

WWD 41 Asbestos History

- In 2013, the Shaver Lake Citizens Advisory Committee (SLCAC) was informed that asbestos fibers were found in the Districts water system. At that time, the asbestos fibers were below the maximum contaminant level (MCL) of 7 Million Fibers per Liter (MFL) allowed by the State.
- It was determined that the low ph of the water led to the deterioration of the concrete layer of the pipes which exposed the asbestos fibers, allowing them to break off into the water supply.
- In April 2014, the SLCAC approved use of District reserves to find a solution to the asbestos fiber problem.
- A study was completed in May 2015 by West Yost Associates which recommended the replacement of deteriorating sections (approximately 2 miles) of asbestos concrete water pipes.
- In April 2016, Strahm Engineering Inc. was selected to create the plans and specifications for the Asbestos Pipeline Replacement Project (Project).
- On February 9, 2018 Strahm Engineering Inc. submitted the final plans and specifications to the County.
- At a SLCAC meeting in May 2018, a consultant presented information on a possible alternative solution to the asbestos contamination, a chemical treatment process called Zinc-Ortho Phosphate.
 - The consultant explained that this chemical is absorbed into the pipes creating a barrier between the pipes and the water flowing through the pipe. The consultant believes that as long as the chemical is consistently being dosed into the water system, the lining should prevent any fibers from breaking loose even if there is a disturbance (high flow) in the system.
- In order to proceed with construction of the Project, the District would need to have funding in place before January 2019 to be able to take the Project out to bid. Since it was unlikely that the funding would be in place in time, the SLCAC in concurrence with the Community members present decided to delay the Project and test the Zinc-Ortho Phosphate treatment to see if it would remedy the Asbestos problem, potentially saving the District approximately \$2.5 million in construction costs.
- In May 2018, sample results for asbestos fibers showed results of 23.4 MFL. In June 2018, the asbestos levels reached 440 MFL.

- The Zinc-Ortho Phosphate treatment started in July 2018 after the County received approval from the State.
- The County mailed a notice to all residents in July 2018 informing the community that the water system was currently in violation of a drinking water standard for asbestos contamination.
- At the SLCAC meeting in September 2018, the approximately 100 community members present voiced their opinion that the District immediately move forward with the Project. The County informed the Community that there was not enough time to acquire funding by the January 2019 deadline and that the Projects earliest possible construction date was summer 2020.
- Following the opinion of the Community, the SLCAC voted to move forward with the replacement of the asbestos pipe. In the meantime, the Zinc-Ortho Phosphate treatment will continue to be used to aide in controlling the asbestos levels until the pipe is replaced.
- At the time of the SLCAC meeting, the asbestos level was 84 MFL. With the continued use of the Zinc-Ortho Phosphate, the asbestos levels decreased to 2.4 MFL in December 2018.
- The asbestos results received in the beginning of January 2019 came in high at 21.6 MFL and throughout the month continued to climb to 348 MFL.
- In the first week of February 2019, the asbestos results were 209 MFL and by the end of the month, the results dropped down to 45 MFL.
- Under normal operating conditions, the system has experienced asbestos levels under the MCL. However, during times of high water flow through the system, such as a line break or the use of a fire hydrant, the District experiences a high spike in asbestos levels.
- The chemical treatment process has not shown the ability to permanently alleviate the asbestos fibers issue.

Next Steps for Project Completion

- If the District chooses to move forward with the Asbestos Pipeline Replacement Project, the County will proceed with conducting the required public meetings and hearings in accordance with Proposition 218 (Prop 218).

- A Prop 218 is required to secure the funding necessary to fund the Project. This process will allow each property owner an opportunity to formally support or oppose the assessment.
- The Engineer's Estimate for the Project is \$2.5 Million. **Please keep in mind that this is an estimate and not the actual construction cost as that information will not be available until bids have been received.** Additional information about the Prop 218 and the associated costs will be provided at a later date as the calculations have not been completed.
- Please note: all properties receiving water and those that have potential to receive water from WWD 41 (see map below) are affected by the asbestos fibers issue due to the water mains being interconnected. This means that each area of the water system has the ability to receive water from one another.

