

Chromium-6 Data for Southwest Houston

The City of Houston/Houston Public Works (HPW) tested its drinking water for chromium-6 in 2013 – 2014 as part of EPA's third Unregulated Contaminant Monitoring Regulation (UCMR 3). HPW has conducted additional testing between 2017 and the present at the groundwater well locations in Southwest Houston where chromium-6 was detected during UCMR 3, as well as at representative locations in the drinking water distribution system that receive water from those groundwater wells.

The Safe Drinking Water Act (SDWA) requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur. EPA has not created a drinking water standard for chromium-6 by itself but does have a drinking water standard for total chromium, which includes chromium-6. In order to ensure that the greatest potential risk is addressed, EPA based its drinking water standard assuming that total chromium consists of 100 percent chromium-6, the form of chromium with the greatest health concern. USEPA's drinking water standard for total chromium is 100 parts per billion (ppb), and the highest level of chromium-6 observed in the drinking water system was 8.0 ppb.

More information regarding chromium in drinking water, including EPA's responses to Frequently Asked Questions, can be found on EPA's website: <https://www.epa.gov/dwstandardsregulations/chromium-drinking-water>.

Houston Water Southwest Area Chromium-6 Test Results (ppb)

Location	Jul 2013	Feb 2017	July 2017	Dec 2017	Mar 2018	Dec 2018	Feb 2019	May 2019	Sep 2019	Dec 2019	Feb 2020	May 2020	Aug 2020	Nov 2020	Feb 2021	May 2021	Aug 2021	Nov 2021	Feb 2022
Water Plants																			
Bellaire Braes	1.7	1.9	0.22	1.6	0.26	1.1	0.73	0.37	0.33	0.37	0.24	0.1	0.21	0.26	1.4	1.9	0.83	0.11	0.28
Bellaire Braes Well 1 ⁱⁱ	Facility Out of Service				1.3	Facility Out of Service	1.8	1.7	0.55	Facility Out of Service					1.9	ND ^{vii}	1.7	0.02	1.2
Brookfield	4.9	5.4	5	5.1	2.4	4.6	4.5	4.8	4.6	5.8	5.4	4.9	5	5.8	6	5	5.9	0.27	4.6
District 90-2	3.1	3.5	3.3	4.2	4.3	Facility Out of Service	6.5	4	3.1	4.4	8	3	3.2	3.1	4.1	3.7	3.5	4	4
District 111-2	4.9	2.3	Facility Out of Service		2.6	5.2	5.3	5.8	5.5	6.7	6	4.7	5.7	1.7	6	6.3	6.3	6.1	5
District 123	5.1	6.7	5.8	5.5	2.5	5.9	6	Facility Out of Service	2.2	6.7	4.7	Facility Out of Service		5.9	1.7	1.8	4	5.3	3.9
District 184	3.2	2	2.2	2.3	3	2	0.06	1.3	0.03	0.05	0.03	1.1	2.2	2.1	2.2	2.2	2.1	3	3
Parkglen-1	2.6	2.5	2.8	2.5	2.3	3.8	4.1	3.3	0.06	2.1	2.9	2	2.4	0.95	0.94	ND ^{vii}	5.1	0.11	2.6
Parkglen West	4.4	4	4.4	Facility Out of Service	4	4.1	4	Facility Out of Service							4.6	5	4.5	4.7	
Distribution Sample Points (DSP)																			
Collected to Monitor Levels Observed in Water Lines Near Customer Homes																			
DSP D-District 111- 2 ⁱⁱⁱ	4.4	2.6	0.18	1.8	Not sampled ⁱ	4.9	5.3	1	0.42	6.6	0.76	4.7	0.49	5.3	6	5.6	4.3	4.8	5.2
DSP 100 ^v	2.9	1.5	1.4	2.9	Not sampled ⁱ	2.6	1.8	0.4	0.47	0.59	0.56	1	1.4	0.23	1.3	0.08	4.6	2.4	2.8
DSP Parkglen MUD ^{iv}	2.8	2.3	0.78	2.4	Not sampled ⁱ	1.7 ^{iv}	3.5	0.28	2.6	2.5	1.8	2.4	1.1	0.54	2.6	0.26	1.8	1.8	1.6
DSP Brookfield -1 ^{vi}	Site added temporary for two monitoring periods to observe levels in distribution in comparison to the plants.						0.69	0.79	--	--	--	--	--	--	--	--	--	--	--
DSP Brookfield -2 ^{vi}	Site added temporary for two monitoring periods to observe levels in distribution in comparison to the plants.						0.78	4.3	--	--	--	--	--	--	--	--	--	--	--
DSP D-123-1 ^{vi}	Site added temporary for two monitoring periods to observe levels in distribution in comparison to the plants.						1.2	1.7	--	--	--	--	--	--	--	--	--	--	--
DSP D-123-2 ^{vi}	Site added temporary for two monitoring periods to observe levels in distribution in comparison to the plants.						1	1.7	--	--	--	--	--	--	--	--	--	--	--
DSP Parkglen West MUD-1 ^{vi}	Site added temporary for two monitoring periods to observe levels in distribution in comparison to the plants.						0.95	1.2	--	--	--	--	--	--	--	--	--	--	--

i. Distribution samples were not collected in March 2018. Observations showed levels at distribution sites are either equal to or less than their associated source water plants.

ii. Bellaire Braes Well 1 was sampled in March 2018, to observe levels in groundwater for this facility, whereas the other Bellaire Braes samples were from the plant storage tank where groundwater and surface water are mixed together.

iii. D-D-111-2 is water from Bellaire Braes, District 111-2, and Brookfield Facilities

iv. Parkglen MUD is water from District 184, District 90-2, District 123, and Parkglen West Groundwater Facilities. In December 2018, Distribution Site Parkglen West MUD-2 was sampled instead of distribution site Parkglen MUD.

v. 100 represents Parkglen-1 Groundwater Facility.

vi. Brookfield DSPs represent the Brookfield plant, D-123 DSPs represent the D-123 plants, the Parkglen West MUD-1 DSP represents the Parkglen West plant.

vii. ND - Not Detected