

Water System Name: Flag City Water System CSA 31

Report Date: 07/09

Type of Water Source(s) in Use: Groundwater wells

Name of Source(s) in Use: Well #1, #2

Drinking Water Source Assessment Information: A source water assessment for the wells of the Flag City CSA 31 PWS water system was completed in July 2002. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Known contaminant plumes. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Automobile (gas stations), Historic gas stations, Underground storage tanks (confirmed leaking tanks), and Wastewater treatment plants.

Table #1: Sampling Results Showing Detection of Coliform Bacteria

MICROBIOLOGICAL CONTAMINANTS	HIGHEST NO. of DETECTIONS	NO. of MOS. in VIOLATION	MCL	MCLG	TYPICAL SOURCE OF BACTERIA
Tot. Coliform Bacteria	0 (highest in month)	0	> 1	0	Naturally present in environment
Fecal Coliform and <i>E. coli</i>	0 (year total)	0	> 1	0	Human and animal fecal waste

Table #2: Sampling Results Showing Detection of Lead and Copper

LEAD and COPPER	NO. of SAMPLES	90 TH Percentile LEVEL	NO. SITES > AL	AL	MCLG	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	5	1.7	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	5	186	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table #3: Sampling Results Showing Detection of Sodium and Hardness

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Sodium (ppm)	2008	56	–	none	none	Generally found in ground and surface water
Hardness (ppm)	2008	284	–	none	none	Generally found in ground and surface water

Table #4: Detection of Contaminants with a PRIMARY Drinking Water Standard

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Gross Alpha Activity (pCi/L)	2008	11.9	10.7–13.7	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2008	12.93	11.9–14.2	20	N/A	Erosion of natural deposits
Arsenic (ppb)	2008	*6.5	6–7	10	N/A	Erosion of natural deposits; run-off from orchards; glass and electronics production wastes
Barium (ppb)	2008	162	158–166	1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits
Chromium (ppb)	2008	3.5	3–4	50	2.5	Discharge from steel & pulp mills & chrome plating; erosion of natural deposits
Lead (ppb)	2008	0.45	0.4–0.5	50	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Mercury	2008	0.01	ND–0.02	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from crop land
Nickel (ppb)	2008	1	ND–2	100	100	Erosion of natural deposits; discharge from metal factories
Nitrate (ppm)	2008	*30.4	21.3–33.9	45	45	Run-off and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
TTHM (ppb) (Total trihalomethanes)	2008	1.6	–	80	N/A	By-product of drinking water chlorination

Table #5: Detection of Contaminants with a SECONDARY Drinking Water Standard

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Corrosivity	2008	0.4	–	Non-corrosive	N/A	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Total Dissolved Solids (TDS) (ppm)	2008	480	–	1000	N/A	Run-off/leaching from natural deposits
Specific Conductance (microohms)	2008	774	–	1600	N/A	Substances that form ions when in water; seawater influence
Turbidity (units)	2004	0.2	ND–0.4	5 units	N/A	Soil run-off
Chloride (ppm)	2008	35	–	500	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2008	22	–	500	N/A	Leaching from natural deposits; industrial wastes

Table #6: Detection of UNREGULATED Contaminants

CHEMICAL OR CONSTITUENT	SAMPLE DATE	RANGE OF DETECTIONS	NOTIFICATION LEVEL	HEALTH EFFECTS LANGUAGE
Chromium VI (ppb) (Hexavalent chromium)	2003	6.7	N/A	N/A
Vanadium (ppb)	2008	13 –14	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental defects (based on studies in laboratory animals)

Drinking water is tested for quality for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of Jan. 1 thru Dec. 31, 2008.
 * Any violation of an MCL or AL is asterisked. Additional information concerning the violation is provided below.

Summary Information for Contaminants Exceeding an AL

Arsenic levels above 5 (ppb), the Action Level (AL), requires that you be notified by the following statement:*

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Health Services continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and other circulatory problems.

Nitrate levels above 23 (ppm), the Action Level (AL), requires additional testing and that you be notified by the following statement:*

Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider or choose to use bottled water for mixing formula and juice for your baby. If you are pregnant, you should drink bottled water.

A copy of the complete assessment is available at:

San Joaquin County, Environmental Health Department
 304 E. Weber Ave., 3rd Floor, Stockton, CA 95202

You may request a summary of the assessment be sent to you by contacting:

Small Public Water Systems, San Joaquin County Environmental Health Department, (209) 468-3420