2012 Consumer Confidence Report

Water System Name: **Pacific Union College** Report Date: April 1, 2013

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 the period of January 1 - December 31, 2012.

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

Type of water source(s) in use: 4 Wells

Name & location of source(s): Well # 3,4,5 North Howell Mountain Rd. Past Clark Way
Well # 6 Behind Water Tanks at Airport

Drinking Water Source Assessment information: Available at Facilities Management, Dale Wither's Office

This was completed in October of 2001 for our Water System. The Vulnerability Summary showed us most vulnerable for the following activities for each well as follows:
Well #3 Grazing, Sewer collection systems, Historic gas stations
Well #4 Farm machinery repair, grazing, NPDES/WDR permitted discharges, Photo process
Printing, Sewer collection systems, Historic Gas Stations
Well #5 Grazing, sewer collection systems
Well #6 Airports – Maintenance/fueling areas
We will be glad to go over any questions you might have on this or let you review the full report.

Time and place of regularly scheduled board meetings for public participation: We do not have any board meetings but we are always available for public comment.

For more information, contact: Dale Withers dwithers@puc.edu Phone: (707) 965-7154

This information can also be viewed on the college's web site at the following URL
http://www.puc.edu/campus-services/facilities-management/ccr

We are also able to email you this information in the future should you misplace this copy or need an extra.
If you do not use email you can drop by our office to pick up an extra copy. Our Office is located at:
205 Highland Oaks Dr.
Angwin CA 94508
Phone #: (707) 965-7154 Email: dwithers@puc.edu

During April 2012, we did miss our routine test for coliform bacteria and therefore cannot provide evidence of the bacteriological quality of the drinking water during that time. Please refer to Attachment A for any further questions. We hope you take the time to read and digest this report, should you have any questions feel free to contact us.

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

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.

there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

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.

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: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/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, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and 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 USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 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 Department 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.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.)	0*	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	10 06/11	<0.005	NONE	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10 06/11	<0.066	NONE	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	04/12	10.375	9.0-12.0	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	04/12	27	19-36	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Alkalinity (Total ppm CaCO3)	04/12	39.5	32-48	none	none	Generally found in ground and surface water
Calcium (ppm)	04/12	5.75	4.2-7	none	none	Generally found in ground and surface water
Magnesium (ppm)	04/12	3.0	2.0-4.5	none	none	Generally found in ground and surface water

Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Arsenic	04/12	< 2.0 ppb	2.0	10 ppb	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production waste.
Average Chlorine Residuals (ppm)	Daily	0.3	.02-0.8	N/A	N/A	Sodium Hypochlorite injected into water from chlorination
Barium (wells 3,4,5) (ppm)	04/12	103.3	100-110	1000	2	Erosion of natural deposits
Barium (well 6) (ppm)	04/12	100	100	1000	2	Erosion of natural deposits
Chromium (wells 3,4,5) (ppb)	04/12	1.0	1.0	50	100	Erosion of natural deposits

Chromium (well 6) (ppb)	04/12	1.0	1.0	50	100	Erosion of natural deposits
Gross Alpha Activity	08/07	0.861 pCi/L	0.121-1.82	15 pCi/L	N/A	Decay of natural man-made deposits
Nitrate (as nitrate, NO3)	04/12	9.325 ppb	6.3-12	45 ppb	45 as NO3	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Trihalomethanes (TTHMs) (ppb)	06/12	Non detect	Non detect	80 ppb	N/A	By-product of drinking water chlorination
Flouride (ppb)	04/12	0.195 ppb	0.19-0.21 ppb	150 ppb	150 ppb	Discharge from steel/metal, plastic and fertilizer factories
Uranium (pCi/L)	05/06	0.138 pCi/L	0-0.741 pCi/L	20 pCi/L	0.43 pCi/L	Discharge from steel/metal, plastic and fertilizer factroies
Radium 228 (pCi/L)	09/08	0.067 pCi/L	0-0.325 pCi/L	5 pCi/L	0 pCi/L	Discharge from steel/metal, plastic and fertilizer factories

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Chloride	04/12	6.25 ppm	4.3-7.8	500 ppm	N/A	Runoff/leaching from natural deposits; seawater influence
Color Units	04/12	6.5	3-10	15 units	N/A	Naturally-occurring organic materials
Iron	04/12	100 ppb	100	300 ppb	N/A	Leaching from natural products; industrial wastes
Manganese	04/12	20 ppb	20	50 ppb	N/A	Leaching from natural deposits
Specific Conductance	04/12	122 micromhos	98-150	1600 micromhos	N/A	Substance that form ions when in water; sea water influence
Sulfate	04/12	3.775 ppm	1.5-6.5	500 ppm	N/A	Runoff/leaching from natural deposits' industrial waste
Total Dissolved Solids (TDS)	04/12	145 ppm	120-170	1000 ppm	N/A	Runoff/leaching from natural deposits
Turbidity	04/12	0.6 units	0.30-1.0	5 units	N/A	Soil Runoff
Zinc	04/12	59 ppb	50-86	5000 ppb	N/A	Runoff/leaching from natural deposits' industrial wastes

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 USEPA'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. USEPA/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).

Lead-Specific Language for Community Water Systems: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Pacific Union College 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 exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. 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 or at http://www.epa.gov/safewater/lead.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Citation for Noncompliance with Section 64423	Failed to test for Coliform Bacteria in April 2012	1 Month	See Attachment A Below	We are unsure of the bacteriological quality of the drinking water during April 2012.

Attachment A

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Pacific Union College Failed to Test for Coliform Bacteria—April 2012

Our water system failed to test the drinking water for coliform bacteria during April 2012. Although this is not an emergency, as our customers, you have a right to know about this violation – what happened, what you should do, and what we did to correct the situation. Please share this information with other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or giving out copies by hand or mail.

What happened?

We are required by state regulations to monitor our drinking water for specific contaminants on a regular basis. Results of this routine monitoring are an indicator of whether or not the drinking water meets health standards. During April 2012 we did not test for coliform bacteria and therefore cannot be sure of the bacteriological quality of the drinking water during that time.

What does this mean?

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliform bacteria are indicators of potential contamination and may originate from human, animal, or soil sources. If the coliform standards are met, the water served can be considered safe from bacteria. If they are not met, drinking the water may not necessarily

result in illness, but that possibility exists. Routine and follow up sampling are important to periodically verify the water quality. Our failure to test the drinking water for bacteria during April2012 was a violation of Section 64423, Title 22 of the California Code of Regulations (CCR).

What should I do?

You do not need to boil the water or take any corrective actions. This is not an emergency. If you have health concerns, you may wish to consult your doctor. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at (800) 426-4791.

What corrective actions have been taken to prevent this violation from occurring in the future?

We have implemented a new policy which requires us to log when the samples were taken to the lab and who took the sample to the lab. This is logged into a shared calendar, which all the people involved with the water system share access to. This is meant to prevent us from thinking someone has collected the lab samples and transported them to the lab when no one has.

This notification of the public is being done in compliance with Sections 64463.4 and 64465, Title 22 of the CCR as a means of keeping the public informed.

Persons wishing more information should contact: Dale Withers
205 Highland Oaks Drive Angwin CA 94508