



MEMO

Date: April 22, 2019
To: Ms. Trish Birmingham, School Business Administrator
From: James Eberts
Re: Franklin Township Schools – Mercury Air Sampling Summary

Comments:

Ms. Birmingham,

Per the District's request, Epic Environmental recently performed bulk sampling of the rubberized floors at Janvier, Main Road, and Reutter Elementary Schools to test for the presence of mercury. Results of the sampling confirmed the presence of mercury above the currently recognized limit of 1 mg/Kg in all three schools.

Upon learning of the presence of mercury in the flooring, the District authorized Epic Environmental to perform air sampling to measure mercury vapor concentrations that may be generated from the slow degradation of mercury in the flooring.

Representative air samples were collected in the Janvier All Purpose Room, Main Road Gymnasium, and Reutter Gymnasium. Ventilation and temperature were that of a typical school day. Samples were collected at a height of 3' above the floor, representing the breathing zone of preschool and elementary school students. Results were compared to the action level criteria recommended by the New Jersey Department of Health of 0.8 $\mu\text{g}/\text{m}^3$. This limit is protective of preschool-aged children.

Sample results are summarized below:

Janvier APR	0.29 – 0.31 $\mu\text{g}/\text{m}^3$
Main Road Gym	< 0.12 $\mu\text{g}/\text{m}^3$
Reutter Gym	0.15 – 0.20 $\mu\text{g}/\text{m}^3$

All results were well below the 0.8 $\mu\text{g}/\text{m}^3$ NJDOH criteria. These results indicate that under normal operating and occupancy conditions, airborne mercury concentrations are not at a level that will pose neither a short term nor long term exposure risk.

Epic does recommend performing a "worst case" evaluation to measure airborne mercury concentrations at high temperatures and no ventilation to determine if precautions are necessary should the ventilation fail during the summer months.

A final report will be issued that will detail sampling procedures, results, and recommendations.

James Eberts
Epic Environmental Services, LLC



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn: **James Eberts**
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1930 Brown Road
Newfield, NJ 08344
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Fax: (856) 205-0413

4/19/2019

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/17/2019. The results are tabulated on the attached data pages for the following client designated project:

Franklin Twp BOE Mercury - Janvier

The reference number for these samples is EMSL Order #011904420. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry Laboratory
Director



AIHA-LAP, LLC-IHLAP Lab # 100194
NELAP Certification: NJ 03036; NY 10872

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the AIHA, unless specifically indicated. The final results are not field blank corrected. The laboratory is not responsible for final results calculated using air volumes that have been provided by non-laboratory personnel. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

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EMSL Order: 011904420
 CustomerID: EPIC62
 CustomerPO: 19-2118
 ProjectID:

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Newfield, NJ 08344

Phone: (856) 205-1077
 Fax: (856) 205-0413
 Received: 04/17/19 3:45 PM

Project: Franklin Twp BOE Mercury - Janvier

Analytical Results

Client Sample Description	JAN-01	Collected:	4/17/2019	Lab ID:	011904420-0001		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
3ft by stage							
METALS							
NIOSH 6009	Mercury	0.00029	0.00011 mg/m ³	4/19/2019	PV	4/19/2019	PV
Client Sample Description	JAN-02	Collected:	4/17/2019	Lab ID:	011904420-0002		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
5ft by stage							
METALS							
NIOSH 6009	Mercury	0.00029	0.00011 mg/m ³	4/19/2019	PV	4/19/2019	PV
Client Sample Description	JAN-03	Collected:	4/17/2019	Lab ID:	011904420-0003		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
3ft opposite wall from stage							
METALS							
NIOSH 6009	Mercury	0.00031	0.00011 mg/m ³	4/19/2019	PV	4/19/2019	PV
Client Sample Description	JAN-04	Collected:	4/17/2019	Lab ID:	011904420-0004		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
3ft luchen by APR							
METALS							
NIOSH 6009	Mercury	0.00024	0.00011 mg/m ³	4/19/2019	PV	4/19/2019	PV
Client Sample Description	JAN-05	Collected:	4/17/2019	Lab ID:	011904420-0005		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
3ft kitchen outside exit							
METALS							
NIOSH 6009	Mercury	ND	0.00011 mg/m ³	4/19/2019	PV	4/19/2019	PV
Client Sample Description	FB-01	Collected:	4/17/2019	Lab ID:	011904420-0006		
Method	Parameter	Result	RL Units	Prep Date	Analyst	Analysis Date	Analyst
Field Blank 1							
METALS							

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 Received: 04/17/19 3:45 PM

Project: Franklin Twp BOE Mercury - Janvier

Analytical Results

Client Sample Description FB-01
Field Blank 1
Collected: 4/17/2019
Lab ID: 011904420-0006

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	ND		0.000010 mg/tube	4/19/2019	PV	4/19/2019	PV
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Client Sample Description FB-02
Field Blank 1
Collected: 4/17/2019
Lab ID: 011904420-0007

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	ND		0.000010 mg/tube	4/19/2019	PV	4/19/2019	PV
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Definitions:

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution



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4/22/2019

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The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/19/2019. The results are tabulated on the attached data pages for the following client designated project:

Franklin Twp BOE Mercury - Main Road

The reference number for these samples is EMSL Order #011904527. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry Laboratory
Director



AIHA-LAP, LLC-IHLAP Lab # 100194
NELAP Certification: NJ 03036; NY 10872

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EMSL Order: 011904527

CustomerID: EPIC62

CustomerPO: 19-2118

ProjectID:

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1930 Brown Road
Newfield, NJ 08344

Phone: (856) 205-1077
 Fax: (856) 205-0413
 Received: 04/19/19 9:00 AM

Project: Franklin Twp BOE Mercury - Main Road

Analytical Results

Client Sample Description	MR-1	Collected:	Lab ID:	011904527-0001				
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
Wall opposite of gym office								
METALS								
NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
Client Sample Description	MR-3	Collected:	Lab ID:	011904527-0002				
Wall closest to gym office								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
Client Sample Description	MR-2	Collected:	Lab ID:	011904527-0003				
Wall opposite of gym office								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
Client Sample Description	MR-4	Collected:	Lab ID:	011904527-0004				
Gym office								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
Client Sample Description	MR-5	Collected:	Lab ID:	011904527-0005				
Outside of gym								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
Client Sample Description	FB-01	Collected:	Lab ID:	011904527-0006				
Field Blank 1								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								



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EMSL Order: 011904527

CustomerID: EPIC62

CustomerPO: 19-2118

ProjectID:

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Phone: (856) 205-1077
Fax: (856) 205-0413
Received: 04/19/19 9:00 AM

Project: Franklin Twp BOE Mercury - Main Road

Analytical Results

Client Sample Description FB-01
Field Blank 1 *Collected:* *Lab ID:* 011904527-0006

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.000010	mg/tube	4/22/2019	PV	4/22/2019	PV

Client Sample Description FB-02
Field Blank 1 *Collected:* *Lab ID:* 011904527-0007

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.000010	mg/tube	4/22/2019	PV	4/22/2019	PV

Definitions:

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4/22/2019

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The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/19/2019. The results are tabulated on the attached data pages for the following client designated project:

Franklin Twp BOE Mercury - Reutter

The reference number for these samples is EMSL Order #011904529. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry Laboratory
Director



AIHA-LAP, LLC-IHLAP Lab # 100194
NELAP Certification: NJ 03036; NY 10872

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CustomerPO: 19-2118

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 Received: 04/19/19 9:00 AM

Project: Franklin Twp BOE Mercury - Reutter

Analytical Results

Client Sample Description REV-01
3ft gym left of ent. **Collected:** **Lab ID:** 011904529-0001

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	0.00019	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
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Client Sample Description REV-02
5ft gym left of ent. **Collected:** **Lab ID:** 011904529-0002

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	0.00015	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
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Client Sample Description REV-03
2ft gym opposite of ent. **Collected:** **Lab ID:** 011904529-0003

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	0.00020	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
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Client Sample Description REV-04
3ft gym office **Collected:** **Lab ID:** 011904529-0004

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	0.00016	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
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Client Sample Description REV-05
3ft gym outside exit **Collected:** **Lab ID:** 011904529-0005

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

NIOSH 6009	Mercury	ND	0.00013	mg/m ³	4/22/2019	PV	4/22/2019	PV
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Client Sample Description FB-01
Field Blank 1 **Collected:** **Lab ID:** 011904529-0006

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
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METALS

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Phone: (856) 205-1077
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 Received: 04/19/19 9:00 AM

Project: Franklin Twp BOE Mercury - Reutter

Analytical Results

Client Sample Description FB-01 **Collected:** **Lab ID:** 011904529-0006
 Field Blank 1

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.000010	mg/tube	4/22/2019	PV	4/22/2019	PV

Client Sample Description FB-02 **Collected:** **Lab ID:** 011904529-0007
 Field Blank 1

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
METALS								
NIOSH 6009	Mercury	ND	0.000010	mg/tube	4/22/2019	PV	4/22/2019	PV

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 RL - Reporting Limit (Analytical)
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