Why are there Contaminants in my Drinking Water?

Sources of drinking water (raw) vary widely and include rivers, lakes, springs, groundwater, and surface water from reservoirs and wells. As water travels over the surface of the earth and through the soil, it dissolves naturally occurring minerals and, in some cases, natural contaminants, and can pick up pollutants residing within the pores of rocks or from human activities. Contaminants in drinking water may include:

Voluntary Monitoring

PFCs have established voluntary contaminant standards (VOCMCs). The VOCMCs are guidelines to assist public water systems in managing their drinking water. The presence of these contaminants typically results from the presence of heavy metals. Aluminum and copper monitoring standards are established by the Water Quality and Health Effects Technical Committee (WQHE).

Radioactive contaminants, which are usually naturally occurring, are determined by regulating radionuclides and radionuclides from radionuclear plants. Radionuclides are iodines, strontium, americium, curium, and plutonium. Radioactive contaminants, which are usually naturally occurring, can cause harm to public health, but are not necessarily regulated by the EPA.

In order to ensure that water is safe to drink, EPA provides regulations that limit the amount of certain contaminants to levels in drinking water. The Office of Water (OGW) administers the Safe Drinking Water Act (SDWA) regulations, which provide for the regulation of contaminants in drinking water. The SDWA regulations also provide for the regulation of radionuclides in drinking water. The SDWA regulations specify that the levels of certain contaminants in drinking water must not exceed the limits specified in the regulations.

Heavy metals

Heavy metals are naturally occurring elements that are toxic to human health. Heavy metals are often found in drinking water because they are released from natural processes or human activities. Heavy metals can affect human health by altering the balance of minerals in the body, or by altering the function of certain organs. Heavy metals can also be harmful to the environment by altering the balance of nutrients in the ecosystem. Heavy metals can be found in drinking water from natural sources, such as rocks and soil, or from human activities, such as mining, smelting, and sewage treatment. Heavy metals can be harmful if they are ingested or inhaled, or if they come into contact with the skin. Heavy metals can also be harmful if they are released into the environment, where they can contaminate soil, water, and air.

Arsenic

The drinking water standard for arsenic is 10 μg/L. The City’s drinking water contains arsenic. The presence of arsenic in drinking water can be harmful to human health. Arsenic can cause skin and lung problems, and may cause cancer. In addition, long-term exposure to arsenic can cause heart problems, high blood pressure, and damage to the nervous system. Arsenic can also affect the development of children.

Volatile Organic Compounds

Volatile organic compounds (VOCs) are compounds that are emitted into the air from sources such as gas stations, manufacturing plants, and household products. VOCs can cause health problems such as respiratory irritation, eye irritation, and headaches. VOCs can also react with other pollutants in the air to form harmful secondary pollutants.

Nitrates

Nitrates are a natural component of the water cycle. Nitrates are found in drinking water because they are released from natural processes or human activities. Nitrates can affect human health by altering the balance of minerals in the body, or by altering the function of certain organs. Nitrates can also be harmful to the environment by altering the balance of nutrients in the ecosystem. Nitrates can be found in drinking water from natural sources, such as rocks and soil, or from human activities, such as agriculture and sewage treatment. Nitrates can be harmful if they are ingested or inhaled, or if they come into contact with the skin. Nitrates can also be harmful if they are released into the environment, where they can contaminate soil, water, and air.

Cryptosporidium

Cryptosporidium is a protozoan that causes cryptosporidiosis. Cryptosporidiosis is a gastrointestinal illness that is caused by the ingestion of Cryptosporidium parvum. Cryptosporidium parvum is a parasite that can live in the human intestine. Cryptosporidium parvum can be transmitted through contaminated water or food. Cryptosporidium parvum can also be transmitted through person-to-person contact. Cryptosporidium parvum is the most common cause of waterborne disease in the United States. Cryptosporidium parvum can cause mild to severe gastrointestinal illness in humans, including diarrhea, nausea, and abdominal pain. Cryptosporidium parvum can also cause severe illness in immunocompromised individuals, including those with HIV/AIDS, cancer, or other immunocompromising conditions.
### City of Santa Fe 2012 Water Quality Table

#### Table: City of Santa Fe 2012 Water Quality Report

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Units</th>
<th>MCL</th>
<th>MCLG</th>
<th>City Well</th>
<th>Sample Date</th>
<th>Burnace WF</th>
<th>Sample Date</th>
<th>Burnace MCL</th>
<th>Sample Date</th>
<th>Notice of annual finds, if below, found then and before previous notices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>ppm</td>
<td>15</td>
<td>3</td>
<td>18-Mar-12</td>
<td>1.6</td>
<td>11-June-11</td>
<td>0.5</td>
<td>61-Mar-12</td>
<td>0.5</td>
<td>13-Apr-12</td>
</tr>
<tr>
<td>Barium</td>
<td>ppm</td>
<td>2</td>
<td>0.01</td>
<td>24-Aug-11</td>
<td>0.875</td>
<td>11-June-11</td>
<td>0.5</td>
<td>61-Mar-12</td>
<td>0.5</td>
<td>13-Apr-12</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>0.8</td>
<td>11-June-11</td>
<td>0.25</td>
<td>11-June-11</td>
<td>0.5</td>
<td>61-Mar-12</td>
<td>0.5</td>
<td>13-Apr-12</td>
</tr>
<tr>
<td>Selenium</td>
<td>ppm</td>
<td>50</td>
<td>2</td>
<td>11-June-11</td>
<td>0.5</td>
<td>11-June-11</td>
<td>0.5</td>
<td>61-Mar-12</td>
<td>0.5</td>
<td>13-Apr-12</td>
</tr>
<tr>
<td>Nitrate (as-N)</td>
<td>ppm</td>
<td>15</td>
<td>10</td>
<td>24-Aug-11</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
</tr>
<tr>
<td>Radiological Contaminants (Standard prior to 2000 for UTH)</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Alpha</td>
<td>Bq/l</td>
<td>15</td>
<td>1.0</td>
<td>24-Aug-11</td>
<td>1.5</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
</tr>
<tr>
<td>Total Beta (ICP)</td>
<td>Bq/l</td>
<td>15</td>
<td>1.0</td>
<td>24-Aug-11</td>
<td>1.5</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
</tr>
<tr>
<td>Total Radioactivity</td>
<td>Bq/l</td>
<td>15</td>
<td>1.0</td>
<td>24-Aug-11</td>
<td>1.5</td>
<td>15-Apr-12</td>
<td>15-Apr-12</td>
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<tr>
<td>Nitrogen</td>
<td>ppm</td>
<td>50</td>
<td>2</td>
<td>11-June-11</td>
<td>0.5</td>
<td>11-June-11</td>
<td>0.5</td>
<td>61-Mar-12</td>
<td>0.5</td>
<td>13-Apr-12</td>
</tr>
<tr>
<td>Turbidity (nephelometric)</td>
<td>NTU</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity (new method with same unit)</td>
<td>NTU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon (TOC)</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Raw Organic Carbon (ROC)</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- MCL: Maximum Contaminant Level
- MCLG: Maximum Contaminant Level Goal
- Notice of annual finds, if below, found then and before previous notices.
- Turbidity: measurement of cloudiness of water. We assign it because it is a good indicator of the effectiveness of our
di水quality treatment processes.
- City Well used: 1.12 and Northwest well.

### Sources of Supply

#### 2012 Water Source

The City was served by four distinct sources of supply in 2012. The 17,000 active Santa Fe Waterworks surface water intake to the Santa Fe River is in shared with the City of Albuquerque and the Placitas area in the treatment. Surface water from the Santa Fe River and the Galisteo Basin is treated through conventional wastewater treatment and then treated through drinking water treatment plants (DWTs), 2012 installed. The City of Santa Fe Water Department has a policy of 3.5 water weeks located within the City limits of Santa Fe. The Badlands Water Field surface water intake to the Santa Fe River is the 

### Water Source Assessment and Availability

#### Source Water Assessment and Availability

The New Mexico Environment Department (NED) completed a Source Water Assessment for the City of Santa Fe. This assessment includes a determination of source water protection areas and an inventory of pollution sources within the area of concern. NED concluded: "The Source Water Assessment for the City of Santa Fe, water utility meets that the water is well-maintained and operated, and the cysts of drinking water are generally protected. The public health standard for concentration based on the identification of the source water. A copy of the report is available by contacting NED at 505-476-6330.

### Do we need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. These people include:
- Immunosuppressed persons or persons with cancer undergoing cancer chemotherapy who have immune system suppression, people with HIV/AIDS or other severe immune disorders, some infants, and there can be particular risk for these clients. These people should consult a doctor about drinking water. Health care professionals may provide additional information on conditions for the general and drinking water. such as:

### Conclusion

The City of Santa Fe Water Division (City) is pleased to provide the 2012 Water Quality Report. A safe and dependable water supply is vital to our community and the primary reason for the 2012 report is provided annually and contains information on the quality of water throughout the state year. The City of Santa Fe, drinking water at U.S. Environmental Protection Agency (EPA) and State division of water quality. The report contains additional details about water you come from, which it creates, and how it compares to standards and data and to other sources. This report contains information on contaminants which may be a concern.

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*En Español*

[Website address and contact information in Spanish for Santa Fe water utility departement]