateau
- Wells are deep in the aquifer, 1,000+ feet
- Provide water to:
 - Los Alamos,
 - White Rock,
 - Bandelier and
 - LANL

Safe

- Drinking water is safe
 - Meets all federal & state drinking water standards
- Reported annually in the Drinking Water Quality Report
- Mailed to every address and posted online
 - https://www.losalamosnm.us/government/departments/utilities/water_supply/
- Quality Water
 - Similar to Fiji bottled water

Comparison

	Los Alamos Water*	Fiji Bottled Water*
Source of Water	Aquifer, Los Alamos, NM	Aquifer, Viti Levu, Fiji
Acidity (PH)	7.34	7.5
Total Dissolved Solids (TDS)	157 mg/l	160 mg/l
Calcium	16.2 mg/l	17 mg/l
Magnesium	3.9 mg/l	13 mg/l
Sodium	19.3 mg/l	17 mg/l
Bicarbonate	78.2 mg/l	140 mg/l
Chloride	3.93 mg/l	7 mg/l
Silica	71.1 mg/l	83 mg/l

*2005 data

Potential Risk

- DOE has detected Chromium 6 at elevated levels at the top of the aquifer
- Closest DPU well is a quarter mile away
- DPU pumps water deep in the aquifer, hundreds of feet below upper surface
- Plume detected by DOE has not affected any DPU drinking water supply wells

Potential Risk

- Naturally occurring Chromium detected in drinking water at DPU wells
- Chromium found in 3 forms
 - Metal ore
 - Trivalent (Chromium 3)
 - Hexavalent (Chromium 6)
- Trivalent (Cr 3) is a required nutrient found in fresh produce, meat, grains and yeast.
- Hexavalent (Cr 6) is toxic and an indicator of human pollution.

Testing

- NMED
 - tests Total Chromium every 3 years in 12 wells
- LANL and DPU as of 2005
 - Total Chromium every year in 12 wells
 - Total Chromium and Chromium 6 quarterly in 4 wells
 - PM1, PM3, PM4 & PM5 closest to plume

Total Chromium - Drinking Water

YEAR	EPA MCL	NMED MCL	LOW	HIGH
2002	100 ppb	50 ppb	2.9 ppb	4.5 ppb
2003	100 ppb	50 ppb	2.9 ppb	4.5 ppb
2004	100 ppb	50 ppb	2.83 ppb	5.63 ppb
2005	100 ppb	50 ppb	5 ppb	6 ppb
2006	100 ppb	50 ppb	3 ppb	6.5 ppb
2007	100 ppb	50 ppb	Non-detect	7.3 ppb
2008	100 ppb	50 ppb	Non-detect	6.1 ppb
2010	100 ppb	50 ppb	Non-detect	6.7 ppb
2011	100 ppb	50 ppb	2.17 ppb	11.1 ppb
2012	100 ppb	50 ppb	2.75 ppb	12.5 ppb
2013	100 ppb	50 ppb	4.06 ppb	9.9 ppb
2014	100 ppb	50 ppb	2.29 ppb	13 ppb
2015	100 ppb	50 ppb	4 ppb	6 ppb
2016	100 ppb	50 ppb	4 ppb	6 ppb

Available Options

- Should a well become contaminated DPU will be conservative
 - Notify public
 - Assess if it meets state and federal safe drinking water standards
 - What are the environmental conditions
 - Stop pumping from the affected well
 - File a claim with our insurance company