



SOCIAL SECURITY

MEMORANDUM

Date: 01/26/08

To: Lollie Driulini
AFGE Regional Health & Safety Officer

From: Rick Prieto
SSA Facilities Team Dallas, TX

Subject: Initial & Follow-up Lead and Copper in Water Testing for the Ardmore, OK SSA Field Office

Attached please find the information on the initial & follow-up lead and copper in water testing for the Ardmore, OK SSA Field Office. No elevated lead and /or copper levels were reported. All sample results were found to be well below the EPA Action Level for lead and copper. As a result, no further investigation or follow up sampling is required.

If you have any questions, please call at 214-767-3104 in Management and Operations Support.

Thank You

Rick Prieto



FOH

Federal Occupational Health
a component of the US Public Health Service



INITIAL & FOLLOW-UP LEAD AND COPPER IN WATER TESTING

Conducted for:

SOCIAL SECURITY ADMINISTRATION
OFFICE OF ENVIRONMENTAL HEALTH AND OCCUPATIONAL SAFETY
6401 SECURITY BLVD
BALTIMORE, MD 21235-6401

Conducted at:

ARDMORE FIELD OFFICE
SOCIAL SECURITY ADMINISTRATION
321 S. HOLIDAY DRIVE
ARDMORE, OK 73401

SOCIAL SECURITY ADMINISTRATION CODE 786
GSA BUILDING NUMBER OK0084

Conducted on:

JULY 13, 2007 &
JULY 27, 2007

Prepared by:

UNITED STATES PUBLIC HEALTH SERVICE
FEDERAL OCCUPATIONAL HEALTH SERVICE
DALLAS AREA OFFICE
1301 YOUNG STREET, SUITE 772
DALLAS, TX 75202

EXECUTIVE SUMMARY

On July 13, 2007, the U.S. Public Health Service (USPHS), Federal Occupational Health Service (FOHS), Environmental Health Program conducted initial lead and copper testing of drinking water at the at the Ardmore Field Office (Social Security Administration Code 786, GSA building number OK0084) located at 321 S. Holiday Drive in Ardmore, OK 73401. The purpose of the testing was to determine lead and copper content in water collected from all sources of water used exclusively by SSA personnel for drinking inside the office. As a result on elevated copper levels found during the initial testing, follow-up copper testing of was also conducted on July 27, 2007.

The U.S. Public Health Service (USPHS) Federal Occupational Health Service (FOHS) Program received a task order request to conduct copper and lead water testing in drinking water from the Social Security Administration Office of Environmental Health and Occupational Safety (OEHOS) located in Baltimore, Maryland. The assistance and cooperation received from all local SSA personnel was sincerely appreciated.

A total of three drinking water sources were identified, which included the sink faucet located in the Multi-purpose Room, water fountain located in the Open Work Area outside the employee's restrooms, and water fountain in the Reception Area outside the public restrooms. Lead testing results for the samples collected at the identified sources were all ranged from <1.00 to 1.34 parts per billion (ppb). Copper testing results for the samples collected at the identified sources were all ranged from 0.604 to 1.34 parts per million (ppm). The concentration of lead was well below the Environmental Protection Agency (EPA) Action Level of 15 parts per billion (ppb), however, the copper identified in the samples were above the Environmental Protection Agency (EPA) Action Level of 1.3 parts per million (ppm) established for copper. As a result of the elevated sample findings, copper follow-up testing was conducted on July 27, 2007 on the water fountain located in the Open Work Area outside the employee's restrooms, and water fountain in the Reception Area outside the public restrooms. All other samples were found below the EPA Action Level of 1.3 ppm.

INTRODUCTION

The Social Security Administration (SSA) is conducting water testing in SSA field offices throughout the United States to determine potential adult exposure to lead and copper in drinking water. Whereas copper is considered as a nutritionally essential element in low doses, lead is not a nutritional element. Lead causes both acute and chronic adverse health effects. Copper can cause acute gastrointestinal disturbances as well as have chronic adverse health effects in high doses. Both lead and copper are regulated by the Environmental Protection Agency (EPA) under the authority of the Safe Drinking Water Act of 1974 (amended 1986). The SSA testing program is similar to EPA's Lead and Copper Rule (June 7, 1991) in that SSA requires corrective measures (interim or permanent) if either the lead action level of 15 parts per billion (ppb) or the copper action level of 1.3 parts per million (ppm) is exceeded.

METHOD OF SURVEY

The water was sampled using EPA's suggested sampling procedures. On July 12, 2007 at approximately 1600 hours, the designated drinking water-dispensing outlets were flushed for a 1-minute period and then a plastic covering was placed over the outlets to prevent use. A sign was posted on the outlets indicating that the outlets were temporarily out of service due to testing. On the morning of July 13, 2007 at approximately 0800 hours, the taps were opened and water was collected immediately in a one-liter plastic bottle, which was preserved with nitric acid upon receipt at the lab (See Tables 1, 2, & 3 for the sampling collection locations). Follow-up sampling of the designated drinking water outlets previously sampled were flushed for a 5-minute period on July 26, 2007 at approximately 1700 hours. On the morning of July 27, 2007 at approximately 0830 hours, three samples were collected in 250-milliliter bottles at each designated drinking water outlets. Follow-up sampling included an initial (first draw) sample followed by a 1-minute flush between the first and second draws and a 5-minute flush prior to the third and final draw. (See Tables 1 & 2 for the sampling collection locations. Follow-up sampling are denoted by a, b, & c). The water samples were submitted to the Federal Occupational Health Environmental Reference Laboratory in Chicago, Illinois. The copper samples were analyzed in accordance with EPA Method S/M 3111B using a Perkin Elmer Analyst 200 Flame atomic absorption spectrophotometer. The lead samples were analyzed in accordance with EPA Method 200.9 using a Perkin Elmer Analyst 600-graphite furnace spectrophotometer.

RESULTS

The copper and lead testing results from each drinking water outlets inside the Ardmore Field Office are as follows:

Initial sampling:

- The water sample collected from the sink faucet in Multipurpose Room had a copper level of 0.604 parts per million (ppm) and a lead concentration 1.34 parts per billion (ppb).
- The water sample collected from the water fountain in the Open Work Area outside the employee's restrooms had a copper level of 1.62 parts per million (ppm) and a lead concentration <1.00 parts per billion (ppb).
- The water sample collected from the drinking fountain from the Reception Area outside the public restrooms had a copper level of 1.61 parts per million (ppm) and a lead concentration <1.00 parts per billion (ppb).

As a result of the elevated copper findings, follow-up testing was conducted on July 27, 2007 from the water fountain in the Open Work Area outside the employee's restrooms and from the Reception Area outside the public restrooms

Follow-up Sampling (Copper)

- The first draw water sample collected from the water fountain outside the employee's restrooms in the Open Work Area contained a copper concentration of 0.554 parts per million (ppm).
- The second draw water sample (following 1-minute flush) collected from the water fountain outside the employee's restrooms in the Open Work Area contained a copper concentration of 0.398 parts per million (ppm).
- The third draw water sample (following an additional 5-minute flush) collected from the water fountain outside the employee's restrooms in the Open Work Area contained a copper concentration of 0.230 parts per million (ppm).
- The first draw water sample collected from the water fountain outside the public restrooms in the Reception Area contained a copper concentration of 0.260 parts per million (ppm).
- The second draw water sample (following 1-minute flush) collected from the water fountain outside the public restrooms in the Reception Area contained a copper concentration of 0.515 parts per million (ppm).
- The third draw water sample (following an additional 5-minute flush) collected from the water fountain outside the public restrooms in the Reception Area contained a copper concentration of 0.548 parts per million (ppm).

The Environmental Protection Agency (EPA) has established an Action Level of 1.3 parts per million (ppm) for copper and 15 parts per billion (ppb) for lead. As a result of the elevated sample findings, copper follow-up testing was conducted from the water fountain outside the employee's restrooms in the Open Work Area and from the water fountain outside the public restrooms in the Reception Area. All other samples were found below the EPA Action Level of 1.3 parts per million (ppm). The lead concentrations from the initial sample results from three drinking outlets were found above the EPA Action level of 15 parts per billion (ppb). Individual sample results are also located in Tables 1, 2, & 3 on the following page.

RECOMMENDATIONS

As a result of the sample analysis findings, no further investigation or follow-up sampling is required.

TABLE 1
INITIAL WATER TESTING RESULTS (LEAD)
Ardmore Field Office (786)
321 S. Holiday Drive
Ardmore, OK 73401
July 13, 2007

SAMPLE	LOCATION / MANUFACTURER	LEAD RESULTS	EPA ACTION LEVEL (LEAD)
06-0786-W001	Multi-purpose Room Sink Faucet Manufacturer: Peerless Model #: N/A Serial #: N/A	1.34	15 ppb
06-0786-W002	Drinking Fountain outside Employee's Restrooms in the Open Work Area Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060217857	<1.00	15 ppb
06-0786-W003	Drinking Fountain outside Public Restrooms Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060417167	<1.00	15 ppb

ppb - parts per billion

**TABLE 2
INITIAL WATER TESTING RESULTS (COPPER)**

Ardmore Field Office (786)
321 S. Holiday Drive
Ardmore, OK 73401
July 13, 2007

SAMPLE	LOCATION / MANUFACTURER	COPPER RESULTS	EPA ACTION LEVEL (COPPER)
06-0786-W001	Multi-purpose Room Sink Faucet Manufacturer: Peerless Model #: N/A Serial #: N/A	0.604	1.3 ppm
06-0786-W002	Drinking Fountain outside Employee's Restrooms in the Open Work Area Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060217857	1.62	1.3 ppm
06-0786-W003	Drinking Fountain outside Public Restrooms Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060417167	1.61	1.3 ppm

ppm - parts per million

TABLE 3
FOLLOW-UP WATER TESTING RESULTS (COPPER)

Ardmore Field Office (786)

321 S. Holiday Drive

Ardmore, OK 73401

July 13, 2007

SAMPLE	LOCATION / MANUFACTURER	COPPER RESULTS	EPA ACTION LEVEL (COPPER)
06-0786-W002A	Drinking Fountain outside Employee's Restrooms in the Open Work Area Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060217857	0.554	1.3 ppm
06-0786-W002B		0.398	1.3 ppm
06-0786-W002C		0.230	1.3 ppm
06-0786-W003A	Drinking Fountain outside Public Restrooms Manufacturer: Elkay Model #: EZFS8-1B Serial #: 060417167	0.260	1.3 ppm
06-0786-W003B		0.515	1.3 ppm
06-0786-W003C		0.548	1.3 ppm

ppm - parts per million

APPENDIX A

**FOHS ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT**



FOH ENVIRONMENTAL LABORATORY

133 S. CLARK STREET CHICAGO, IL 60605 PHONE: (312) 886-0413 FAX: (312) 886-0438

ANALYTICAL REPORT

Submitted To: USPHS/Federal Occupational Health
1301 Young Street, Suite 772
Dallas, TX 75202

Attention: Mr. Alex Fontenarosa

Submitted By: Ms. Edna A. Bautista

Reference Data: Lead and Copper
Sampling Site: SSA: 321 S. Holliday Drive, Ardmore, OK (#786)
Sample Type: Water
Method Reference: EPA 200.9 and S/M 3111B, respectively
Project ID: Project 8125
DFOH Lab Nos.: TM-07-32680 through TM-07-32682
Date Received: 07/17/07
Date Analyzed: 07/18/07
Date Issued: 07/18/07

The water samples were preserved with concentrated nitric acid. The lead analyses were performed using a Perkin Elmer AAnalyst 600 graphite furnace spectrophotometer (GFAAS). The copper analysis were performed using a Perkin Elmer Aanalyst 200 Flame atomic absorption spectrometer (AAS).

S/M indicates that the method is from *Standard Methods for the Examination of Water and Wastewater*.

The analytical results are given in the enclosed table. If you have any questions about the results, feel free to phone the Laboratory at (312) 886-0413.


Ms. Edna A. Bautista
Analyst


Ms. Michelle C. Stemmons
Laboratory Director

Project 8125
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Environmental Lead (Lab ID #102443) and Industrial Hygiene programs
for all methods



FOH ENVIRONMENTAL LABORATORY

536 S. CLARK STREET CHICAGO, IL 60605 PHONE: (312) 888-0413 FAX: (312) 888-0494

LEAD & COPPER in WATER RESULTS

SAMPLE NUMBER*	LABORATORY NUMBER	COPPER CONCENTRATION (ppm)	LEAD CONCENTRATION (ppb)
06-C786-W001	TM-07-32680	0.604	1.34
06-C786-W002	TM-07-32681	1.62**	< 1.00
06-C786-W003	TM-07-32682	1.81**	< 1.00

*All samples received in condition acceptable for analysis.

** Indicates that the samples are at or above the Action Level as established by the Environmental Protection Agency (EPA).

ANALYTE	ACTION LEVEL	METHOD DETECTION LIMIT (MDL)	METHOD
Copper	1.3 ppm	0.020 ppm	SM 3111B
Lead	15 ppb	1.00 ppb	EPA 200.8

Edna A. Bautista
Ms. Edna A. Bautista
Analyst

Project 8125
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Environmental Lead (Lab ID 410243) and Industrial Hygiene programs
For all notices



FOH ENVIRONMENTAL LABORATORY

396 S. CLARK STREET CHICAGO, IL 60606 PHONE: (312) 886-0413 FAX: (312) 888-0414

ANALYTICAL REPORT

Submitted To: USPHS/Federal Occupational Health
1301 Young Street, Suite 772
Dallas, TX 75202

Attention: Mr. Alex Fontenarosa


Submitted By: Ms. Michelle C. Stemmons

Reference Data: Copper
Sampling Site: SSA: 321 South Holiday Drive, Ardmore, OK (#786)
Sample Type: Water
Method Reference: S/M 3111B
Project ID: Project 8134
DFOH Lab Nos.: TM-07-32709 through TM-07-32714
Date Received: 07/31/07
Date Analyzed: 08/01/07 through 08/02/07
Date Issued: 08/06/07

The water samples were preserved with concentrated nitric acid. The copper analyses were performed using a Perkin Elmer Analyst 200 Flame atomic absorption spectrometer (AAS).

S/M indicates that the method is from *Standard Methods for the Examination of Water and Wastewater*.

The analytical results is given in the enclosed table. If you have any questions about the results, feel free to phone the Laboratory at (312) 886-0413.


Ms. Edna A. Bautista
Analyst


Ms. Michelle C. Stemmons
Laboratory Director

Project 8134
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