

# Water System Name: Manteca Industrial Water System CSA 30

Report Date: 07/08

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

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

**Drinking Water Source Assessment Information:** A source water assessment for the well of the Manteca Industrial PWS water system was completed in February 2003. 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: Septic systems (low density).

### Discussion of Vulnerability

Nitrate has been detected in the water supply in the standby well for this system and in another system located south of this well at levels over the Maximum Contaminant Level (MCL). Sources of nitrate include runoff from fertilizer use, leaching from septic tanks and sewage, and erosion of natural deposits. Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blueness of the skin. This well has does not have levels of nitrate over the MCL and has a much deeper grout seal to seal off contaminants.

**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 <sup>TH</sup> Percentile LEVEL	NO. SITES > AL	AL	MCLG	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	5	1.3	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	5	54	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	23	–	none	none	Generally found in ground and surface water
Hardness (ppm)	2008	100	–	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	1.04	–	15	N/A	Erosion of natural deposits
Arsenic (ppb)	2008	*8	–	10	0.004	Erosion of natural deposits; run-off from orchards; glass and electronics production wastes
Barium (ppb)	2008	101	–	1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits
Chromium (ppb)	2008	7	–	50	2.5	Discharge from steel & pulp mills & chrome plating; erosion of natural deposits
Lead (ppb)	2008	0.5	–	50	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Nitrate (ppm)	2008	13.9	–	45	45	Run-off and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

**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	-1.0	–	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	210	–	1000	N/A	Run-off/leaching from natural deposits
Specific Conductance (microohms)	2008	296	–	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	2008	14	–	500	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2008	19	–	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
Boron (ppb)	2008	100	1000	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental defects (based on studies in laboratory animals)
Chromium VI (ppb) (Hexavalent chromium)	2008	N/D–5.9	N/A	N/A
Vanadium (ppb)	2008	46	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, 2007.

\* 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.

*A copy of the complete assessment is available at:*

San Joaquin County, Environmental Health Department  
304 E. Weber Ave., 3<sup>rd</sup> 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