2011 Consumer Confidence Report

Water System Name: **Washington Colony School 1000285** Report Date: January 6, 2012

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, 2011.

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: 2 Ground Water Wells **NTNC**

Name & location of source(s): **Primary Well 053 -** Location: In shed Center North area of school property.
North Well 001 (Standby Well) – Location: South East corner of playground

Drinking Water Source Assessment information: Not Available

Time and place of regularly scheduled board meetings for public participation: Call for time/date

For more information, contact: Dale Drew Phone: (559) 233-0706

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 (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.

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: 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, and 5 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	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	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) 10/18/10	5	3.3		15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 10/18/10	5	0.014		1.3	0.17	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) Primary Well	3/29/10	29.7		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm) Primary Well	3/29/10	76.8		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**Any violation of an MC 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
Inorganic Contaminants						
Arsenic (ppb)				10	0.004	Erosion of natural deposits; runoff from orchards, from glass and electronics production waste
Primary well	3/29/10	2.1				
Standby well	4/15/09	2.4				
Barium (ppm)				1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Primary well	3/29/10	0.04				
Standby well	4/15/09	0.036				
Fluoride (ppm)				2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Primary well	3/29/10	0.1				
Standby well	4/15/09	0.1				
Nitrate (as nitrate, NO_3) (ppm)				45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Primary well	3/1/11	14.1				
Standby well	10/26/11	**28.1**				
Radioactive Contaminants						
Gross Alpha Particle Activity (pCi/L)				15	(0)	Erosion of natural deposits
Primary well	1/11/11 – 10/20/11	2.22	1.6 – 3.01			
Standby well	10/15/07	2.65				
Uranium (pCi/L)				20	0.43	Erosion of natural deposits
Primary well	1/11/11 – 10/26/11	2.44	2.12 – 2.82			
Standby well	10/15/07	1.63				
Total Radium 226 (pCi/L)				3	0.05	Erosion of natural deposits
Primary well	10/15/07	0.0969				
Standby well	10/15/07	0.194				
Total Radium NTNC by 903 (pCi/L)				3	0.05	Erosion of natural deposits
Primary well	1/11/11 – 10/26/11	0.11	0.035 – 0.15			
Total Radium 228 (pCi/L)				2	0.019	Erosion of natural deposits
Primary well	10/15/07	0.008				
Standby well	10/15/07	0.000				

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
Aluminum (ppb)				200		Erosion of natural deposits; residual from some surface water treatment processes
Standby well	4/15/09	36				
Iron (ppb)				300		Leaching from natural deposits; industrial wastes
Primary well	3/29/10	128				
Total Dissolved Solids (TDS) (ppm)				1000		Runoff/leaching from natural deposits
Primary well	5/25/10	553				
Standby well	5/25/10	210				
(EC) (umhos/cm) Specific Conductance µS/cm				1600		Substances that form ions when in water; seawater influence
Primary well	3/29/10	279				
Standby well	5/25/10	35.9				
Chloride (ppm)				500		Runoff/leaching from natural deposits; seawater influence
Primary well	3/29/10	14.0				
Standby well	5/25/10	11.9				
Sulfate (ppm)				500		Runoff/leaching from natural deposits; industrial wastes
Primary well	5/25/10	31.7				
Standby well	5/25/10	5.6				
Turbidity (Units)				5	none	Soil runoff
Primary well	3/29/10	0.5				
Standby well	5/25/10	<0.2				
Color (Units)				15	none	Naturally-occurring organic materials
Primary well	3/29/10	5				
Standby well	5/25/10	5				
Odor-Threshold (Units)				3	none	Naturally-occurring organic materials
Primary well	3/29/10	1				
Standby well	5/25/10	1				

There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

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).

Nitrate *in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.*

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL or Violation of Any TT or Monitoring and Reporting Requirement