Soil and Land Use Technology, Inc.

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May 3, 2019

Department of General Services
Office of Safety and Health, Facilities Division
2000 14th Street NW, 5th Floor
Washington, DC 20009

Subject: Lead Survey
Janney Elementary School
4130 Albemarle Street NW
Washington, DC 20016

On May 2, 2019, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted a lead survey on a pour in place (PIP) rubber surface of the playground at Janney Elementary School, a property maintained by the Department of General Services (DGS), located at 4130 Albemarle Street NW, Washington, DC 20016. The survey was conducted in response to results documented within *Report on lead in pour in place (PIP) rubber playground at Janney Elementary School* produced by Ecology Center; dated May 2, 2019, recently shared with the Department. The intent of this survey is to verify the presence of lead within the surfacing material.

Background

Janney Elementary School was modernized in 2011. The subject playground was constructed in conjunction with that modernization based on aerials within that timeframe. The playground is located south of the school, adjacent to a synthetic turf soccer field and paved parking area.

Methodology

The testing for lead content was performed using an X-Ray Fluorescence (XRF) Spectrum Analyzer (Serial Number 18594). The XRF detects lead in the field by reading fluorescence emanating from a surface when exposed to small amounts of radiation. XRF readings are in milligrams per square centimeter (mg/cm^2), a mass per area unit. This methodology is considered for screening purposes only and should be followed by laboratory analysis.

Prior to commencement of XRF analysis, three calibration readings were collected using field standards with known lead concentrations. The composition of the surfacing components (e.g., rubber, synthetic, etc.) was determined and logged into the XRF

analyzer. The RMD LPA1 automatically performed substrate correction to ensure that the substrate composition did not provide false readings. At the completion of XRFs analysis, three additional calibration readings of standards with known lead concentrations were collected to ensure that the device was still accurate. The XRF generated a report detailing the materials sampled, the locations, the substrate, and the lead content.

The screening included 12 XRF readings, including 6 calibration checks to ensure that the instrument is within acceptable calibration perimeters. The XRF sample results are tabulated below. Attachment A illustrates the locations of the screenings.

Lead Survey Results (XRF Data)

The screening included 12 XRF readings, including 6 calibration checks to ensure that the instrument is within acceptable calibration perimeters.

Table 1. XRF results

Xrf Reading #	Component	Substrate	Condition	Color	Location	Results	Lead (Mg/Cm²)
1	Calibrate					Negative	0.9
2	Calibrate					Positive	1.1
3	Calibrate					Positive	1.0
4	Pour in Place	Rubber	Fair	Black/Green	Playground next to soccer field	Negative	0.0
5	Pour in Place	Rubber	Fair	Black/Green	Playground next to soccer field	Negative	0.0
6	Pour in Place	Rubber	Fair	Black/Green	Playground next to soccer field	Negative	0.0
7	Soccer Field Surface	Synthetic Grass	Good	Green	Soccer Field	Negative	0.0
8	Soccer Field Surface	Synthetic Grass	Good	Green	Soccer Field	Negative	0.0
9	Soccer Field Surface	Synthetic Grass	Good	Green	Soccer Field	Negative	0.0
10	Calibrate					Positive	1.1
11	Calibrate					Positive	1.2
12	Calibrate					Positive	1.0

Findings and Conclusions

A total of six XRF readings were taken of the Playground PIP and the adjacent synthetic field. All the surfaces were negative for the presence of lead. Six (6) bulk samples of the Playground PIP and the Synthetic Turf have been submitted for lead analyzation.

Sincerely,

Chaminda Jayatilake, PE, CIH, CSP, CHMM
Certified Industrial Hygienist
Soil and Land Use Technology Inc. (SaLUT)

Attachments

Attachment A – Screening Locations

Attachment A

Screening Locations

Please note screening locations 1,2,3,10,11, and 12 were calibration