

## 2015 Consumer Confidence Report

Water System Name: San Luis Hills - San Luis Water District

Report Date: June 28, 2016

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, 2015 – December 31, 2015.

**Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.59**

### Type of water sources in use:

The only source of water is the San Luis Canal (California Aqueduct), which provides surface water exported from the San Francisco Bay-Delta.

### Name & location of source:

The San Luis Canal (California Aqueduct) raw water enters the District's distribution system from the Canal at milepost 75.49-R near Pioneer Road. The water is treated at the San Luis Truck Plaza Water Treatment Facility. The facility utilizes a conventional treatment process, which includes flash mixing and chemical coagulation, flocculation, sedimentation, filtration and chlorination.

### Drinking Water Source Assessment information:

The raw source is considered most vulnerable to the following identified possible contaminating activities: Crops, irrigated [row crops, orchards, sod, greenhouses, use of Fertilizer/Pesticide/Herbicide Application]. Transportation corridors - Road Right-of-ways [herbicide use areas]. The Drinking Water Source Assessment was conducted in 2002 and is available at the District Office.

### Time and place of regularly scheduled board meetings for public participation:

The Board of Directors meets regularly at 1:30 PM on the last Tuesday of every month. Meetings are held at the District's office at 1015 Sixth Street in Los Banos, California.

For more information contact Mike Zuspan, Treatment Supervisor Phone: (209) 826-4043

### 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.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDL's 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.

**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 nanograms per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**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 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).

**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 which a water system must follow.

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

**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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum, production, and can also come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which 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**, USEPA and the state Department of Health Services (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 must provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7 and 8 list all of the drinking 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 the District to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, through representative of the water quality, are more than one year old.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

| <b>Microbiological Contaminants</b><br>(complete if bacteria detected) | <b>Highest No. of Detections</b> | <b>No. of Months In violation</b> | <b>MCL</b>  | <b>MCLG</b> | <b>Typical Source of Bacteria</b>    |
|--|----------------------------------|-----------------------------------|---|-------------|--------------------------------------|
| Total Coliform Bacteria  | (In a month)<br>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)<br>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**

| <b>Lead and Copper</b><br>(complete if lead or copper detected in the last sample set) | <b>No. of samples collected</b> | <b>90<sup>th</sup> percentile level detected</b> | <b>No. Sites exceeding AL</b> | <b>AL</b> | <b>MCLG</b> | <b>Typical Source of Contaminant</b>   |
|--|---------------------------------|--|-------------------------------|-----------|-------------|--|
| Lead (ppb)   | 5                               | <0.005(ppm)                                      | 0                             | 15        | 2           | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits. |
| Copper (ppm)   | 5                               | 0.385(ppm)                                       | 0                             | 1.3       | 0.17        | Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.         |

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

| <b>Chemical or Constituent</b><br>(and reporting units) | <b>Sample Date</b> | <b>Level Detected</b> | <b>Range of Detections</b> | <b>MCL</b> | <b>PHG (MCLG)</b> | <b>Typical Source of Contaminant</b>  |
|---|--------------------|-----------------------|----------------------------|------------|-------------------|---|
| Sodium (ppm)  | 08/05/15           | 77.0                  | N/A                        | None       | None              | Salt present in the water and is generally naturally occurring  |
| Hardness (ppm)  | 08/05/15           | 174.8                 | N/A                        | None       | None              | Sum of polyvalent cations present in the water, generally magnesium and calcium and are usually naturally occurring |

*\*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      | PHG (MCLG)                 | Typical Source Of Contaminant  |
|---|-------------|----------------|---------------------|----------|----------------------------|--|
| Aluminum                                      | 08/05/15    | <50.0 ppb      | N/A                 | 1000 ppb | 0.6 PHG<br>N/A (MCLG)      | Erosion of natural deposits; residual from some surface water treatment processes  |
| Antimony                                      | 08/05/15    | <6.0 ppb       | N/A                 | 6.0 ppb  | 20 PHG<br>N/A (MCLG)       | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.   |
| Arsenic                                       | 08/05/15    | 2.7 ppb        | N/A                 | 10 ppb   | 0.004                      | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.  |
| Asbestos                                      | 03/20/14    | <0.20 MFL      | N/A                 | 7- MFL   | N/A<br>PHG<br>7 (MCLG)     | Internal corrosion of asbestos cement water mains; erosion of natural deposits.  |
| Barium  | 08/05/15    | <100.0 ppb     | N/A                 | 1000 ppb | N/A<br>PHG<br>2.0 (MCLG)   | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.   |
| Beryllium                                     | 08/05/15    | <1.0 ppb       | N/A                 | 4.0 ppb  | N/A<br>PHG<br>1.0 (MCLG)   | Discharge from metal refineries; coal-burning factories, and electrical, aerospace, and defense industries.  |
| Cadmium                                       | 08/05/15    | <1.0 ppb       | N/A                 | 5.0 ppb  | .04 PHG<br>N/A (MCLG)      | Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories and metal refineries; runoff from waste batteries and paints. |
| Chromium                                      | 08/05/15    | <10.0 ppb      | N/A                 | 50.0 ppb | N/A<br>PHG<br>100.0 (MCLG) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.   |
| Fluoride                                      | 08/05/15    | <0.1 ppm       | N/A                 | 2.0 ppm  | 1.0 PHG<br>N/A (MCLG)      | Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.  |

**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        | PHG (MCLG)                   | Typical Source Of Contaminant   |
|---|--|-----------------------------------|---------------------|------------|------------------------------|---|
| Mercury                                       | 08/05/15                                     | <1.0 ppb                          | N/A                 | 2.0 ppb    | 1.2 PHG<br>N/A<br>(MCLG)     | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.  |
| Nickel  | 08/05/15                                     | <10.0 ppb                         | N/A                 | 100.0 ppb  | 12.0 PHG<br>N/A<br>(MCL)     | Erosion of natural deposits; discharge from metal factories.  |
| Nitrite (as nitrogen,N)                       | 08/05/15                                     | <400 ppb                          | N/A                 | 1000 ppb   | 1.0 PHG<br>N/A<br>(MCLG)     | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.   |
| Nitrate (as nitrate,NO <sub>3</sub> )         | 08/05/15                                     | 3.8 ppm                           | N/A                 | 45.0 ppm   | 45.0 PHG<br>N/A<br>(MCLG)    | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.   |
| Selenium                                      | 08/05/15                                     | <5.0 ppb                          | N/A                 | 50.0 ppb   | N/A<br>PHG<br>30.0<br>(MCLG) | Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive). |
| Thallium                                      | 08/05/15                                     | <1.0 ppb                          | N/A                 | 2.0 ppb    | 0.1 PHG<br>N/A<br>(MCLG)     | Leaching from ore-processing sites' discharge from electronics, glass and drug factories.   |
| Gross Alpha                                   | 06/25/09<br>09/10/09<br>12/15/09<br>03/22/10 | 6.2 pCi/l<br><3.0<br><3.0<br>3.10 | 2.25 pCi/l          | 15.0 pCi/l | N/A<br>PHG<br>0<br>(MCLG)    | Erosion of natural deposits.  |

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

| <b>Chemical or Constituent</b><br>(and reporting units) | <b>Sample Date</b> | <b>Level Detected</b> | <b>Range of Detection</b> | <b>MCL</b>       | <b>PHG (MCLG)</b> | <b>Typical Source of Contaminant</b>   |
|---|--------------------|-----------------------|---------------------------|------------------|-------------------|--|
| Aluminum  | 08/05/15           | <50.0 ppb             | N/A                       | 200 ppb          | N/A               | Erosion of natural deposits; residual from some surface water treatment processes.                               |
| Color   | 08/05/15           | 10.0 units            | N/A                       | 15 units         | N/A               | Naturally-occurring organic materials  |
| Copper  | 08/05/15           | <50.0 ppb             | N/A                       | 1000 ppb         | N/A               | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |
| Foaming Agents (MBAS)                                   | 08/05/15           | <0.02 ppm             | N/A                       | 0.5 ppm          | N/A               | Municipal and industrial waste discharges.   |
| PH  | 08/05/15           | 7.9                   | N/A                       | 6.5 – 8.5        | N/A               | Leaching from natural deposits.  |
| Silver  | 08/05/15           | <10.0 ppb             | N/A                       | 100.0 ppb        | N/A               | Industrial discharges  |
| Turbidity   | 08/05/15           | 0.88 units            | N/A                       | 5.0 units        | N/A               | Soil Runoff  |
| Zinc  | 08/05/15           | <50.0 ppb             | N/A                       | 5000 ppb         | N/A               | Runoff/leaching from natural deposits; industrial wastes.  |
| Total Dissolved Solids (TDS)                            | 08/05/15           | 396.0 ppm             | N/A                       | 1000.0 ppm       | N/A               | Runoff/leaching from natural deposits.   |
| Specific Conductance                                    | 08/05/15           | 690.0 micromhos       | N/A                       | 1600.0 micromhos | N/A               | Substances that form ions when in water; seawater influence  |
| Sulfate   | 08/05/15           | 44.1 ppm              | N/A                       | 500.0 ppm        | N/A               | Runoff/leaching from natural deposits; industrial wastes.  |
| Chloride  | 08/05/15           | 106.4 ppm             | N/A                       | 500.0 ppm        | N/A               | Runoff/leaching from natural deposits; seawater influence  |
| Iron  | 08/05/15           | <100.0 ppb            | N/A                       | 300.0 ppb        | N/A               | Leaching from natural deposits; industrial wastes.   |
| Manganese   | 08/05/15           | <20.0 ppb             | N/A                       | 50.0 ppb         | N/A               | Leaching from natural deposits   |

### **Additional General Information on Drinking Water**

All drinking water, including bottle 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 infections by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. San Luis Water District 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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### **IMPORTANT - NON-POTABLE WATER IS USED FOR LANDSCAPE IRRIGATION**

Residents and Business owners should be reminded that all landscape irrigation is conducted with Non-Potable Water. The Non-Potable Water is delivered using a completely independent plumbing system from the Potable Water System. Therefore, at no time shall any Resident or Business make any plumbing changes that could interconnect the two systems. A cross connection of the two systems can cause serious health effects. Contact the District immediately at (209) 826-4043 if you suspect there has been a cross connection between the potable and non-potable water systems.

**For Systems Providing Surface Water as a Source of Drinking Water**

**TABLE 8 – SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES**

|  |  |
|--|--|
| Treatment Technique <sup>(a)</sup><br>(Type of approved filtration technology used)                      | <u>Conventional Filtration and Treatment:</u> A process which includes flash mixing and chemical coagulation, flocculation, sedimentation, filtration and chlorination.  |
| Turbidity Performance Standards <sup>(b)</sup><br>(that must be met through the water treatment process) | <u>Turbidity of the filtered water must:</u><br>1 – Be less than or equal to <1.0 NTU in 95% of measurements in a month.<br><br>2 – Not exceed 0.3 NTU for more than eight consecutive hours.<br><br>3 – Not exceed 2.0 NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.                      | 100%   |
| Highest single turbidity measurement during the year.  | 0.268 NTU-   |
| The number of violations of any surface water treatment requirements.                                    | 1- Disinfection By-Product Rule.<br>2- TTHM Stage 2 disinfection byproducts compliance rule.   |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

\* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

**Summary Information for Violation of a Surface Water Treatment Technique (TT)**

| VIOLATION OF A SURFACE WATER TT  |   |  |   |   |
|--|---|--|---|---|
| TT Violation   | Explanation   | Duration                                     | Actions Taken to Correct the Violation  | Health Effects Language   |
| Noncompliance of Disinfection By Product Precursor treatment Technique Requirement | Failure to achieve acceptable levels of TOC removal | 1 <sup>st</sup> and 2 <sup>nd</sup> Quarters | The District is testing different treatment techniques to optimize TOC reduction. | <u>Total organic carbon (TOC) has no health effects.</u> However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (TTHMs) and Haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increase risk of cancer. |