ADEQ Arizona Department of Environmental Quality

# FACT SHEET

Publication Number: FS 15-07

# Highway 260 and Johnson Lane
## Preliminary Investigation

### Site Description

The Highway 260 and Johnson Lane Preliminary Investigation (the site) is located in the Lakeside portion of the Town of Pinetop-Lakeside, Arizona. The site is generally bounded to the north by the Rhoton Lane alignment, to the east by the western side of the Blue Ridge Unified School District property and Billy Creek, to the south by the east-west alignment of West White Mountain Boulevard (State Route Highway 260) and the Burke Lane alignment, and to the west by Rainbow View Drive (see Figure 3, page 3.) The site includes a mixture of public, commercial and residential land uses along State Route Highway 260.

2015 groundwater testing of private drinking water and irrigation wells on properties near the intersection of Highway 260 and Johnson Lane found tetrachloroethene (PCE) and trichloroethene (TCE). PCE levels ranged from 47 to 59 parts per billion (ppb) which exceed the Aquifer Water Quality Standard (AWQS) of 5 ppb. TCE levels were below the AWQS of 5 ppb. Groundwater in this area is generally found at depths ranging from 50 to 150 feet below the ground surface. Based on historical and recent data, groundwater flow is to the northwest.

### What are the contaminants at this site?

PCE is a man-made solvent commonly used in the dry cleaning process and as a degreaser in many industrial applications. TCE is a solvent primarily used in metal degreasing and cleaning operations and can also be a breakdown product of PCE.

### What are the health risks associated with this contamination?

There are multiple privately owned domestic water wells within the site. People who drink water containing PCE or TCE over many years could experience problems with their liver and may have an increased risk of cancer. ADEQ is concerned that additional privately owned domestic supply wells may be impacted by groundwater contamination near the site.

**If you own a private well within the area of the site, please contact ADEQ at (602) 771-4452 or toll free at (800) 234-5677 ext. 6027714452.**


*Fig. 1 – An example of a water tank connected to a privately owned well.*

### What are ADEQ's future plans at this site?

ADEQ is currently conducting an Early Response Action (ERA) that includes further assessment of the plume boundaries and evaluating options to address the potential groundwater contamination. The evaluation of this area does not necessarily represent a determination that the release of a hazardous substance at the site poses a threat to human health or the environment.

ADEQ appreciates your cooperation as investigation of groundwater contamination continues. ADEQ does not have jurisdiction over private wells in Arizona and cannot require private wells to be taken out of service. The results of tests will be shared with the well owners and used to determine plume boundaries.

### Site History

Groundwater contamination by TCE above the AWQS was first reported in the area in 1994 from a sample collected from the Blue Ridge Unified School District (BRUSD) drinking water well. In 1995, BRUSD began purchasing drinking water from Arizona Water Company (AWC) and the water from this well has been used solely for irrigation since that time. In 2013, the BRUSD drilled a deeper well to provide drinking water to the school.

Subsequent investigation in 2003 through 2005 found no TCE above AWQS in the BRUSD irrigation wells, and no impacts in the domestic drinking water wells that were sampled near BRUSD. Soils and creek sediments at the site were

also tested and no contamination or potential contamination sources were found. The U.S. Department of Health and Human Services evaluated potential public health hazards at the BRUSD in 2003, including potential hazards from irrigation water quality, drinking water quality and indoor air quality. No apparent public health hazards were found. Additional investigation conducted in 2015 did not find TCE above AWQS in the BRUSD irrigation wells.

AWC supply wells are not present within the site and most AWC supply wells are located in a deeper aquifer that is not affected by this contamination. Drinking water supplied by AWC meets all federal and state drinking water standards.

**For More Information:**

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*Please call the Records Management Center 48 hours in advance for a file review appointment at (602) 771-4380. The Remedial Projects Section fax number is (602) 771-4138.*

*Fig. 2 – Water wells like the one pictured above are very common in the area of the preliminary investigation.*

## GLOSSARY

***Aquifer Water Quality Standard***
*Enforceable standards set to protect the quality of the water in Arizona aquifers for present and foreseeable uses, including consumption of the water by humans.*

***contamination***
*Any hazardous substance released into the environment.*

***Early Response Action***
*A cleanup activity that is performed prior to the final remedy and often prior to the completion of the Remedial Investigation because timeliness of response may be needed to protect the public health or environment.*

***groundwater***
*Water found beneath the earth's surface that fills pores between materials such as sand, clay or gravel. In aquifers, groundwater occurs in sufficient quantities that it can be used for drinking water, irrigation and other purposes.*

***plume***
*An area of contamination in groundwater, soil or air, often used to describe the dispersion of contamination in soil and/or groundwater.*

***trichloroethene (TCE)***
*A heavy, colorless, toxic liquid used to degrease metals, as an extraction solvent for oils and waxes, as a refrigerant, in dry cleaning and as a fumigant.*

***tetrachloroethene (PCE)***
*A clear, colorless, nonflammable solvent that readily evaporates at room temperature. PCE is widely used for dry cleaning of fabrics and degreasing/drying of metals.*

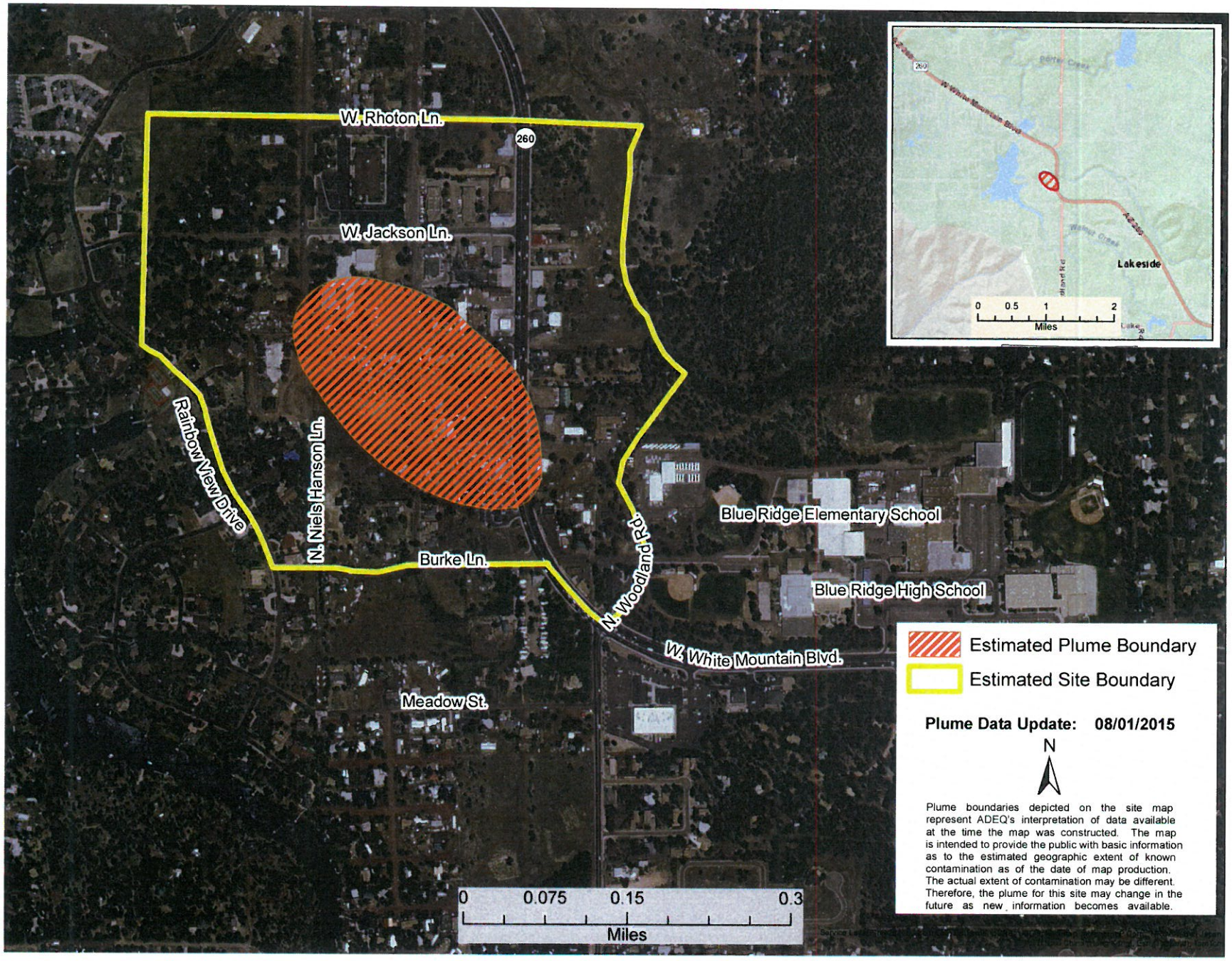


*Fig. 3 – Highway 260 and Johnson Lane Boundaries*