Palo Alto Emergency Water Supply Project Update
In 1997, the California Department of Public Health (CDPH) directed all local water systems to develop and implement emergency storage capacity plans for securing water supply needs of both nonresidential and residential areas. By 1999, two years after the CDPH approved a plan for protecting Palo Alto’s water supply, the city had completed a series of capital projects in three phases:

• Rebuild existing water pumping stations to improve water quality and increase water flow from existing facilities; and
• Rebuild existing water pressure tanks and place new storage capacity in the锁定水库确保水资源供应的安全性。

The SFPUC’s water sources are protected by the State Water Resources Control Board, which regulates water quality standards. The SFPUC Water Quality Division regularly monitors water quality at designated sampling points throughout the water system, and analyzes water for the presence of a wide variety of contaminants.

The SFPUC Water Quality Division also undertakes comprehensive monitoring programs to identify and assess potential health risks from water contaminants. The monitoring programs include:

• Source water monitoring: periodic sampling of the water source to determine the presence of contaminants that may affect water quality.
• Treatment plant monitoring: continuous monitoring of water entering and leaving the treatment plants to ensure compliance with water quality standards.
• Distribution system monitoring: periodic sampling of water collected from customers’ taps to assess the effectiveness of the treatment processes and the integrity of the distribution system.
• Public health monitoring: monitoring of public health indicators, such as waterborne disease outbreaks, to detect any potential health risks from water contaminants.

In addition to the monitoring programs, the SFPUC Water Quality Division also conducts surveys and studies to identify potential health risks from water contaminants. These surveys and studies include:

• Source water surveys: monitoring the water source for the presence of contaminants that may affect water quality.
• Treatment plant surveys: monitoring the treatment processes to ensure compliance with water quality standards.
• Distribution system surveys: monitoring the distribution system for the presence of contaminants that may affect water quality.
• Public health surveys: monitoring public health indicators, such as waterborne disease outbreaks, to detect any potential health risks from water contaminants.

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### City of Palo Alto Water Quality Data for Year 2009(1)

<table>
<thead>
<tr>
<th>DETECTED CONTAMINANTS</th>
<th>UNIT</th>
<th>TCL</th>
<th>MRDL or MRDLG</th>
<th>RANGE</th>
<th>AVERAGE OR MAX</th>
<th>TYPICAL SOURCES IN DRINKING WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turbidity</strong></td>
<td>NTU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Soil runoff</td>
</tr>
<tr>
<td>For Filterd Water from Srum Valley WTP</td>
<td>–</td>
<td>1 NTU</td>
<td>N/A</td>
<td>–</td>
<td>[0.14]</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>For Filterd Water from Hurry Tracy WTP</td>
<td>–</td>
<td>1 NTU</td>
<td>N/A</td>
<td>–</td>
<td>[0.10]</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>For Unfiltered Hetch Hetchy Water</td>
<td>NTU</td>
<td>5</td>
<td>N/A</td>
<td>0.27 - 0.57</td>
<td>[0.37]</td>
<td>Soil runoff</td>
</tr>
</tbody>
</table>

**DISINFECTION BYPRODUCTS AND PRECURSOR**

### MICROBIOLOGICAL

- **Total Coliforms**
  - NTU of monthly samples: [0] – [1.33%]
  - Naturally present in the environment

### INORGANIC CHEMICALS

- **Fluoride (source water)**
  - ppm: 2.0
  - NTU: 1
  - > 0.1 - 0.8
  - 0.3≤ Erosion of natural deposits

- **Chlorine (including free chlorine and chloramine)**
  - ppm: MRDL = 4.0
  - MRDLG = 0.43 - 2.46
  - 2.07 Drinking water disinfectant added for treatment

- **Total Trihalomethanes**
  - ppb: 80
  - NTU: 23.7 - 63.0
  - [43.1] Byproduct of drinking water disinfection

### ORGANIC CHEMICALS

- **Silica**
  - ppm: 4.8 - 7.5
  - 5.9

### TREATMENT TECHNIQUE (TT): A required process intended to reduce the level of a contaminant in drinking water.

### REGULATORY ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

### 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 CDPH.

### MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs are set by the CDPH.

### PRIMARY DRINKING WATER STANDARD (PDWS): MCLs and MCLGs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

### REBATE AND WATER EFFICIENCY PROGRAMS

City of Palo Alto Utilities, Utility Marketing Services at (650) 329-2241

www.cityofpaloalto.org/reswater