SOURCE WATER ASSESSMENT

City of Orange’s water supplies are from various sources including groundwater, purchased water from northern California and the Colorado River, and desalinization. The City does not use well water from areas known to be contaminated by nuclear or hazardous waste. Water sources are chosen to ensure adequate supplies now and into the future. Please ensure adequate water supplies now and into the future. Please help recognize the value of a reliable water supply. Use what you have and don’t waste water.

City of Orange Water Division Service Area Map

City of Orange’s water supplies are from various sources including groundwater, purchased water from northern California and the Colorado River, and desalinization. The City does not use well water from areas known to be contaminated by nuclear or hazardous waste. Water sources are chosen to ensure adequate supplies now and into the future. Please ensure adequate water supplies now and into the future. Please help recognize the value of a reliable water supply. Use what you have and don’t waste water.

Water Supply, Water Quality, and Related Topics

CUSTOMER SERVICE: We are committed to provide prompt courteous service to our customers. If you have questions about water quality, pressure or other supply issues, please call (714) 288-2875 or other regular business hours (714) 538-1961. Questions about your water bill should be directed to our utility billing office (714) 744-2233.

ONGOING WATER QUALITY PROGRAMS AND ACTIVITIES: The City of Orange adheres to strict regulatory standards for materials used in our water system. Regular third party testing assures all materials are approved for use in potable water systems. We also operate an on-line monitoring equipment system, with testing performed in the city’s lab, and contracted testing with other public and private laboratories, we are able to assure that our water supplies meet or exceed all applicable drinking water standards. In addition, our staff administers a cross-connection control program to insure that water service connections are protected when there is a possibility of reverse flow containing our water system.

DISINFECTION: Water supplies are made safe to drink in several ways. All of the city’s well water supplies are naturally filtered as the water percolates through the ground removing impurities. As an added protection, the city chlorinates all well water pumped into the distribution system. Other water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines and ozone. Each, or a combination of these, may be used to treat various water purchased by the city for delivery to our customers. All treatment methods are designed to make the water safe for human to drink. Chloramination disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally makes up about 25% to 35% of our total supply. Fish owners should take appropriate measures when changing or adding water from the tap to independent or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

FIRE HYDRANTS: The City of Orange maintains high standards for water supplies available for fire protection and is rated a Class I Water Utility by the Insurance Services Office. We have over 4,500 high quality, pressure tested, fire hydrants located throughout our service area. Many other hydrants are privately owned and maintained by the property owner. The city tests all public hydrants on a regular interval, usually once each year. It is very important that hydrants function properly and are accessible to firefighters when emergency supplies are needed. If there is a hydrant in front of your home or on your property, please maintain a sufficiently clear, three-foot minimum space around the hydrant. Bushes, shrubs, trees, etc. should be trimmed to keep the hydrant visible and accessible.

REGIONAL WATER SUPPLY SOURCES: Water supplies throughout Southern California are derived from several sources. These water sources include water from the Colorado River and the Western States, water from local groundwater basins, local watersheds, the Deseret Aqueduct, the Colorado Aqueduct, and the Southern California Aqueduct. Water is delivered by pipelines and storage, gas stations, and wastewater collection systems. The City of Orange carefully tests all water supplies to assure the safety and proper function of the water supplies available to the City of Orange Water Division, located at 1985 S. Wind St., or you may request a summary be sent to you by contacting the City of Orange Water Division at (714) 288-2475.

CONSUMER CONFIDENCE REPORT 2018

This report contains important information about your drinking water. The City of Orange Water Division must provide this report annually to its customers. If you have any questions about the water supply, please call (714) 288-2475.

Water Supply, Water Quality, and Related Topics

Water supplies are made safe to drink in several ways. All of the city’s well water supplies are naturally filtered as the water percolates through the ground removing impurities. As an added protection, the city chlorinates all well water pumped into the distribution system. Other water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines and ozone. Each, or a combination of these, may be used to treat various water purchased by the city for delivery to our customers. All treatment methods are designed to make the water safe for human to drink. Chloramination disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally makes up about 25% to 35% of our total supply. Fish owners should take appropriate measures when changing or adding water from the tap to independent or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

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Since 1990, the City of Orange has been a water customer in an annual water quality report. The federal government has established guidelines for drinking-water agencies to follow when certifying drinking water quality information to consumers. The State of California has followed these guidelines and the former water quality report, referred to as the Consumer Confidence Report (CCR), provided customers with an overview of water quality, key definitions, and interpretation of the data.

The report describes the quality of the water provided in 2018. It includes details about water sources, the drinking water treatment process, and the contaminants that may be present in the water. The report also includes an indicator of whether or not the drinking water meets health standards. During 2018, we did not complete all required testing because the concentrations of these contaminants is not expected to vary significantly from year to year. This practice is consistent with an area source standard, except for certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must prove the same or better protection for public health.

The table below lists all the drinking water contaminants detected by the City of Orange during the 2018 calendar year. The presence of these contaminants in the drinking water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The terms and abbreviations used below:

- **Primary Drinking Water Standard or PDWS**: MCLs and MRDLs for contaminants that effect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Public Health Goal (PHG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs for the California Department of Health are based on the PHGs.
- **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.
- **Maximum Contaminant Level (MCL)**: The level of a contaminant in drinking water which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **Turbidity**: A measure of the cloudiness of the water. Turbidity is a good indicator of the effectiveness of the filtration process.

The table includes the following contaminants:

- **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, leather tanneries, and dry cleaners.**
- **Radionuclides, that can be naturally occurring or result from the mining and processing of uranium, thorium, and actinide-containing minerals.**
- **Inorganic 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, leather tanneries, and dry cleaners.**
- **Microbiological contaminants, including Escherichia coli and other enteric bacteria which can cause waterborne illnesses.**
- **Pathogens, that may be present in surface water and ground water.**

### WATER QUALITY DATA

The table below lists all the drinking water contaminants detected by the City of Orange during the 2018 calendar year. The presence of these contaminants in the drinking water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The table includes the following contaminants:

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### PRIMARY DRINKING WATER STANDARDS

(Mandatory Health-based Water Standards Established by the U.S. EPA & State Water Resources Control Board)

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit and Measurement</th>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Coliforms</strong></td>
<td></td>
<td>15</td>
<td>15</td>
<td>ND</td>
<td>ND</td>
<td>Weekly</td>
<td>Present or absent in the environment</td>
</tr>
<tr>
<td><strong>Turbidity</strong></td>
<td>NTU</td>
<td>5.7</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td>Daily</td>
<td>cloudy water</td>
</tr>
</tbody>
</table>

### Microbiological Contaminants

**Total Coliform Bacteria**

<table>
<thead>
<tr>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1000</td>
<td>ND - 3.6</td>
<td>1.4</td>
<td>2018</td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
<td>ND - 7.65</td>
<td>3.6</td>
<td>2018</td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>1.11 - 3.39</td>
<td>2.45</td>
<td>2018</td>
<td>Fertilizers; Septic Tanks</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants

**Aluminum**

<table>
<thead>
<tr>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
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<td>1.4</td>
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</tr>
<tr>
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<td>10</td>
<td>1.11 - 3.39</td>
<td>2.45</td>
<td>2018</td>
<td>Fertilizers; Septic Tanks</td>
</tr>
</tbody>
</table>

**Copper**

<table>
<thead>
<tr>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1000</td>
<td>ND - 3.6</td>
<td>1.4</td>
<td>2018</td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>1.11 - 3.39</td>
<td>2.45</td>
<td>2018</td>
<td>Fertilizers; Septic Tanks</td>
</tr>
</tbody>
</table>

### Secondary Drinking Water Standards

(Aesthetic Standards Established by the U.S. EPA & State Water Resources Control Board)

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit and Measurement</th>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
</table>
| **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, leather tanneries, and dry cleaners.**
| **Radionuclides, that can be naturally occurring or result from the mining and processing of uranium, thorium, and actinide-containing minerals.**
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| **Microbiological contaminants, including Escherichia coli and other enteric bacteria which can cause waterborne illnesses.**
| **Pathogens, that may be present in surface water and ground water.**

**Contaminant**

<table>
<thead>
<tr>
<th>MCL</th>
<th>MRDL</th>
<th>Range</th>
<th>Average</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1000</td>
<td>ND - 3.6</td>
<td>1.4</td>
<td>2018</td>
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</tr>
<tr>
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<td>2018</td>
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</tr>
<tr>
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<td>1000</td>
<td>ND - 7.65</td>
<td>3.6</td>
<td>2018</td>
<td>Erosion of Natural Deposits</td>
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<td>1000</td>
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<td>1.4</td>
<td>2018</td>
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<tr>
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<td>2.45</td>
<td>2018</td>
<td>Fertilizers; Septic Tanks</td>
</tr>
</tbody>
</table>

# Conclusion

The City of Orange has been a water customer in an annual water quality report. The federal government has established guidelines for drinking-water agencies to follow when certifying drinking water quality information to consumers. The State of California has followed these guidelines and the former water quality report, referred to as the Consumer Confidence Report (CCR), provided customers with an overview of water quality, key definitions, and interpretation of the data.

The report describes the quality of the water provided in 2018. It includes details about water sources, the drinking water treatment process, and the contaminants that may be present in the water. The report also includes an indicator of whether or not the drinking water meets health standards. During 2018, we did not complete all required testing because the concentrations of these contaminants is not expected to vary significantly from year to year. This practice is consistent with an area source standard, except for certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must prove the same or better protection for public health.
Since 1980, the City of Orange has provided safe drinking water to customers an annual water quality report. The federal government has adopted selected guidelines for specific agencies to follow when certifying drinking water quality. The State of California tailored these guidelines and the former water quality report is called the Consumer Confidence Report. The City is required to provide customers with a summary of the results, including a summary of the quality of the water (Myers, 2018).

The results reported in the summary of the table provided in 2018. It includes detailed water quality data, the data what the water contains, and how it is treated. The summary is based on data that the State of California collected at the City of Orange’s drinking water facilities. The data is for the month of January 1 through December 31, 2018 and is available to the public.

The table below lists drinking water contaminants detected by the City of Orange during the 2018 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The table also includes details about water treatment requirements.

### Microbiological Contaminants

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit</th>
<th>Measurement</th>
<th>MCL</th>
<th>PHG (Table)</th>
<th>Range</th>
<th>Average</th>
<th>Date</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Coliform Bacteria</strong></td>
<td>ng/100 mL</td>
<td>0.001</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit</th>
<th>Measurement</th>
<th>MCL</th>
<th>PHG</th>
<th>Range</th>
<th>Average</th>
<th>Date</th>
<th>Sampled</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminum</strong></td>
<td>ppm</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td><strong>Arsenic</strong></td>
<td>ppm</td>
<td>10</td>
<td>0.004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td><strong>Hexavalent Chromium</strong></td>
<td>ppb</td>
<td>10</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of Natural Deposits</td>
</tr>
<tr>
<td><strong>Fluoride</strong></td>
<td>ppm</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
<tr>
<td><strong>Nitrates</strong></td>
<td>ppm</td>
<td>10</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
<tr>
<td><strong>Nitrites</strong></td>
<td>ppm</td>
<td>10</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
<tr>
<td><strong>Radium</strong></td>
<td>ppm</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
<tr>
<td><strong>Copper</strong></td>
<td>ppm</td>
<td>0.1</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>ppm</td>
<td>15</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural Deposits: Water/Water Industry</td>
</tr>
</tbody>
</table>

The presence of bacteria in the water does not necessarily indicate that there is a public health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The table also includes details about water treatment requirements.

### Primary Drinking Water Standards

- **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.

- **Maximum Contaminant Level (MCL):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs are set by the U.S. Environmental Protection Agency.

- **Primary Drinking Water Standards:** 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 Department of Public Health.

- **Secondary Drinking Water Standards:** The level of a contaminant in drinking water below which there is no known or expected risk to health. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. Secondary MCLGs are set by the California Department of Public Health.

- **Terms and abbreviations used below:**
  - ppm: parts per million
  - ppb: parts per billion
  - MCL: Maximum Contaminant Level
  - MCLG: Maximum Contaminant Level Goal
  - PHG: Primary Health Goal
  - MCR: Microbiological Contaminant Rule
  - LCR: Lead Contamination Control Rule
  - SDR: Secondary MCL Goal (MCLG)
  - PHGC: Primary Health Goal Concentration
  - U.S. EPA: U.S. Environmental Protection Agency
  - CTC: California State Water Resources Control Board
  - UF: Unkown Factor
  - LCR: Lead Contamination Control Rule
  - PHGC: Primary Health Goal Concentration
  - U.S. EPA: U.S. Environmental Protection Agency

The presence of bacteria in the water does not necessarily indicate that there is a public health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The table also includes details about water treatment requirements.

### Secondary Drinking Water Standards

- **Microbiological Contaminants:**
  - **Total Coliform Bacteria (MCL):** 5.0% of monthly samples are positive
  - **Total Coliform Bacteria (MCLG):** 5.0% of monthly samples are positive

- **Inorganic Contaminants:**
  - **Aluminum (MCLG):** 0.001 ppm
  - **Arsenic (MCLG):** 0.004 ppm
  - **Hexavalent Chromium (MCLG):** 0.02 ppm
  - **Fluoride (MCLG):** 1 ppm
  - **Nitrates (MCLG):** 1 ppm
  - **Nitrites (MCLG):** 1 ppm
  - **Radium (MCLG):** 0.1 ppm
  - **Copper (MCLG):** 0.5 ppm
  - **Lead (MCLG):** 0.1 ppm

The presence of bacteria in the water does not necessarily indicate that there is a public health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. The table also includes details about water treatment requirements.

### Regulatory Action Levels (AL):

- **Aluminum (MCLG):** 0.001 ppm
  - **Arsenic (MCLG):** 0.004 ppm
  - **Hexavalent Chromium (MCLG):** 0.02 ppm
  - **Fluoride (MCLG):** 1 ppm
  - **Nitrates (MCLG):** 1 ppm
  - **Nitrites (MCLG):** 1 ppm
  - **Radium (MCLG):** 0.1 ppm
  - **Copper (MCLG):** 0.5 ppm
  - **Lead (MCLG):** 0.1 ppm

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### Treatment Requirements:

- **Corrosivity:**
  - **Caliche:** 0.001 ppm
  - **Sulfate:** 500 ppm
  - **Chloride:** 500 ppm
  - **Uranium:** 20 pCi/l

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A combination of some or all of these sources is available to the City of Orange now or in the future. Reliable water supplies are made safe to drink in several ways. All of the city’s well water sources are naturally filtered as the water percolates through the ground removing impurities. As an added protection, the city chlorinates all well water pumped into the distribution system. Other water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines and ozone. Each, or a combination of these, may be used to treat various water pumped by the city for delivery to our customers. All treatment methods are designed to make the water safe for human to drink. Chloramination disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally make up about 25% to 30% of our total supply. Pet fish owners should take appropriate precautions when changing or adding water from the tap to indigos or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

REQUIRE WATER SUPPLIES: The City of Orange maintains high standards for water supplies available for use at your premises as a Class 1 Water System by the Insurance Services Office. We have over 4,500 water sheds, reclamation and water reuse projects, and ocean desalinization. All treatment methods are designed to make the water safe for human to drink. Chloramination disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally make up about 25% to 30% of our total supply. Pet fish owners should take appropriate precautions when changing or adding water from the tap to indigos or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

REGIONAL WATER SUPPLY SOURCES: Water supplies throughout Southern California are derived from several sources. These sources include water from northern California and the Colorado River. The City of Orange also purchases water from various sources throughout the state including desalination facilities and ground water supplies. The City of Orange adheres to strict regulatory standards for materials and procedures in our water system. Rigorous third party testing assures all water supplies are made safe to drink. Chloramine disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally make up about 25% to 30% of our total supply. Pet fish owners should take appropriate precautions when changing or adding water from the tap to indigos or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.
Water supplies are made safe to drink in several ways. All of the city’s well water sources are naturally filtered as the water passes through the ground before it enters the well field. An added protection, the city chlorinates all well water pumped into the distribution system. Some water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines and ozone. Each, or a combination of these, may be used to treat your water purchased by the city for delivery to your customers. All treatment methods are designed to make the water safe for human to drink. Chlorination disinfection can be toxic to fish and other aquatic animals and is in excess for kidney dialysis patients. Water supplied with chloramines generally make up about 25% to 35% of our total supply. Fish owners should take appropriate remedies when changing or adding water from the tap to independent or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

City of Orange’s water supplies are from various sources including groundwater, purchased water from northern California and the Colorado River, local groundwater basins, local water project, the Colorado River, local groundwater basins, local reclamation and water reuse projects, and ocean desalinization. A combination of some or all of these sources is usually once each year. It is very important that hydrants function properly and are accessible to firefighters when emergency supplies are needed.

City of Orange maintains high standards that are approved for use in potable water systems. We also operate an in-service drinking water laboratory. With testing performed in the city’s lab, and contracted testing with other public and private laboratories, we are able to assure that our water supply meets or exceeds all applicable drinking water standards. In addition, our staff administers a cross-connection control program to ensure that water service connections are protected when there is a possibility of reverse flow contaminating our water system.

Water supplies are essential to our health, safety, and welfare. To ensure adequate water supplies now and into the future. Please ensure that our water supplies are made safe to drink in several ways. All of the city’s well water sources are naturally filtered as the water passes through the ground before it enters the well field. An added protection, the city chlorinates all well water pumped into the distribution system. Some water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines and ozone. Each, or a combination of these, may be used to treat your water purchased by the city for delivery to your customers. All treatment methods are designed to make the water safe for human to drink. Chlorination disinfection can be toxic to fish and other aquatic animals and is in excess for kidney dialysis patients. Water supplied with chloramines generally make up about 25% to 35% of our total supply. Fish owners should take appropriate remedies when changing or adding water from the tap to independent or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

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