

October 24, 2016

Mr. Mike Vogel
Interim Director of Facilities and Construction Management
South Washington County Schools
7362 East Douglas Point Road S
Cottage Grove, MN 55016
P 651-425-6274
E mvogel@sowashco.org



**RE: Liberty Ridge Annex
Lead-in-Water Testing
IEA Project #201610819**

Dear Mr. Vogel,

At the request of South Washington County Schools, IEA collected a total of 31 samples of drinking water on September 22, 2016, for lead analyses from the Liberty Ridge Annex building.

The purpose of the site sampling was to document lead levels in the sampled locations and compare them to the EPA action level of 20 parts per billion (ppb).

INTRODUCTION

The Environmental Protection Agency (EPA) established the Lead Contamination Control Act (LCCA) of 1988 to identify and reduce lead in drinking water. Both the EPA and the Minnesota Department of Health (MDH) recommend testing of potable water sources (water used for consumption) every five years for the presence of lead. Lead is a metal that usually enters drinking water through the distribution system, including pipes, solders, faucets, and valves. Lead levels in water may increase when the water is allowed to sit undisturbed in the system, such as in science, biology, or art areas. Exposure to lead is a significant health concern, especially to infants and young children whose growing bodies absorb lead more readily than adult bodies do. Lead exposure can cause delays in physical and/or mental development in children and damage to the brain, kidneys, nervous system, and red blood cells. The EPA and MDH recommend that action be taken at a specific fixture when the lead concentration exceeds the EPA's action level for schools of 20 parts per billion (ppb).

METHODOLOGY

IEA collected 31 first-draw (unless otherwise noted) samples of approximately 500 milliliters (ml). "First draw" means the samples are collected before the fixture is used or flushed during the day. The first-draw sample results reflect a worst case scenario, i.e., the highest lead level that would be consumed by building occupants. Current protocol calls for flushing locations 8-18 hours prior to sampling.

Site map with sample locations are included in Appendix A. Water samples were analyzed by Minnesota Valley Testing Laboratories (MVTL) in New Ulm, Minnesota, which uses EPA approved analytical methods and quality control/assurance procedures. Samples were analyzed using the ICP/MS EPA Method 200.8.

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT, INC.
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9201 West Broadway, #600
Brooklyn Park, MN 55445
763-315-7900
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MANKATO
610 North Riverfront Drive
Mankato, MN 56001
507-345-8818
FAX 507-345-5301
800-233-9513

ROCHESTER
210 Woodlake Drive SE
Rochester, MN 55904
507-281-6664
FAX 507-281-6695
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BRAINERD
13432 Elmwood Drive, Ste. #5
Baxter, MN 56425
218-454-0703
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800-233-9513

MARSHALL
1420 East College Drive
Marshall, MN 56258
507-476-3599
FAX 507-537-6985
800-233-9513

VIRGINIA
5525 Emerald Avenue
Mountain Iron, MN 55768
218-410-9521
FAX 763-315-7920
800-233-9513

RESULTS & DISCUSSION

The lead-in-water sampling results for the Liberty Ridge Annex building ranged from below the level of detection (<0.05 ppb) to 6.01 ppb. The sample results for the Liberty Ridge Annex building are below the EPA action level of 20 ppb. The laboratory report is provided in Appendix B. Laboratory results are reported in micrograms per liter ($\mu\text{g/L}$) which is equivalent to parts per billion (ppb).

There are no results for the Liberty Ridge Annex building with lead levels between 15 ppb and 20 ppb. For this range, although the EPA recommends that school drinking water not exceed 20 ppb, the MDH recommends schools seek to reduce the amount of lead in drinking water to as close to zero as possible. The highest result for the Liberty Ridge Annex building was 6.01 ppb, the sink in Room 112.

RECOMMENDATIONS

IEA recommends that a copy of the district's Lead- in-Drinking Water Testing Report be made available to staff and the public through the district's administrative offices.

GENERAL CONDITIONS

The analysis and opinions expressed in this report are based upon water testing at South Washington County Schools. This report does not reflect variations in conditions that may occur. Actual conditions may vary and may not become evident without further assessment.

The report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental, health and safety practices. Other than as provided in the preceding sentence and in our Proposal #5406A dated August 5, 2016 regarding Lead-in-Water Testing, including the General Conditions attached thereto, no warranties are extended or made.

Please contact IEA if you would like assistance with any of the above recommendations or have questions regarding this report.

Sincerely,

IEA, INC.


Amy Satterfield, CPPM I
Director of Business Development


Karen Weiblen
EHS/IEQ Consultant

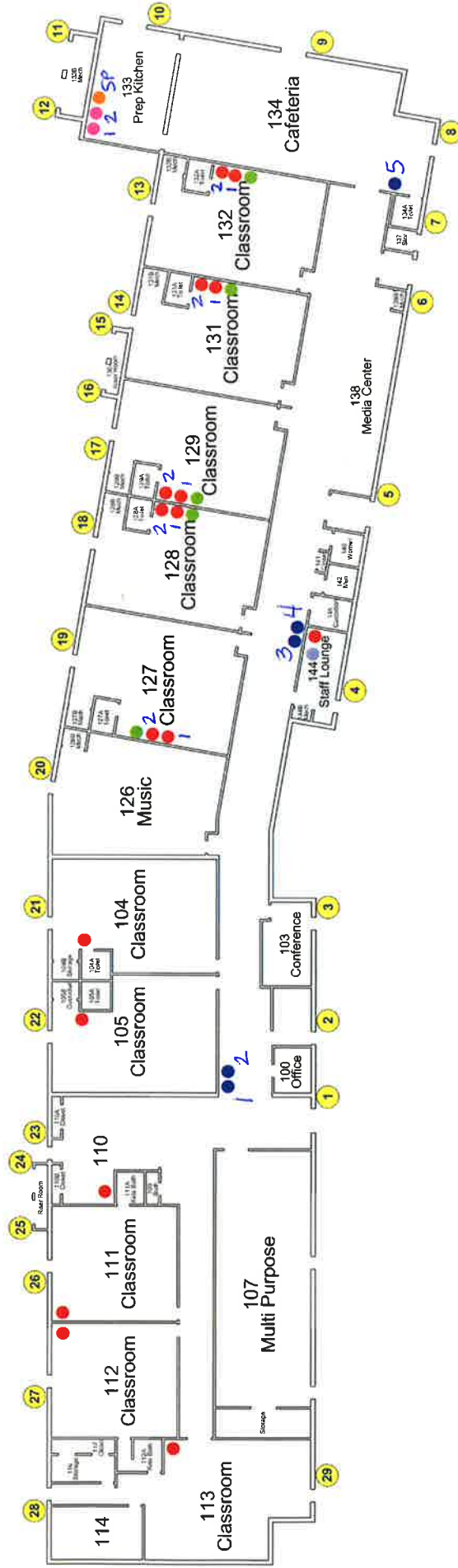
Enclosure

cc: Damien Nelson, Safety & Security

Appendix A
Site Map/Drawing

LEGEND

- SINK (17)
- KITCHEN SINK (2)
- KITCHEN SPRAYER (1)
- DRINKING FOUNTAIN (5)
- WATER COOLER (5)
- INLINE HOT/COLD DISPENSER (1)



Appendix B

Laboratory Testing Report

MINNESOTA VALLEY TESTING LABORATORIES, INC.

MVTL

1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724
1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885
www.mvttl.com

MEMBER
ACIL

Report Date: 24 Oct 2016

HEIDI SOLBERG
IEA/BROOKLYN PARK
9201 W BDWY STE #600
BROOKLYN PARK MN 55445

Work Order #: 12-14666
Account #: 002190
Purchase Order #: 201610819

Date Received: 22 Sep 2016
Date Sampled: 22 Sep 2016
Temperature at Receipt: 20.1C

PROJECT NAME: LIBERTY RIDGE ANNEX
PROJECT NUMBER: 201610819

LAB NUMBER	SAMPLE DESCRIPTION	LEAD RESULTS	MCL	DATE ANALYZED	ANALYST
16-A50822	09222016LRA-1 KITCHEN SINK #1	2.95 ug/L	15.0	15 Oct 16	RMV
16-A50823	09222016LRA-2 KITCHEN SINK #2	2.03 ug/L	15.0	15 Oct 16	RMV
16-A50824	09222016LRA-3 KITCHEN SPRAYER	< 0.5 ug/L	15.0	15 Oct 16	RMV
16-A50825	09222016LRA-4 WATER COOLER #1	< 0.5 ug/L	15.0	15 Oct 16	RMV
16-A50826	09222016LRA-5 WATER COOLER #2	< 0.5 ug/L	15.0	15 Oct 16	RMV
16-A50827	09222016LRA-6 WATER COOLER #3	< 0.5 ug/L	15.0	14 Oct 16	RMV
16-A50828	09222016LRA-7 WATER COOLER #4	< 0.5 ug/L	15.0	14 Oct 16	RMV
16-A50829	09222016LRA-8 WATER COOLER #5	< 0.5 ug/L	15.0	14 Oct 16	RMV
16-A50830	09222016LRA-9 SINK 104	2.66 ug/L	15.0	14 Oct 16	RMV
16-A50831	09222016LRA-10 SINK 105	2.48 ug/L	15.0	14 Oct 16	RMV
16-A50832	09222016LRA-11 SINK 110	2.41 ug/L	15.0	14 Oct 16	RMV
16-A50833	09222016LRA-12 SINK 111	< 0.5 ug/L	15.0	14 Oct 16	RMV
16-A50834	09222016LRA-13 SINK 112	6.01 ug/L	15.0	14 Oct 16	RMV

Approved by: 
Dan O'Connell, Asst. Chemistry Laboratory Manager New Ulm, MN

Analyses performed under our Minnesota Department of Health Accreditation conform to the current TNI standards. The reporting limit was elevated for any analyte requiring a dilution as coded below:
@ = Due to sample matrix # = Due to concentration of other analytes
! = Due to sample quantity + = Due to internal standard response
CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

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16-A50835	09222016LRA-14 SINK 113	0.78 ug/L	15.0	14 Oct 16	RMV
16-A50836	09222016LRA-15 SINK STAFF LOUNGE	< 0.5 ug/L	15.0	14 Oct 16	RMV
16-A50837	09222016LRA-16 INLINE COOLER 144	< 0.5 ug/L	15.0	15 Oct 16	RMV
16-A50838	09222016LRA-17 DF 127	0.63 ug/L	15.0	15 Oct 16	RMV
16-A50839	09222016LRA-18 SINK #1 127	2.15 ug/L	15.0	15 Oct 16	RMV
16-A50840	09222016LRA-19 SINK #2 127	1.39 ug/L	15.0	15 Oct 16	RMV
16-A50841	09222016LRA-20 DF 128	1.33 ug/L	15.0	15 Oct 16	RMV
16-A50842	09222016LRA-21 SINK #1 RM 128	3.64 ug/L	15.0	15 Oct 16	RMV
16-A50843	09222016LRA-22 SINK #2 RM 128	0.90 ug/L	15.0	15 Oct 16	RMV
16-A50844	09222016LRA-23 DF 129	1.37 ug/L	15.0	15 Oct 16	RMV
16-A50845	09222016LRA-24 SINK #1 129	0.79 ug/L	15.0	15 Oct 16	RMV
16-A50846	09222016LRA-25 SINK #2 129	2.03 ug/L	15.0	15 Oct 16	RMV
16-A50847	09222016LRA-26 DF 131	1.01 ug/L	15.0	15 Oct 16	RMV

Approved by: 
Dan O'Connell, Asst. Chemistry Laboratory Manager New Ulm, MN
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16-A50848	09222016LRA-27 SINK #1 131	1.14 ug/L	15.0	15 Oct 16	RMV
16-A50849	09222016LRA-28 SINK #2 131	2.58 ug/L	15.0	15 Oct 16	RMV
16-A50850	09222016LRA-29 DF 132	0.59 ug/L	15.0	15 Oct 16	RMV
16-A50851	09222016LRA-30 SINK #1 132	0.84 ug/L	15.0	15 Oct 16	RMV
16-A50852	09222016LRA-31 SINK #2 132	3.60 ug/L	15.0	15 Oct 16	RMV

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