## 2017 Consumer Confidence Report

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| Water System Name: | **Shadow Acres Mutual Water Company** | Report Date: | May 5, 2018 |

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for 2017 and may include earlier and more recent monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

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| Type of water source(s) in use: | | Ground-Water and Treated Surface Water | | | | | | |
| Name & general location of source(s): | | | Community ground-water well and treated surface water supplied by AVEK, | | | | | |
| Antelope Valley East Kern Water Agency, as a secondary supply. | | | | | | | | |
| Drinking Water Source Assessment information: | | | | Water storage tanks may be vulnerable to contamination and | | | | |
| Ground-water is vulnerable to nitrates from septic tanks and fertilizer use. | | | | | | | | |
| Time and place of regularly scheduled board meetings for public participation: | | | | | | | Monthly Board Meetings Open to | |
| Shareholders and Residents. Contact the Water Company office for date and location if you wish to attend. | | | | | | | | |
| For more information, contact: | Jeanne Miller | | | | | Phone: | | ( 661 ) 947-0200 |
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| **TERMS USED IN THIS REPORT** | | | | | | | | |
| **Maximum Contaminant Level (MCL)**: The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.  **Maximum Contaminant Level Goal (MCLG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).  **Public Health Goal (PHG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.  **Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.  **Maximum Residual Disinfectant Level Goal (MRDLG)**:The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.  **Primary Drinking Water Standards (PDWS)**: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. | | | | | **Secondary Drinking Water Standards (SDWS)**:MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.  **Treatment Technique (TT)**: A required process intended to reduce the level of a contaminant in drinking water.  **Regulatory Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.  **Variances and Exemptions**: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.  **Level 1 Assessment**: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.  **Level 2 Assessment**: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.  **ND**: not detectable at testing limit  **ppm**: parts per million or milligrams per liter (mg/L)  **ppb**: parts per billion or micrograms per liter (µg/L)  **ppt**: parts per trillion or nanograms per liter (ng/L)  **ppq**: parts per quadrillion or picogram per liter (pg/L)  **pCi/L**: picocuries per liter (a measure of radiation) | | | |

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

* *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
* *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
* *Pesticides and herbicides* that may come from a variety of sources such as agriculture, storm-water runoff, and residential uses.
* *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes, petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
* *Radioactive contaminants* that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the U.S. EPA and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent**. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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| Table 1 – SAMPLING RESULTS SHOWING the detection of coliform bacteria | | | | | | | | | | |
| **Microbiological Contaminants** | **Highest No. of Detections** | | **No. of Months in Violation** | | MCL | | | **MCLG** | **Typical Source of Bacteria** | |
| Total Coliform Bacteria (state Total Coliform Rule) | (In a mo.)  1 | | 1 | | 1 positive monthly sample | | | 0 | Naturally present in the environment | |
| Fecal Coliform or *E. coli* (state Total Coliform Rule) | (In the year)  0 | | 0 | | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive | | |  | Human and animal fecal waste | |
| *E. coli*  (federal Revised Total Coliform Rule) | (In the year)  0 | | 0 | | (a) | | | 0 | Human and animal fecal waste | |
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| Table 2 – SAMPLING RESULTS SHOWING THE detection of Lead and copper | | | | | | | | | | |
| Lead and Copper | **Sample Date** | **No. of Samples Collected** | | **90th Percentile Level Detected** | **No. Sites Exceeding AL** | **AL** | **PHG** | **No. of Schools Requesting Lead Sampling** | | **Typical Source of Contaminant** |
| Lead (ppb) \* | 3/22/18 | 5 | | N/D | 0 | 15 | 0.2 | Not applicable | | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) \* | 3/22/18 | 5 | | 0.63 | 0 | 1.3 | 0.3 | Not applicable | | Internal corrosion of household plumbing systems; erosion of natural deposits. |

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| TAble 3 – SAMPLING RESULTS FOR sodium and hardness | | | | | | | |
| **Chemical or Constituent** | **Sample Source** | | **Level Detected** | **Range of Detections** | **MCL** | **PHG (MCLG)** | **Typical Source of Contaminant** |
| Sodium ppm | AVEK  Well | | 32  151 | 143 - 159 | none | none | Salt present in the water and is generally naturally occurring |
| Hardness ppm | AVEK  Well | | 69  473 | 448 - 497 | none | none | Generally magnesium and calcium, and are usually naturally occurring |
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| **TAble 4 – detection of contaminants with a Primary Drinking Water Standard** | | | | | | | |
| **Chemical or Constituent** (and reporting units) | | **Sample Source** | **Level Detected** | **Range of Detections** | **MCL [MRDL]** | **PHG (MCLG) [MRDLG]** | **Typical Source of Contaminant** |
| Barium mg/L | | AVEK  Well | 0.02  0.01 | 0 - 0.02 | 1 | 2 | Erosion of natural deposits |
| Fluoride mg/L | | Well | 0.2 |  | 2 | 1 | Erosion of natural deposits |
|  | |  |  |  |  |  |  |
| Hexavalent Chromium ug/L | | AVEK  Well | 0.08  ND |  | 50 | NA | Discharge from manufacturing: wood preservation; electroplating; erosion of natural deposits |
| Nitrate (as N) mg/L | | AVEK  Well | 0.5  4.1 | 4.0 – 4.3 | 10 | 10 | Run-off/leaching from fertilizer use and septic tanks; erosion of natural deposits. |
| Nitrate (as NO3) mg/L | | Well | 18.4 | 18.0 – 18.8 | 45 |  | Run-off/leaching from fertilizer use and septic tanks; erosion of natural deposits. |
| Selenium ug/L | | Well | 4 |  | 50 | 30 | Erosion of Natural Deposits |
| Vanadium ug/L | | Well | 4.5 | 4 - 5 | 50 | 15 | Erosion of Natural Deposits |
| **TAble 5 – detection of contaminants with a Secondary Drinking Water Standard**  Aesthetic standards established by the State Water Resources Control Board | | | | | | | |
| **Chemical or Constituent** (and reporting units) | | **Sample Source** | **Level Detected** | **Range of Detections** | **MCL** | **PHG (MCLG)** | Typical Source of Contaminant |
| Chloride mg/L | | AVEK  Well | 43  115 | 106 – 123 | 500 | 250 | Run-off/leaching from natural deposits. |
| Chlorine ppm | | AVEK | 1.07 | 1.08 – 1.76 | 4 | 4 | Drinking water disinfectant added for treatment. |
| Specific Conductance umhos | | AVEK  Well | 275  1490 | 121 – 630  1460 - 1520 | 1600 |  | Substances that form ions in water |
| Sulfate mg/L | | AVEK  Well | 37  355 | 339 - 370 | 500 | 250 | Run-off/leaching from natural deposits. |
| Total Dissolved Solids mg/L | | AVEK | 180  1040 | 1020 - 1060 | 1000 | 500 | Run-off/leaching from natural deposits. |
| Total Organic Carbon mg/L | | AVEK | 1.7 | 1.2 - 2.5 |  |  | Treatment Requirement |
| Turbidity Units | | AVEK  Well | 0.05  1.9 | 1-3 – 2.5 | 5 |  | Soil run-off |
| Iron ug/L | | Well | 265 | 230 - 300 | 300 |  | Run-off leaching from natural deposits |
| Zinc mg/L | | AVEK | 0.44 |  | 5.0 |  | Run-off/leaching from natural deposits. |
| **TAble 6 – detection of UNREGULATED CONTAMINANTS** | | | | | | | |
| **Chemical or Constituent** (and reporting units) | | **Sample Source** | **Level Detected** | **Range of Detections** | **Notification Level** | | **Health Effects Language** |
| Bicarbonate Alkalinity(HCO3) mg/L | | AVEK  Well | 48  285 | 280 - 290 | No Standard | | Data provided here as information for consumers. |
| Calcium mg/L | | AVEK  Well | 14  129 | 122 - 135 | No Standard | | Data provided here as information for consumers. |
| Magnesium mg/L | | AVEK  Well | 8.2  37 | 35 – 39 | No Standard | | Data provided here as information for consumers. |
| pH Units | | AVEK  Well | 6.57  7.4 | 6.1 – 7.4 | No Standard | | Data provided here as information for consumers. |
| Potassium mg/L | | Well | 3 |  | No Standard | | Data provided here as information for consumers |
| Total Alkalinity (CaCO3) mgL | | AVEK  Well | 40  235 | 230 - 240 | No Standard | | Data provided here as information for consumers |
| Aggressiveness Index | | Well | 12.25 | 12.2 - 12.3 |  | | Data provided here as information for consumers |

**Additional General Information on Drinking Water**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA’s Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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| **VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT** | | | | |
| **Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| **Total Coliform Rule** | **In October 2017, the monthly bacT sample tested positive for coliform bacteria** | **1 incident/ 1 day** | **Chlorine was added to the well. Four subsequent samples in October and five samples in November tested negative for coliform bacteria** | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system |
| **Lead and Copper Rule**  **Monitoring Requirements not met** | **Failure to comply with Dept. of Public Health testing requirement** | **1 year** | **Required monitoring standards will be met in 2018** | **See information below** |

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| Our water system failed to monitor as required for drinking water standards during the past year and, therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have a right to know what happened, and what we did to correct this situation.  *We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2017, we did not test for Lead and Copper in the homes of 10 residents and are therefore required to notify consumers that we cannot be sure of the quality of our drinking water during that time.*  To correct the situation, the first set of required samples has been taken and the results are included in this annual report. The second set of samples will be taken and tested in September, 2018. If you would like to volunteer your home as a sample site or have any questions about this notice, contact the SAMWC office at 661-947-0200.  Shadow Acres Mutual Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead and copper exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4701) or at <http://www.epa.gov/lead>.  The water in our distribution system is a blend of AVEK water and ground-water. More information on AVEK’s water can be found at [www.avek.org](http://www.avek.org). The laboratory results from our water testing are available for review in the SAMWC office. Shareholder/Members and residents are invited to attend monthly Board meetings. |