



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
SANTA FE

John R. D'Antonio, Jr., P.E.
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MEMORANDUM

To: Ted Bagley
From: John Longworth, P.E., Chief, Water Use and Conservation Bureau
RE: Estimated Indoor Domestic Use for NPT area
Date: August 20, 2009

This memo provides an indoor domestic use calculation for the NPT area as per your request.

Indoor Use = (persons per household)*(gallons per capita per day)*(Conversion to acre-feet per year)

Where:

- Persons per household = In Census Tract 101.03, an average household size maximum is identified as 3.5 persons per household. (U.S. Census Bureau, American Fact Finder, Census 2000 Summary File 1, Matrix P17, see attached map).
- Gallons per capita per day = 77.3 for indoor water use without water conservation plumbing fixtures and appliances plus 25 for evaporative cooling and water softening requirements for a total of 102.3 (page 8 of Office of the State Engineer Technical Report 52, June 2008).
- Conversion to acre-feet/year = 1 acre-foot/325,900 gallons * 365 days/year

Therefore:

Indoor Use = (3.5)*(102.3)*(365/325,900)=0.40 acre-feet/year

Exhibit 2

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

STATE OF NEW MEXICO, ex rel. STATE)
ENGINEER, et al.,)
Plaintiffs,)
)
v.)
R. LEE AAMODT, et al.,)
Defendants,)

No. 66cv6639 MV/WPL

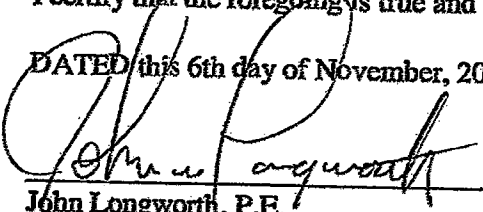
AFFIDAVIT

I, John Longworth, being duly sworn, on oath, state as follows:

1. I am an employee of the Office of the New Mexico State Engineer, a Professional Engineer and Chief of the Office's Bureau of Water Use and Conservation.
2. Attached is a memorandum authored by me regarding the quantification of indoor domestic use of water in the Nambe-Pojoaque-Tesuque stream system.
3. It expresses my opinion as a professional engineer and expert in water use quantification.
4. As that memorandum states, my conclusion is that given the assumptions stated, indoor use for domestic purposes in the Nambe-Pojoaque-Tesuque stream system can be estimated at 0.4 acre feet per year per household.

I certify that the foregoing is true and correct.

DATED this 6th day of November, 2009.



John Longworth, P.E.
130 S. Capital Pl.
Santa Fe, NM 87501

EXHIBIT
1

SUBSCRIBED AND SWORN to before me this 6th day of Nov, 2009.

Dolores M Bacon
Notary Public

My Commission Expires: 10/18/10