

February 22, 2016

Portland Public Schools Andy Fridley 501 N. Dixon Street Portland, Oregon 97227

Re: Air and Soil Sample Report

Harriet Tubman School Portland, Oregon

PBS Project No. 6500.638

Dear Mr. Fridley:

On Friday, February 12, 2016, PBS Engineering and Environmental, Inc. (PBS) sampled air and soil at the Harriet Tubman Middle School located at 2231 N. Flint Avenue, Portland, Oregon.

Air samples were collected from two separate locations including the main office and room 218 (a science classroom located at the southwest corner of the building). Air samples were collected utilizing high-volume vacuum pumps fitted to 37-millimeter filter cassettes. Samples were collected from a height of approximately 4 feet above ground level. Air samples were collected at a calibrated flow rate of 10 L/minute for a period of approximately 24 hours each. An additional bulk soil sample was taken at the playground at the school as well.

The air and soil samples were submitted to RJ Lee Group Laboratories in Monroeville, Pennsylvania using ICP-MS analysis methods to detect lowest possible concentrations of arsenic and cadmium

There were no detectable levels of either cadmium or arsenic reported for any of the air and soil samples. For more detailed information regarding these lab reports, please refer to the attached laboratory reports.

Sincerely,

PBS Engineering and Environmental Inc.

Douglas Hancock CIH CSP

Attachment: Laboratory Results

DH:db





## LABORATORY REPORT

PBS Engineering & Environmental 4412 Southwest Corbett Ave. Portland, OR 97239

Attn: Emily Bahus Phone: 971-334-5339

Email: emily.bahus@pbsenv.com

RJ Lee Group Job No.: PA160220160007 Samples Received: February 16, 2016 Report Date: February 18, 2016

Client Project: 6500.638 Purchase Order No.: N/A

Matrix: Air and Emissions

Prep/Analysis: NIOSH 7300-mod / NIOSH 7300 (ICPMS)-PA

	Client Sample ID RJ Lee Group ID	Sampling Date	Sample Volume (L) Sampling Time (min.)	Analyte	Sample Concentration (µg/filter)	Minimum Reporting Limit (µg/filter)	Sample Concentration µg/m³	Minimum Reporting Limit (µg/m³)	Analysis Date	Q
Office		02/12/2016	14710 L	Arsenic	< 0.025	0.025	< 0.0017	0.0017	02/17/2016	A
	PA160220160007-001		N/A							
Office		02/12/2016	14710 L	Cadmium	< 0.025	0.025	< 0.0017	0.0017	02/17/2016	A
	PA160220160007-001		N/A							
218		02/12/2016	14740 L	Arsenic	< 0.025	0.025	< 0.0017	0.0017	02/17/2016	Α
	PA160220160007-002		N/A							
218		02/12/2016	14740 L	Cadmium	< 0.025	0.025	< 0.0017	0.0017	02/17/2016	A
	PA160220160007-002		N/A							

## Comments:

Report Qualifiers (Q):

H = Holding times for preparation or analysis exceeded A = AIHA-LAP, LLC Accredited (Lab ID 100364)

E = Value above highest calibration standard

*J* = *Value below lowest calibration standard but above MDL* (Method Detection Limit)

L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits

B = Analyte detected in the associated Method Blank

S = Spike Recovery outside accepted limits

R = RPD (relative percent difference) outside accepted limits

D = RL (reporting limit verification) outside accepted limits

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Results have not been blank corrected unless otherwise noted. Samples were received in good condition unless otherwise noted. All QC samples are within acceptable established limits unless otherwise noted in the comments section of the report and/or with the appropriate flags under the report qualifiers (Q) column. Quality Control data is available upon request.

> Philip Grindle Philip Grindle Laboratory Supervisor



## LABORATORY REPORT

PBS Engineering & Environmental 4412 Southwest Corbett Ave. Portland, OR 97239

Attn: Emily Bahus Phone: 971-334-5339

Email: emily.bahus@pbsenv.com

RJ Lee Group Job No.: PA160220160008 Samples Received: February 16, 2016 Report Date: February 18, 2016 Client Project: 6500.638

Matrix: Solid

Purchase Order No.: N/A

Prep/Analysis: EPA 3050B / EPA 6010C

	RJ Lee Group ID	Sampling Date	_	Sample Concentration		Minimum Reporting Limit			
Client Sample ID			Analyte	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	Q
S-001	PA160220160008-001	02/12/2016	Arsenic	< 0.00049	< 4.9	0.00049	4.9	02/17/2016	PCN
S-001	PA160220160008-001	02/12/2016	Cadmium	< 0.00010	< 1.0	0.00010	1.0	02/17/2016	PCN

## Comments:

Report Qualifiers (Q).

P: PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)

 ${m N}: NY\; ELAP\; Accredited\; (NY\; ELAP\; Lab\; Code\; 10884)$ 

C: CA ELAP Accredited (CA ELAP Certificate 1970)

A: AIHA-LAP, LLC Accredited (Lab ID 100364)

 $E = Value \ above \ highest \ calibration \ standard$ 

*J* = Value below lowest calibration standard but above MDL (Method Detection Limit)

L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery

outside accepted recovery limits

H = Holding times for preparation or analysis exceeded

- : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accredidations

 $B = Analyte\ detected\ in\ the\ associated\ Method\ Blank$ 

S = Spike Recovery outside accepted limits

R = RPD (relative percent difference) outside accepted limits

D = RL (reporting limit verification) outside accepted limits

NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropiate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle
Philip Grindle