July 20, 2018



Paul Besel Grand Meadow Public School 710 4<sup>th</sup> Ave. NE Grand Meadow, MN 55936

RE: Lead-in-Water First Draw – Initial Testing IEA Project # 201810628

Dear Mr. Besel:

At the request of Grand Meadow School, IEA collected a total of 12 water samples from identified potable water sources on June 19, 2018 for lead analyses from the Grand Meadow Public School New Addition.

The purpose of the sampling is to document lead content in the sampled locations and to compare to the, Environmental Protection Agency (EPA) action level of 20 parts per billion (ppb).

#### INTRODUCTION

Minnesota Statute 121A.335 requires public school buildings serving kindergarten through grade 12 to test for lead in potable water fixtures every 5 years. The 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance (2006) and the Lead Contamination Control Act (LCCA) of 1988 were created by the Environmental Protection Agency (EPA) to identify and reduce lead in drinking water. Lead is a metal that usually enters drinking water through the distribution system, including pipes, solders, faucets, and valves. Lead content in water may increase when the water is allowed to sit undisturbed in the system. Exposure to lead is a significant health concern. When the lead concentration exceeds the EPA's action level for schools of 20 parts per billion (ppb) in a specific fixture, the EPA and MDH recommend taking that fixture out of service until lead content is reduced.

#### **METHODOLOGY**

IEA collected 12 first-draw samples of approximately 250 milliliters (ml) of water. "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. Grand Meadow Public School followed current EPA protocol, which calls for flushing identified locations for 2-3 minutes, 8-18 hours prior to sampling.

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.

#### **RESULTS & DISCUSSION**

The lead-in-water sampling results ranged from below the level of detection (<0.5 ppb) to 1.92 ppb. Thus, lead content was below the EPA action level of 20 ppb and the MDH action level of 2 ppb. The laboratory reports are provided in Appendix A. Laboratory results are reported in micrograms per liter ( $\mu$ g/L) which is equivalent to parts per billion (ppb).

#### 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. Per Minnesota Statutes, section 121A.335, a school district that has tested its buildings for the presence of lead shall make the results of the testing available to the public for review and must notify parents of the availability of the information.

#### **GENERAL CONDITIONS**

The analysis and opinions expressed in this report are based upon water testing at Grand Meadow Public School at the indicated locations. 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 # 7209 dated June 13, 2018 regarding lead-in-water sampling at Grand Meadow Public School New Addition 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.

Scott Stockdale Project Manager Natalie Eskew Project Manager

Reviewed by:

Enc.

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# Appendix A

Laboratory Testing Report

# MINNESOTA VALLEY TESTING LABORATORIES, INC.

MVTL

Report Date: 13 Jul 2018

Work Order #: 12-10439

Account #: 002190

Purchase Order #: 201810628

Date Received: 20 Jun 2018 Date Sampled: 19 Jun 2018

Time Sampled: 6:00

Temperature at Receipt: 21.8C

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

PROJECT NAME: NEW ADDITION PROJECT NUMBER: 201810628

LAB NUMBER	SAMPLE DESCRIPTION	LEAD RESULTS	MCL	DATE ANALYZED	ANALYST
18-A30764	061918GM-01 ROOM 101 SINK	< 0.5 ug/L	15.0	11 Jul 18	RMV
18-A30765	061918GM-02 ROOM 102 SINK	< 0.5 ug/L	15.0	3 Jul 18	RMV
18-A30766	061918GM-03 BATHROOMS ACROSS FROM ELEVATOR TALL WC	< 0.5 ug/L	15.0	11 Jul 18	RMV
18-A30767	061918GM-04 BATHROOMS ACROSS FROM ELEVATOR SHORT WC	< 0.5 ug/L	15.0	11 Jul 18	RMV
18-A30768	061918GM-05 BY ROOM 207 WRESTLING WC	< 0.5 ug/L	15.0	11 Jul 18	RMV
18-A30769	061918GM-06 ROOM 108 SINK	0.85 ug/L	15.0	11 Jul 18	RMV
18-A30770	061918GM-07 ROOM 109 SINK	0.58 ug/L	15.0	11 Jul 18	RMV
18-A30771	061918GM-08 CONCESSION SINK WEST RIGHT SINK	0.73 ug/L	15.0	11 Jul 18	RMV
18-A30772	061918GM-09 CONCESSION SINK EAST LEFT SINK	0.60 ug/L	15.0	11 Jul 18	RMV
18-A30773	061918GM-10 ROOM 124 SINK	1.92 ug/L	15.0	11 Jul 18	RMV

Dan O'Connell

Approved by:

David Smahel

Chemistry Laboratory Managers 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 # = Di

# = Due to concentration of other analytes

! = Due to sample quantity  $\hspace{1cm}$  + = Due to internal standard response

CERTIFICATION: MN LAB # 027-015-125 WI LAB # 999447680 ND MICRO # 1013-M ND WW/DW # R-040

## MININESUIA

### MINNESOTA VALLEY TESTING LABORATORIES, INC.

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 MEMBER

1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885

www.mvtl.com

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**ACIL** 

Date Received: 20 Jun 2018 Date Sampled: 19 Jun 2018

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PROJECT NAME: NEW ADDITION PROJECT NUMBER: 201810628

BROOKLYN PARK MN 55445

HEIDI SOLBERG

IEA/BROOKLYN PARK 9201 W BDWY STE #600

LAB NUMBER	SAMPLE DESCRIPTION	LEAD RESULTS	MCL	DATE ANALYZED	ANALYST
18-A30774	061918GM-11 OUTSIDE WEIGHT ROOM TALL WC	< 0.5 ug/L	15.0	11 Jul 18	RMV
18-A30775	061918GM-12 OUTSIDE WEIGHT ROOM SHORT WC	< 0.5 ug/L	15.0	11 Jul 18	RMV

Approved by: R Dan Com

Dan O'Connell David Smahel

Chemistry Laboratory Managers New Ulm, MN

Page: 2
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