

FREQUENTLY ASKED QUESTIONS ABOUT GROUNDWATER PROJECT

1. What are the health risks presented by the landfill water?

There are no known health risks from the groundwater. The groundwater is located over 600 feet below ground surface (ft bgs) and there is no exposure pathway to this water.

The water is not part of the potable (drinkable) water supply.

The nearest drinking water wells are over 1 mile to the southeast and are screened at a much deeper (>1000 ft bgs) level. These are City of Phoenix wells that are regularly tested for safe drinking water parameters.

2. When did Maricopa County first learn of the contamination?

As was required by law in 1993, the County installed two (2) down gradient groundwater wells (south and southeast of the landfill) and began to monitor these wells along with an already existing up gradient well (north of the landfill). Each well is located on County property. In Dec 1997, Trichloroethylene (TCE) above the Aquifer Water Quality Standard of 5.0 micrograms per liter (ug/l) was found in the monitoring wells.

3. How was it determined that the landfill was/is the source for the contamination?

The County is required by law to regularly sample the monitoring wells.

In December 1997, TCE above the Aquifer Water Quality Standard of 5.0 micrograms per liter (ug/l) was found in the monitoring wells. The County reviewed historical information and did not find any other potential TCE source up gradient of the landfill.

4. Who is liable for any monitoring or clean up?

The Consent Order from the Arizona Department of Environmental Quality (ADEQ) requires that Maricopa County is responsible for monitoring and remediating the groundwater contamination, if necessary.

5. Are there test wells surrounding the landfill?

There is an up gradient monitoring well (PW-1) to the north of the landfill on County property. The two down gradient wells located to the south (MW-2) and southeast (MW-1) of the landfill are on County property. In 2007 MW-1 became inoperable and MW-3 was installed as a replacement for MW-1. MW-3 is located to the southeast on Dove Valley HOA property and was installed to identify the down gradient extent of contamination.

The current project installation includes two wells on State land, MW-4 south of the landfill and MW-5 to the southwest. Additionally, a boring TB-1 (uncompleted well) has been installed south of the eastern corner of the landfill on State land.

6. Is the contaminated water used for consumer drinking by DVR residents or any other Phoenix area residents?

No. Drinking water for Phoenix residents is supplied by the City of Phoenix from other sources. The City is required to regularly test the water they supply to citizens and to make the testing information available to citizens.

7. If it is not potable (drinkable) water what the water used for?

At this time, the water is not used for anything. Arizona protects all aquifers and treats all groundwater as if it might be used as drinking water and thus requires remediation of contaminated groundwater.

8. What is the specific purpose(s) for the new test well?

The new well is required to define the extent of the groundwater contamination. Groundwater flow data indicates that groundwater movement is to the southeast from the landfill. Analyses of available data and numerical modeling were used to determine the optimal location for the well.

The County has heard the concerns of the community and agreed to halt construction of TB-7 at this time and install TB-2. However the County

acknowledges that we may be required to recommence activities at TB-7 depending upon the results of TB-2 analyses and direction from ADEQ.

9. Why do we need to do all of this testing at different sites? Why can't we just remediate now?

Remediation requires understanding the extent of the problem. If you don't feel well, the doctor has to do tests before deciding if you need medication or surgery. Environmental characterization is the same.

ADEQ requires that we perform an investigation of the problem under their guidance to determine the extent of the problem and the best way to remediate it.

10. What work are we doing and why is it important to do it now?

We are determining the extent of the groundwater contamination; defining the plume. To stop the continued migration of groundwater contamination we need to know how far any possible contamination has spread and how quickly and in what direction the groundwater moves.

We are also evaluating soil vapor parameters at the landfill to identify whether future remediation of deep vapors at the landfill will be required.

11. What process will we use to pick the new site?

The County has previously worked with ADEQ and the State Land Department for over a year to get approval for six possible well locations on State Land property. Of the pre-approved sites, we are reverting to the southeastern selections. We are restricted by the State Land Department as to where we can drill borings.

12. How long will it take to analyze the water and determine a course of action?

We estimate that analytical data for the new well will be available approximately 30 days from the day of sample collection. The data will be presented to ADEQ for their review. Ensuing actions will be based upon directions of ADEQ.

13. Will the results of the tests be made public?

Yes, please refer to this website for results.

14. Is Maricopa County committed to remediate the problem once the extent of the plume is identified?

Yes. In addition to being under a Consent Order to perform remediation after characterization is completed, Maricopa County is working with ADEQ to work on the characterization with an expedited schedule to get to the point of remediation that much faster.

We are also conducting soil vapor investigations that are not required under the Consent Order in an effort to accommodate remediation as soon as acceptable to ADEQ.

15. Based on what is currently known about the contaminated water, what are the typical corrective actions? Would corrective action be taken on the landfill? If so, what might be done?

An actual remedy cannot be determined until the characterization of the site is completed. ADEQ will review and be required to approve of any remedies recommended by Maricopa County and their consultants.

Typical remediation of groundwater contaminants can involve pumping and treating water, establishing a “subsurface barrier” to keep contamination from spreading, and/or extracting and treating contaminated soil vapors. The exact nature of the remedy will affect its location.