Microbial contaminants, such as viruses and bacteria, from human activity, pick up substances resulting from the presence of animals or industrial processes, and can be naturally-occurring or result from urban stormwater runoff, agricultural livestock operations, and wildlife. Some organic chemical contaminants, including synthetic and natural substances, can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

A Message from the U.S. EPA

The presence of contaminants does not necessarily indicate that the water poses a health risk. More contaminants can be expected to contain at least small amounts of some substances. The presence of contaminants does not mean that the water is unsafe to drink.
Microbial contaminants, such as viruses and bacteria, treatment include:

- Contaminants that may be present in source water before
treatment include:
  - Particulate matter: This includes sediments, organic matter,
    and some inorganic materials. These substances can be
    dissolved or suspended in water.
  - Microbial contaminants: These include microscopic organisms
    such as viruses, bacteria, and parasitic helminths.

- Inorganic contaminants:
  - Coliform bacteria: These are bacteria that are common
    in the environment and are used as indicators of
    fecal contamination.
  - Pathogenic bacteria: These are bacteria that can cause
    illness in humans.
  - Viruses:
    - Enteroviruses: These are viruses that cause illnesses
      like the common cold and hand, foot, and mouth disease.
    - Hepatitis viruses: These cause hepatitis A, B, and C.
    - Noroviruses: These cause gastroenteritis and are
      highly contagious.
    - Rotaviruses: These cause severe diarrhea in infants and
      young children.

- Other contaminants:
  - Hormones:
    - Estrogens: These are hormones that can affect the
      endocrine system.
    - Androgens: These are hormones that control male
      secondary sexual characteristics.
    - Progesterones: These are hormones that support
      pregnancy and lactation.
  - Pharmaceuticals:
    - Antiretrovirals:
      - AZT (Zidovudine): This is an antiretroviral drug
        used to treat HIV.
      - Nevirapine (Nevirapine): This is an antiretroviral
        drug used to treat HIV.
      - Efavirenz (Atripla): This is an antiretroviral
        drug used to treat HIV.
    - Antibiotics:
      - Ciprofloxacin (Cipro): This is an antibiotic
        used to treat infections caused by bacteria.
      - Fluconazole (Diflucan): This is an antifungal
        drug used to treat fungal infections.
  - Adulterants:
    - Methanol: This is a toxic alcohol that can cause
      blindness or death.
    - Ethanol: This is an alcohol that can cause
      nausea, vomiting, and diarrhea.

Hotline at (1-800-426-4791).

In order to ensure that tap water is safe to drink, U.S. EPA and MWD take pride in protecting the water you drink. Reducing the exposure of water to contaminants not only means higher quality water, it reduces treatment costs.

MWD and LVMWD take pride in protecting the water you drink. Reducing the exposure of water to contaminants not only means higher quality water, it reduces treatment costs. LVMWD and other water utilities that deliver surface water are required to complete a Watershed Sanitary Survey every five years. These surveys examine the potential sources of drinking water contamination and identify improved methods for protecting water quality at its source. LVMWD and MWD have completed these required surveys.

Where does our water come from?

Las Virgenes Municipal Water District was founded because there were no local, reliable sources of quality drinking water. As much of our service area rests on volcanic soil, there are no underground storage aquifers or streams that can be drawn upon.

LVMWD is a member agency of the Metropolitan Water District of Southern California, which is our sole supplier of potable water. Metropolitan delivers water to LVMWD from the State Water Project, bringing water from the western Sierras in northern California through the Sacramento – San Joaquin River Delta where it is pumped into the Colorado Aqueduct.

After a journey of several hundred miles, to its terminus near Sylmar, your water is filtered, treated and disinfected before being delivered to LVMWD for distribution.

While Metropolitan also receives water from the Colorado River, our area relies upon the State Water Project, which has an established history of providing very high quality water.
If water contains a contaminant level above the primary MCL, the safety of the water cannot be assured. None of the tests for water served to LVMWD’s customers exceeded the MCLs.

**SECONDARY STANDARDS – AESTHETIC STANDARDS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Ranges</th>
<th>Highest RAA*</th>
<th>Average - Highest RAA*</th>
<th>Average</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum (d)</td>
<td>ppb</td>
<td>200</td>
<td>600</td>
<td>50</td>
<td>ND - 100</td>
<td>76</td>
</tr>
<tr>
<td>Chloride</td>
<td>ppm</td>
<td>500</td>
<td>NA</td>
<td>NA</td>
<td>77 - 82</td>
<td>79</td>
</tr>
<tr>
<td>Color</td>
<td>NTU</td>
<td>15</td>
<td>NA</td>
<td>1 - 2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Manganese</td>
<td>ppm</td>
<td>500</td>
<td>NA</td>
<td>20</td>
<td>ND - 30</td>
<td>9</td>
</tr>
<tr>
<td>Color threshold</td>
<td>TON</td>
<td>3</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Specific Conductance</td>
<td>µS/cm</td>
<td>1,600</td>
<td>NA</td>
<td>570 - 610</td>
<td>590</td>
<td>580 - 620</td>
</tr>
<tr>
<td>Sulfate</td>
<td>ppm</td>
<td>500</td>
<td>0.5</td>
<td>56 - 70</td>
<td>66</td>
<td>58 - 67</td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>ppm</td>
<td>1,000</td>
<td>NA</td>
<td>310 - 340</td>
<td>330</td>
<td>320 - 370</td>
</tr>
<tr>
<td>Turbidity (a)</td>
<td>NTU</td>
<td>5</td>
<td>NA</td>
<td>0.04 - 0.05</td>
<td>0.04*</td>
<td>0.07 - 0.6</td>
</tr>
</tbody>
</table>

**Other Parameters**

- HPC (c) - CFU/mL
- Al - mg/L
- SRV (s) - feet
- Chlorine (d) - mg/L
- Chromium (l) - mg/L
- Copper (g) - mg/L
- Lead (h) - mg/L
- Lead and Copper - mg/L
- Nitrates (i) - mg/L
- Nitrates and Lead - mg/L
- Radon (j) - pCi/L
- Sodium (k) - mg/L
- Total Dissolved Solids (TDS) - mg/L
- Turbidity (m) - NTU
- Sodium (m) - mg/L
- Total Nitrate (n) - mg/L
- Total Dissolved Solids (TDS) - mg/L
- Turbidity (p) - NTU
- Sodium (p) - mg/L
- Total Nitrate (q) - mg/L
- Turbidity (r) - NTU
- Sodium (r) - mg/L
- Total Nitrate (s) - mg/L
- Turbidity (t) - NTU
- Sodium (t) - mg/L
- Total Nitrate (u) - mg/L
- Turbidity (v) - NTU
- Sodium (v) - mg/L
- Total Nitrate (w) - mg/L
- Turbidity (x) - NTU
- Sodium (x) - mg/L
- Total Nitrate (y) - mg/L
- Turbidity (z) - NTU
- Sodium (z) - mg/L
- Total Nitrate (A) - mg/L
- Turbidity (B) - NTU
- Sodium (B) - mg/L
- Total Nitrate (C) - mg/L

**FOOTNOTES**

(a) For the Jensen plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Weedridge plant, the turbidity level of the filtered water shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. For the Folsom plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Elk Grove and Gridley plants, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Welliver plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.

(b) The total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants.

(c) For the Jensen plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Weedridge plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Folsom plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Elk Grove and Gridley plants, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. For the Welliver plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.

(d) Turbidity is a measure of the cloudiness of the water and is an indicator of turbidity in the water. The average and range of turbidity shown in the table are based on the average of the measurements taken each month and shall not exceed 0.3 NTU at any time.

(e) The total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(f) The total coliform MCLs: No more than 99.9% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(g) The total coliform MCLs: No more than 0.01% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(h) The total coliform MCLs: No more than 0.001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(i) The total coliform MCLs: No more than 0.0001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(j) The total coliform MCLs: No more than 0.00001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(k) The total coliform MCLs: No more than 0.0001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(l) The total coliform MCLs: No more than 0.00001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(m) The total coliform MCLs: No more than 0.000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(n) The total coliform MCLs: No more than 0.0000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(o) The total coliform MCLs: No more than 0.00000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(p) The total coliform MCLs: No more than 0.000000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(q) The total coliform MCLs: No more than 0.0000000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.

(r) The total coliform MCLs: No more than 0.00000000001% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution of all the plants. If any of the plants exceed the MCL, the combined distribution of all the plants shall be used to establish compliance.
If water contains a contaminant level above the primary MCL, the safety of the water cannot be assured. None of the tests for water served to LVMWD's customers exceeded the MCLs.

**Sampling Results - Water Quality Report (Based on Data Collected in 2009)**

### Microbiological Parameters
- **Total Coliform Bacteria**: 1 CFU/mL
- **Heterotrophic Plate Count (HPC)**
  - **Microbiology**: CFU/mL
  - **State DLR**: TT
  - **Jensen Plant**: TT
  - **LVWMWD**: TT

### Chemical Parameters
- **Chlorine**: ppm
  - **State DLR**: NA
  - **Jensen Plant**: NA
  - **LVWMWD**: 7.8 - 8.3
- **Color**: NA
- **Manganese**: ppm
  - **State DLR**: 1 NA
  - **Jensen Plant**: 0.5
- **Sulfate**: ppm
  - **State DLR**: 63 NA
  - **Jensen Plant**: 77 NA
- **Turbidity**: NTU
  - **State DLR**: 0.04 - 0.06
  - **Jensen Plant**: 0.04 - 0.06
  - **LVWMWD**: 0.07 - 0.6
- **Aluminum**: µg/L
  - **State DLR**: 0.1
  - **Jensen Plant**: 0.1
  - **LVWMWD**: 0.1

### Other Parameters
- **Fluoride (as F)**
  - **State DLR**: 0.5 ppm
  - **Jensen Plant**: 0.5 ppm
  - **LVWMWD**: 0.5 ppm
- **Hardness**: ppm
  - **State DLR**: 120 NA
  - **Jensen Plant**: 120 NA
  - **LVWMWD**: 120 NA
- **Sodium**: ppm
  - **State DLR**: 66 NA
  - **Jensen Plant**: 66 NA
  - **LVWMWD**: 66 NA
- **Magnesium**: ppm
  - **State DLR**: 120 NA
  - **Jensen Plant**: 120 NA
  - **LVWMWD**: 120 NA
- **Potassium**: ppm
  - **State DLR**: 84 NA
  - **Jensen Plant**: 84 NA
  - **LVWMWD**: 84 NA
- **Sulfate**: ppm
  - **State DLR**: 240 NA
  - **Jensen Plant**: 240 NA
  - **LVWMWD**: 240 NA

### Fluoride Analysis
- **Residue from water treatment process; natural deposits emission**
- **Runoff/blanding from natural deposits; seawater influence**
- **By-product of drinking water chloramination**
- **Industrial waste discharge; could be naturally present as well**
- **By-product of drinking water chlorination; industrial process**
- **Elemental balance in water; affected by temperature, other factors**

### Corrosivity
- **Industrial waste discharge; could be naturally present as well**
- **Elemental balance in water; affected by temperature, other factors**
- **Various natural and man-made sources**
- **Natural-occurring industrial waste discharge**

### By-products, Disinfectant Residuals, and Disinfection-By-Products Precursors (p)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Range</th>
<th>Average</th>
<th>Highest RAA*</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>0.5</td>
<td>79 - 83</td>
<td>79 - 83</td>
<td>81</td>
</tr>
<tr>
<td>Color</td>
<td>1</td>
<td>0.2</td>
<td>0.2 - 0.2</td>
<td>0.2 - 0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Manganese</td>
<td>ppm</td>
<td>20 NA</td>
<td>20 NA</td>
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<td>20 NA</td>
</tr>
<tr>
<td>Chlorite</td>
<td>ppm</td>
<td>0.5</td>
<td>0.5 - 0.5</td>
<td>0.5 - 0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Chromium</td>
<td>ppm</td>
<td>1.3</td>
<td>1.3 - 1.3</td>
<td>1.3 - 1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Magnesium</td>
<td>ppm</td>
<td>8.1</td>
<td>8.2 - 8.2</td>
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</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>240</td>
<td>240 - 240</td>
<td>240 - 240</td>
<td>240</td>
</tr>
<tr>
<td>Nitrates</td>
<td>ppm</td>
<td>0.1</td>
<td>0.1 - 0.1</td>
<td>0.1 - 0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**Summary**

- **Residue from water treatment process; natural deposits emission**
- **Runoff/blanding from natural deposits; seawater influence**
- **By-product of drinking water chloramination; industrial process**
- **Industrial waste discharge; could be naturally present as well**
- **Elemental balance in water; affected by temperature, other factors**
- **Various natural and man-made sources**
- **Natural-occurring industrial waste discharge**

**Notes**

- (k) Bromate reporting level is 3 ppb.
- (j) DLR is 1.0 ppb for each of the following: dichloroacetic acid, trichloroacetic acid, bromoform, chloroform, and dibromochloromethane.
- (i) Reporting level is 0.5 ppb for each of the following: bromodichloromethane, chlorine dioxide, chloroform, and dichloromethane.
- (g) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
- (h) Metropolitan was in compliance with all provisions of the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. Compliance was based on the RAA.
- (e) Flue gas in the boiler is not considered to be by-products of the process.
- (d) Aluminum has both primary and secondary standards.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Year Sampled</th>
<th>Unit</th>
<th>AL</th>
<th>PHG (MCLG) [MRDLG]</th>
<th>State DLR</th>
<th>90th Percentile</th>
<th># Sites Sampled</th>
<th># Sites Above AL</th>
<th>Exceeded AL Y/N</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEAD AND COPPER TAP MONITORING</strong></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>2008</td>
<td>ppb</td>
<td>15</td>
<td>0.2</td>
<td>5</td>
<td>6.5</td>
<td>30</td>
<td>0</td>
<td>N</td>
<td>House pipes internal corrosion; erosion of natural deposits</td>
</tr>
<tr>
<td>Copper</td>
<td>2008</td>
<td>ppb</td>
<td>1300</td>
<td>300</td>
<td>50</td>
<td>230</td>
<td>30</td>
<td>0</td>
<td>N</td>
<td>House pipes internal corrosion; erosion of natural deposits</td>
</tr>
</tbody>
</table>

**ABBREVIATIONS**

AL  Action Level  
DLR  Detection Limits for purposes of Reporting  
MCL  Maximum Contaminant Level  
MCLG Maximum Contaminant Level Goal  
MRDL Maximum Residual Disinfectant Level  
MRDLG Maximum Residual Disinfectant Level Goal  
PHG  Public Health Goal  
ppb  parts per billion or micrograms per liter (µg/L)  
ppm  parts per million or milligrams per liter (mg/L)

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. Las Virgenes Municipal 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 the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead