Limited Hazardous Building Materials Assessment Report Former Woonsocket Middle School

357 Park Place Woonsocket, RI

Rhode Island Department of Environmental Management

June 2013



317 Iron Horse Way, Suite 204 Providence, RI 02908



June 4, 2013

Ms. Cynthia Gianfrancesco Principal Environmental Scientist Rhode Island Department of Environmental Management 235 Promenade Street Providence, RI 02908

Re: Limited Hazardous Building Materials Assessment Report Former Woonsocket Middle School, Woonsocket, Rhode Island Fuss & O'Neill Project No. 20100607.A20

Dear Ms. Gianfrancesco:

The purpose of this letter is to present the enclosed *Hazardous Building Materials Assessment Report* for the former Woonsocket Middle School located at 357 Park Place in Woonsocket, Rhode Island. This hazardous building materials assessment was conducted on behalf of the Rhode Island Department of Environmental Management (RIDEM) at the request of the City of Woonsocket (the City), under the Targeted Brownfield Assessment program. The objective of this assessment was to assist the City in developing abatement strategy and cost estimate for hazardous building materials abatement activities warranted as part of future renovation of the 484,546-square foot, former school building.

The field and laboratory assessment activities detailed in the attached report were implemented in accordance with a USEPA-approved site-specific *Quality Assurance Project Plan (QAPP)* Addendum prepared in accordance with the USEPA Brownfields Quality Assurance Project Plan Guidance Document.

Please contact the undersigned if you have any questions or require additional information regarding this assessment.

Sincerely,

Patrick J. Dowling, CPG Senior Project Manager

John A. Chambers, PG, LSI Vice President

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Attachments: Limited Hazardous Building Materials Assessment Report



Table of Contents

Hazardous Building Materials Assessment Report Former Woonsocket Middle School RIDEM

1	ntroduction	1
2	Asbestos Assessment.1Results of Asbestos Analysis by PLM2Results of Asbestos Analysis by TEM.3Asbestos Analysis Conclusions	. 3 11
3	ead-Based Paint Determination11Lead-Based Paint Screening Results12Lead-Based Paint Screening Conclusions1	15
4	Waste Characterization for Lead1.1Lead Waste Characterization Sampling1.2Lead Waste Characterization Results2.3Lead Waste Characterization Conclusion2	19 20
5	ead Paint Chip Analysis2.1Lead Paint Chip Sampling.2Lead Paint Chip Results.2Lead Paint Chip Results	21
6	PCB Bulk Product and Substrate Assessment 2 0.1 Background 2 0.2 Initial PCB Bulk Product Sampling 2 0.3 Supplemental PCB Sampling 2 0.3.1 Supplemental PCB Bulk Product Sampling 2 0.3.2 Supplemental PCB Substrate Sampling 2 0.4 PCB Assessment Conclusions 2	22 23 23 26 26 27
7	Data Verification and Usability Assessment21Data Verification22Detection Limits and Applicable Regulatory Criteria33Data Usability3	29 30

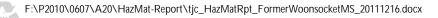




Table of Contents

Hazardous Building Materials Assessment Report Former Woonsocket Middle School RIDEM

	Page
Asbestos Containing Materials and PLM Results	3
Non-Asbestos Containing Materials	6
Materials Analyzed By TEM	11
Estimated Quantities of Asbestos Containing Materials	13
Lead XRF Screening Results	15
TCLP Lead Waste Characterization Results	20
Paint Chip Sample Lead Results	21
PCB Bulk Product Sample Results	24
Bulk Samples Exhibiting Poor Surrogate Recoveries	25
Supplemental PCB Bulk Product Sample Results	26
Substrate Analytical Results	28
Estimated Costs for Hazardous Materials Abatement	Appendix H
	Asbestos Containing Materials and PLM Results Non-Asbestos Containing Materials Materials Analyzed By TEM Estimated Quantities of Asbestos Containing Materials Lead XRF Screening Results TCLP Lead Waste Characterization Results Paint Chip Sample Lead Results PCB Bulk Product Sample Results Bulk Samples Exhibiting Poor Surrogate Recoveries Supplemental PCB Bulk Product Sample Results Substrate Analytical Results

Appendices

- A Asbestos Inspector Licenses and Certifications
- B Asbestos PLM Laboratory Analytical Results
- C Asbestos TEM Laboratory Analytical Results
- D XRF Lead Testing Field Data Sheets
- E TCLP Lead Laboratory Analytical Results and Data Verification Documentation
- F Lead Paint Chip Laboratory Analytical Results and Data Verification Documentation
- G PCB Laboratory Analytical Results and Data Verification Documentation
- H Hazardous Materials Abatement Cost Estimate
- I Facility Floor Plan



1 Introduction

From July 6, 2011 to August 18, 2011, Fuss & O'Neill EnviroScience, LLC (Fuss & O'Neill) representatives Mr. Dustin Diedricksen, Mr. Jonathan Hand, Mr. Stephen Moulton, and Mr. John Coletti performed hazardous building material assessment activities at the former Woonsocket Middle School located at 357 Park Place in Woonsocket, Rhode Island (the site). Additional follow-up sampling was conducted by Mr. Diedricksen and Mr. Steven Hubbs of Fuss & O'Neill on June 11, 2012. The assessment included a limited asbestos assessment, lead-based paint determination, lead paint chip sample analysis, toxic characteristic leaching procedure (TCLP) waste characterization, and polychlorinated biphenyl (PCB) building material assessment. Copies of asbestos inspector licenses for personnel involved in this assessment are included in *Appendix A*. Facility plans, depicting the rooms and areas on each of the four floors of the school building which correspond to the sampling locations discussed in this report is included as *Appendix I*.

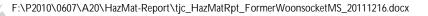
This hazardous building materials assessment was performed to identify and quantify possible hazardous building materials that may affect proposed future renovation of the school building. A definitive renovation or demolition plan was not available to Fuss & O'Neill at the time of this assessment. The work documented herein was performed on behalf of the Rhode Island Department of Environmental Management (RIDEM) for the City of Woonsocket, (the City) in accordance with written scopes of work detailed in a site-specific *Quality Assurance Project Plan Addendum (QAPP Addendum-Revision 1.0*) and site-specific *QAPP Modification* prepared by Fuss & O'Neill and approved by the United States Environmental Protection Agency (USEPA) on May 18, 2011 and May 11, 2012, respectively.

2 Asbestos Assessment

A property owner must ensure that performance of a thorough inspection for asbestos-containing materials (ACM) is conducted prior to disturbance of materials potentially containing asbestos during renovation or demolition. This responsibility is a requirement of the USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Regulation 40 CFR Part 61, Sub-part M, and the Rhode Island Department of Health (RIDOH) regulation R23-24.5-A5b.

This requirement includes friable, non-friable Category I, and non-friable Category II ACM. These terms are defined below:

- Friable ACM is defined as material that contains greater than 1 % asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category I Non-friable ACM refers to specific materials, including packings, gaskets, resilient floor coverings, and asphalt roofing products, which contain greater than 1% asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- A Category II non-friable ACM refers to any non-friable materials, excluding Category I materials, which contain greater than 1%asbestos that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.





During the assessment documented herein, suspect ACM were separated into three USEPA-defined categories. These categories are:

- Thermal System Insulation (TSI) Includes all materials used to prevent heat loss or gain, or water condensation on mechanical systems. Examples of TSI are pipe insulation, boiler insulation, duct insulation, and mudded insulation on pipe fittings.
- Surfacing (SURF) ACM Includes all ACM that is sprayed, troweled, or otherwise applied to an existing surface. Surfacing ACM is commonly used for fireproofing, decorative, and acoustical applications.
- Miscellaneous (MISC) ACM Includes all ACM not categorized as thermal or surfacing ACM, such as linoleum, vinyl asbestos flooring, and ceiling tiles.

The USEPA recommends that representative samples of homogenous building materials be collected in a manner sufficient to determine asbestos content. The USEPA NESHAP regulation does not specifically identify a minimum number of samples to be collected, but, recommends the use of sampling protocols included in 40 CFR Part 763, Sub-Part E - Asbestos Containing Materials in Schools. RIDOH does specify a minimum number of samples in regulation 23-24.5-A5b which is consistent with the below-summarized protocol.

During the assessment documented herein, samples of suspect ACM were collected in accordance with USEPA recommendations and Asbestos Hazard Emergency Response Act (AHERA) and RIDOH protocols. These protocols include the following:

- 1. SURF materials, such as plaster and spray-on fireproofing, were collected in a randomly distributed manner representing each homogenous area based on the overall quantity, using the following sampling method:
 - a. Three samples collected from each homogenous area that is less than or equal to 1,000 square feet.
 - b. Five samples were collected from each homogenous area that is greater than 1,000 square feet but less than or equal to 5,000 square feet.
 - c. Seven samples collected from each homogenous area that is greater than 5,000 square feet.
- 2. TSI materials, such as pipe insulation and tank insulation, were collected in a randomly distributed manner representing each homogenous area. Three samples collected from each material. Also, a minimum of one sample of any patching materials applied to TSI was collected, as long as the patched area was less than six linear or square feet.
- 3. MISC materials, such as floor tile, gaskets, and construction mastics, were typically characterized by a minimum of two samples collected of each homogenous material type. Sampling was conducted



in a manner sufficient to determine asbestos content of the homogenous material as determined by the inspector. If materials identified were of minimal quantity, only a single sample was collected.

The inspectors collected samples, documented sampling activities, and prepared proper chains of custody for transfer of the samples to an accredited laboratory for analysis by Polarized Light Microscopy (PLM). Asbestos samples were submitted to ESS Laboratory (ESS) of Cranston, Rhode Island who, in turn, subcontracted the analysis to EMSL Laboratory (EMSL) of Westmont, New Jersey.

A total of 403 samples, representing 202 different homogeneous, suspect ACM were collected and submitted for laboratory analysis. These samples were initially analyzed by EMSL Laboratory for asbestos content by PLM, and the laboratory was directed to implement a "stop-positive" approach, during which they would suspend analysis of homogeneous sample materials upon confirmation that one sample of that homogeneous material was confirmed to contain asbestos at a concentration greater than 1%. This approach resulted in the analysis of 354 of the 403 samples originally requested for PLM analysis. Additionally, based on the PLM results, supplemental analyses were requested for verification purposes, as discussed further below.

The Fuss & O'Neill sampling locations, identification, and material type of each sample collected and analyzed by the laboratory are summarized in the ACM results *Tables 1* and *2* in *Section 2.1* below. It should be noted that roofing materials were excluded from the assessment documented herein, and to our knowledge have not been evaluated for the presence of ACM.

2.1 Results of Asbestos Analysis by PLM

The USEPA, Occupational Safety and Health Administration (OSHA), and RIDOH define any material that contains greater than one percent (>1%) asbestos, determined utilizing PLM, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos.

Any building materials at the site not listed in the following tables, including roofing materials, should be considered suspect ACM until sample results prove otherwise. Refer to *Appendix B* for Asbestos PLM sample results and applicable data validation materials.

Utilizing the USEPA protocol and criteria, the materials included in *Table 1* were determined to be ACM:

Sample	Material Type	Sample	Asbestos
Location	Material Type	No.	Content
Room 101	White Mottled with Brown 12x12 Floor Tile	818DD-05A	3% Chrysotile
Room 105	White with Brown Streaks 9x9 Floor Tile	818DD-08A	3% Chrysotile
Exterior Typical Window	Tan Caulking at Brick Molding (Wood) Concealed Beneath Aluminum Window Frames	818DD-14A	10% Chrysotile
Room 105	Black Sink Undercoat	818DD-16A	15% Chrysotile
Room 203	Mastic Associated with 2" Brown Vinyl Baseboard	818DD-18A	4.6% Chrysotile*

Table 1Asbestos Containing Materials and PLM Results





Sample Location	Material Type	Sample No.	Asbestos Content
Room 211	Mint Green with Cream and Green Splotches 9x9 Floor Tile	818DD-19A	3% Chrysotile
Room 203	Grey with White Washout 9x9 Floor Tile	818DD-20A	2% Chrysotile
Room 204	Greyish Green with White and Grey Streaks 9x9 Floor Tile	818DD-21A	2% Chrysotile
Room 202A	White with Tan and Grey Specks 9x9 Floor Tile	818DD-25A	5% Chrysotile
Room 207A/B	Blue 9x9 Floor Tile underneath Plywood Underlayment	818DD-28A	2% Chrysotile
Room 211	Beige with White and Brown Splotches 9x9 Floor Tile	818DD-29A	3% Chrysotile
Room 213	Light Brown with Cream and Brown Splotches 9x9 Floor Tile (Checkered)	818DD-30A	2% Chrysotile
Room 213	Dark Brown with Cream and Light Brown Splotches 9x9 Floor Tile (Checkered)	818DD-31A	2% Chrysotile
Room 220 (Office)	Green Mottled 12x12 Floor Tile	818DD-32A	5% Chrysotile
Room 216	Light Blue with White Streaks 9x9 Floor Tile	818DD-33A	2% Chrysotile
Room 218	Brown and Tan Washout 9x9 Floor Tile	818DD-36A	5% Chrysotile
Room 550	Tan/Brown Vinyl Floor Tile Beneath Plywood Underlayment	818DD-38A	2% Chrysotile
Room 553	Brown, Tan, and White Mottled 12x12 Floor Tile	818DD-39A	2% Chrysotile
Hallway Outside Room 554 - 550	Black with White and Green Streaks 9x9 Floor Tile	818DD-42A	4% Chrysotile
Room 502A	Pea Green with Dark Green and White Splotches 12x12 Floor Tile	818DD-46A	6% Chrysotile
Hall Outside Former HS Office	Grey Vinyl Floor Tile underneath Plywood Underlayment	76DD-50A	3.2% Anthophyllite*
Hall Outside Former HS Office	Blue Vinyl Floor Tile underneath Plywood Underlayment	76DD-51A	28.2% Chrysotile*
Former HS Main Office	Brownish Grey with White and Brown Specks 9x9 Floor Tile	76DD-57A	1.9% Chrysotile*
Library Annex	Grey Vinyl Floor Tile Beneath Plywood Underlayment	76DD-66A	8% Chrysotile
Corner Bathroom HS Office Hall	Grey with Pink and Green Splotches 9x9 Floor Tile	76DD-72A	5% Chrysotile
Rooms 350/353	Tan with White and Brown Splotches 12x12 Floor Tile (Checkered)	76DD-73A	5% Chrysotile
Rooms 350/353	Brown with Dark Brown and White Splotches 12x12 Floor Tile (Checkered)	76DD-74A	4% Chrysotile
Room 354	Green with White Splotches 12x12 Floor Tile (Checkered)	76DD-75A	5% Chrysotile
Room 354	Tan with White and Brown Splotches 12x12 Floor Tile (Checkered)	76DD-76A	8% Chrysotile
Room 356	Light Brown with White and Brown Splotches 12x12 Floor Tile (Checkered)	76DD-77A	8% Chrysotile
Room 356	Brown with White and Dark Brown Splotches 12x12 Floor Tile (Checkered)	76DD-78A	5% Chrysotile
Room 351 and 352	Grey with White Splotches 12x12 Floor Tile (Checkered)	76DD-79A	5% Chrysotile
Room 351 and 352	Dark Grey with White Streaks 12x12 Floor Tile (Checkered)	76DD-80A	5% Chrysotile
Room 317 – Partitioned Offices	Orange, Brown, and Tan Mottled 12x12 Floor Tile	77DD-87A	5% Chrysotile





Sample Location	Material Type	Sample No.	Asbestos Content
Projector Booth	Transite Panels	77DD-92A	30% Chrysotile
Room 405	Orange and Tan Mottled 12x12 Floor Tile (Bottom Layer)	711DD-107A	2% Chrysotile
Custodian Room Next to Room 461	Brown with White and Brown Specks 9x9 Floor Tile	711DD-112A	4% Chrysotile
Room 458	Green with White 9x9 Floor Tile	711DD113A	6% Chrysotile
Corridors at Classroom Wing	Tan Window Glazing Compound Associated with Doors	711DD-115A	3% Chrysotile
Room 461	Orange, Brown, and Tan Speckled 9x9 Floor Tile	711DD-116A	5% Chrysotile
Hallway Outside Room 464	Concealed Grey Vinyl Floor Tile underneath Plywood	711DD-117A	4.3% Anthophyllite*
Room 455	Light Brown with White Streaks 9x9 Floor Tile (Checkered)	711DD-118A	8% Chrysotile
Room 455	Brown with White Streaks 9x9 Floor Tile (Checkered)	711DD-119A	10% Chrysotile
Room 456	Greyish Green with White Streaks 12x12 Floor Tile (Top Layer)	711DD-124A	6% Chrysotile
Room 458	Tan with White and Brown Streaks 9x9 Floor Tile	711DD-125A	2% Chrysotile
Room 460	Grey with Pink and White Streak 9x9 Floor Tile	711DD-126A	4% Chrysotile
Room 460	Light Green with Pink and Black Streaks 9x9 Floor Tile	711DD-127A	3% Chrysotile
Custodian Room Next to Room 461	Tan with White and Brown Specks 9x9 Floor Tile	711DD-128A	5% Chrysotile
Room 556	Concealed Bottom Vinyl Floor Tile (Assume 9x9) – Mixed Pattern	711DD-131A	19.9% Chrysotile*
Room 557A	Pea Green Mottled 12x12 Floor Tile	711DD-135A	2% Chrysotile
Room 554	Greenish Brown with Dark Green and White Splotches 12x12 Floor Tile	711DD-140A	4.5% Chrysotile
Room 305	Green with White Specks 12x12 Floor Tile	711DD-143A	3% Chrysotile
Room 316	Green with White Streaks 12x12 Floor Tile	711DD-144A	3% Chrysotile
Room 303	Cement Board Chalkboard	711DD-146A	30% Chrysotile
Room 322	Tan Glue Strips on Wood	711DD-148	2% Chrysotile
Room 419	Self-Stick Brown Floor Tile	711DD-168A	5% Chrysotile
Boiler Room	Cement Overcoat at Top of Boilers	811DD-176A	2% Chrysotile
Boiler Room	Tan Interior Door Blocking	811DD-177A	6% Chrysotile
Boiler Room	Friable Insulation at Boiler Top	811DD-181A	15% Chrysotile
Small Boiler Room	Debris on Floor	811DD-183A	3% Chrysotile
Boiler Tunnel	Preformed Block Type Pipe TSI	811DD-185A	20% Chrysotile 2% Amosite
Room 255	AirCell Pipe TSI	811DD-186A	15% Chrysotile 10% Amosite
Boiler Tunnel	Mudded Pipe Fittings	811DD-187A	8% Chrysotile 15% Amosite
Old Gym Girl's Shower	Transite Shower Stalls	812DD-192A	20% Chrysotile 5% Amosite
Room 251C	Brown Glue Daubs Associated with Luan Panels	812DD-193A	40% Chrysotile
Old Gym Girl's Shower	Yellow Mastic Associated with Ceramic Floor Tile	812DD-196A	2% Chrysotile
Room 218	Brown Mastic Associated with 4" Reddish Brown Vinyl Baseboard	812DD-203A	3% Chrysotile
Room 259A	6" (Thick) Black Vinyl Baseboard	812DD-208	3% Chrysotile





Sample Location	Material Type	Sample No.	Asbestos Content
Room 259A	Black Mastic Associated with 6" (Thick) Black Vinyl Baseboard	812DD-209A	6% Chrysotile
Room 456	Black Mastic Associated with 12x12 Floor Tile (Top Layer)	812DD-210D	4% Chrysotile
Room 259A	Black Mastic Associated with 9x9 Floor Tile (Bottom Layer) (Old HS Building)	812DD-211A	2% Chrysotile

*These samples were recommended for Transmission Electron Microscopy (TEM) analysis for verification, and TEM results confirmed presence of asbestos above 1% (discussed further below).

Utilizing the USEPA protocol and criteria, the following materials were determined not to contain asbestos.

Sample Locations	Material Type	Sample No.
Stair 7 and 9	Brown (Thick) Vinyl 12x12 Flooring with Diamond Pattern	818DD-01 A-B*
Stair 7 and 9	Tan Adhesive Associated with Brown (Thick) Vinyl 12x12 Flooring with Diamond Pattern	818DD-02 A-B*
Room 101	Subfloor/Sleeper Floor Tar Filler (Mastic)	818DD-07 A-B
Room 105	4" Light Brown Vinyl Baseboard	818DD-09A*
Room 105	Tan Mastic Associated with 4" Light Brown Vinyl Baseboard	818DD-10 A-B*
Library and Room 260	Brown Pliable Window Caulk Associated with Aluminum Frames	818DD-13 A-B*
Room 203	2" Brown Vinyl Baseboard	818DD-17A*
Room 205/205A	Brown/Tan, and Green Swirl 9x9 Floor Tile	818DD-22A*
Room 205/205A	Tan and Brown Swirl 9x9 Floor Tile	818DD-23A
Rooms 205/205A, 455, and 558	Black Paper Mastic Associated with 9x9 Floor Tile	818DD-24 A-C*
Room 207A – Raised Floor	Off-White with Cream and Brown Streaks 12x12 Floor Tile 818DD	
Room 207A/B	Beige with Cream and Brown Streaks 12x12 Floor Tile	818DD-27A
Rooms 214A/B and 557	Grey Mottled 12x12 Floor Tile	818DD-34 A-B*
Room 209 A/B	Brown and Tan Mottled 12x12 Floor Tile	818DD-35A*
Room 552	Bluish Green 12x12 Floor Tile	818DD-37A*
Room 550	Light Durplo with Durplo and White Streaks	
Hallway Outside Room 550 - 554		
Room 501	Reddish Pink with White Splotches 12x12 Floor Tile	818DD-44A
Room 502 (Stair and Closet)	Brown, Beige, and Tan Mottled 12x12 Floor Tile	818DD-47A*
Hallway Outside Former HSRed Mottled 12x12 FloorOffice(Top Layer)		76DD-48A*

Table 2Non-Asbestos Containing Materials





Sample Locations	Material Type	Sample No.
Hallway Outside Former HS	Grey/Yellow Mastic Associated with Red	76DD-49 A-B*
Office	Mottled 12x12 Floor Tile	10DD-49 A-D
Auditorium and Cafeteria	Pinkish Orange Mottled 12x12 Floor Tile	76DD-52 A&C
Library	1x1 Pegboard Type Ceiling Tile (Spline)	76DD-54A
Book Storage Room Off Library	Multi-Dot 2x4 Ceiling Tile	76DD-55A
Book Storage Room Off Library	Beige with White and Brown 9x9 Floor Tile	76DD-56A*
Library and Former HS Main Office	Yellow Carpet Glue	76DD-58 A-B
Former HS Main Office	White with Brown Splotches 9x9 Floor Tile	76DD-59A*
Library	Green 9x9 Floor Tile Beneath Carpet	76DD-61A*
Room 353	Fissured 2x2 Wallpaper	76DD-67A
Room 455 and Room 356A – Computer Lab Office	2x4 Fissure and Dot Ceiling Tile	76DD-68 A-B
Corner Bathroom HS Office Hall	1x1 White Ceiling Tile Above 2x4 Styrofoam Panels	76DD-69A
Rooms 350 - 353	4" Shiny Black Vinyl Baseboard	76DD-70A*
Rooms 350 - 353	Brown Mastic Associated with 4" Shiny Black Vinyl Baseboard	76DD-71 A-B*
Room 356 A/B	Tan Mastic Associated with Tan and White Mottled 12x12 Floor Tile Patch	76DD-82 A-B
Corner Bathroom HS Main Office Hallway	4" (Thick) Black Vinyl Baseboard	76DD-83 A-B
Corner Bathroom HS Main Office Hallway	Mastic Associated with 4" (Thick) Black Vinyl Baseboard	76DD-84 A-B
Room 317	Drywall Partition Wall	77DD-85 A-B
Room 317	Joint Compound	77DD-86 A-B
New Gym	Tectum Ceiling Panels	77DD-88 A-B
Cafeteria	Yellow Mastic Associated with 12x12 Floor Tile	77DD-89 A-B
Cafeteria and Auditorium	Red Mottled 12x12 Floor Tile	77DD-90 A-B
Auditorium 1x1 Pegboard (Large Hole) Ceiling Ti		77DD-91 A-C
Stage (Auditorium)	Black Flooring Paper	77DD-93 A-C
Left Practice Area Off Stage	Textured Ceiling Skim Coat	77DD-94 A-C
New Gym	Brown Flooring Paper	77DD-95 A-B
New Gym	Thick Brown Covebase	77DD-96 A-B*
New Gym	Tan/Yellow Mastic Associated with Thick Brown Covebase	77DD-97 A-C*
Cafeteria	2x2 Bumpy White Ceiling Tile	77DD-98 A-B
Cafeteria	4" Blue Vinyl Baseboard	77DD-99A
Cafeteria	White Mastic Associated with 4" Blue Vinyl Baseboard	77DD-100 A-C
Left Stage	2x4 Dotted Ceiling Tile	77DD-101 A-C
New Gym Boys Locker Room and Room 455	Paper Coating Associated with Fiberglass Ceiling Tile	77DD-102 A-C
Cafeteria	Drywall	77DD-103 A-C
Cafeteria	Joint Compound	77DD-104 A-C
Classroom Wing		
Typical Bathroom	2x4 White Drywall Ceiling Tile	711DD-105 A-C





Sample Locations	Material Type	Sample No.
Room 405	Maroon with Black and White Splotches 12x12 Floor Tile (Top Layer)	711DD-106 A-B
Room 451	Grey with Dark Grey and White Splotches 12x12 Floor Tile	711DD-451 A-B
Rooms 459 and 461	1x1 Smooth white Ceiling Tile	711DD-109 A-B
Room 462	Brown Corkboard Mastic	711DD-110 A-B*
Room 459	Paper Backing Associated with Fiberglass Insulation	711DD-111 A-B
Room 455 and Custodians Room Next to Room 461	Brown Glue Daubs Associated with Luan Paneling	711DD-114 A-B*
Hallway Outside Room 464	Orange/Brown with Brown and Tan Splotches 12x12 Floor Tile (Top Layer)	711DD-120 A-B
Custodial Room Next to Room 461	Brown Glue Associated with Wall Paneling	711DD-121 A-B
Room 462 (Upper)	Off White 1x1 Ceiling Tile	711DD-122 A-B
Classroom Wing (451)	Grey Leveling Compound at Thresholds	711DD-123 A-B
Room 464	Grey with Dark Grey and White Splotches 12x12 Floor Tile	711DD-129 A-B
Room 554A	Pink Sink Undercoat	711DD-130
Stair to Attic (561D)	Black Mastic on Brick	711DD-132
Rooms 554, 557, and 561	Black Composite Countertop	711DD-133 A-C
Rooms 557A and 560	Brown Corkboard Mastic	711DD-134 A-C
Hallway Outside 557A	Brown, Dark Brown, and Tan Mottled 12x12 Floor Tile (Top Layer)	711DD-136 A-B
Room 556	Orange/Red with Brown Splotches 12x12 Floor Tile	711DD-137 A-B
Room 562	Green with Dark Green and White 12x12 Stick-On Tile	711DD-138 A-B
Room 561	Grey with White Splotches 12x12 Floor Tile (Top Layer)	711DD-139 A-B
Room 300A	Brown Swirl Linoleum Flooring	711DD-141 A-B
Room 300A	Black Paper Coating Associated with Brown Swirl Linoleum Flooring	711DD-142 A-B
Bathrooms By Rooms 309 and 301A	White Ceramic Tile Grout Adhesive	711DD-145 A-B
Room 322	Off-White with Brown Specks 12x12 Floor Tile (2 nd Layer)	711DD-147 A-B
Room 306	Grey Vinyl Baseboard	711DD-149 A-B*
Room 306 Brown mastic Associated with Grey Vinyl Baseboard		711DD-150 A-B*
Typical Bathrooms	Green Composite Stall Panels	810DD-151 A-B
Room 260	1x1 Stucco-Type Ceiling Tile	810DD-152 A-B
Room 260	Room 260 Tan Mastic Associated with 1x1 Stucco-Type Ceiling Tile	
Basement Boy's Bathroom and Girl's Bathroom Next to Room 256	Grey Adhesive Associated with Ceramic Wall Tile	810DD-154 A-B



Sample Locations	Material Type	Sample No.
Room 258	Cementitious Leveling Compound on Poured Concrete	810DD-155 A-B
Rooms 258 and 260 Brown Glue Daubs Associated Ceiling Tile (Beneath Stairs G		810DD-156 A-B
Room 258 and Girl's Bathroom Next to Room 256	1x1 Pinhole Ceiling Tile	810DD-157 A-B
Typical Bathrooms	Brown Paper Inside Stall Panels	810DD-158 A-B
Typical Bathrooms	2x4 Drywall Ceiling Tiles	810DD-159 A-B
Boy's Bathroom Next to Room 260 and Girl's Bathroom Next to Room 256	Lightweight Concrete Beneath Wall Tile	810DD-160 A-B
Basement Corridor Old HS Building	Rough Plaster Drop Ceiling	810DD-161 A-C
Cafeteria Hallway (To Room 255)	Tan Window Glazing Compound Associated with Interior Wood Sashes	810DD-162 A-B
Basement Corridor Old HS Building	Textured Skim Plaster	810DD-163 A-C
Room 258	6" Black Vinyl Baseboard	810DD-164 A-B*
Room 258	Dark Brown Mastic Associated with 6" Black Vinyl Baseboard	810DD-165 A-B*
Room 256 Mechanical Closet	Cementitious Penetration Sealant	810DD-166 A-B
Room 408	Brown Paper Beneath Wood Floor	711DD-167 A-B
Room 452 Closet	Tan with Red Swirl pattern Linoleum Flooring	711DD-169 A-B
Room 410	Light Blue/Grey Mottled 12x12 Floor tile	711DD-170 A-B
Room 411	Light Beige Floor Tile (2 nd Layer)	711DD-171 A-B
Room 413	Off-White with Brown Specks 12x12 Floor Tile	711DD-172 A-B
Boiler Room	Black Pipe Gasket	811DD-173 A-B
Boiler Room	Grey Interior Door Caulk to Ground Level Exterior	811DD-174A
Boiler Room	Residual Black Duct Seam Sealant Associated with Saw Dust Exhaust	811DD-175A
Boiler Room	Sealant at Front Boiler Panel	811DD-178 A-B
Boiler Room Office	Skim Coat on Concrete Ceiling	811DD-179 A-B
Boiler Room	Interior Boiler Debris	811DD-180 A-B
Room 261A Closet and Small Boiler Room	White/Tan Cloth Vibration Isolator	811DD-182 A-B
Small Boiler Room	Tan Pipe Thread Sealant	811DD-184 A-B
Old Gym	Textured Ceiling Skim Coat	812DD-188 A-C
Old Gym Boy's Locker Room	Tan Adhesive a/w Ceramic Wall Tile	812DD-189 A-B
Room 114 and Old Gym Girl's Locker Room	Black Building Paper Beneath Wood Floor	812DD-190 A-B
Science Basement Hall	Poured Concrete Floor	812DD-191 A-B
Woodshop Hallway	Door Glazing Compound	812DD-194 A-B
Old Gym	Thick Black Vinyl Baseboard (Right Angle)	812DD-195*
Old Gym	Brown Mastic Associated with Thick Black Vinyl Baseboard	812DD-195 A-B*





Sample Locations	Material Type	Sample No.
Old HS Office Area and Room 258	Cloth Wall Covering	812DD-197 A-B
HS Main Office	4" Dark Brown Vinyl Baseboard	812DD-198A*
HS Main Office	Dark Brown Mastic Associated with 4" Dark Brown Vinyl Baseboard	812DD-199 A-B*
Rooms 108, 550, and 557	Tan/Yellow Mastic Associated with Floor Tile (Top Layer)	812DD-200 A-C
Room 502A and Hallway Outside Room 550 - 554	Yellow/Clear Mastic Associated with 12x12 Floor Tile (Top Layer)	812DD-201 A-B
Room 218	4" Reddish Brown Vinyl Baseboard	812DD-202A
Rooms 456 and 550	Top Layer White Mastic Associated with Vinyl Baseboard	812DD-204 A-B
Room 224	4" Black Vinyl Baseboard	812DD-205
Room 458	6" Black (Thin) Vinyl Baseboard	812DD-206
Room 458	Dark Brown Mastic Associated with 6" Black (Thin) Vinyl Baseboard	812DD-207 A-B
Rooms 105, 203, and Boiler Room	Black Mastic Associated with 9x9 Floor Tile	812DD-212 A-D*
Auditorium Wall, Auditorium Inlay Panel, Auditorium Balcony Ceiling, Room 251C Wall, Science Hall Low Ceiling, Kitchen Ceiling, Grand Entry Wall	Plaster Skim Coat	812DD-213 A-G
Auditorium Wall, Auditorium Inlay Panel, Auditorium Balcony Ceiling, Room 251C Wall, Science Hall Low Ceiling, Kitchen Ceiling, Grand Entry Wall	Plaster Rough Coat	812DD-214 A-G
Old HS Entry Wall, Old Gym Girl's Locker Room Ceiling, Room 109 Woodshop Ceiling, Room 258 Lower Wall, Room 356 Wall, Room 451 Wall, and Room 501 Wall	Plaster Skim Coat Associated with Horsehair Plaster	812DD-215 A-G
Old HS Entry Wall, Old Gym Girl's Locker Room Ceiling, Room 109 Woodshop Ceiling, Room 258 Lower Wall, Room 356 Wall, Room 451 Wall, and Room 501 Wall *Material type confirmed as non-aspestos by	Plaster Rough Coat Associated with Horsehair Plaster	812DD-216 A-G

*Material type confirmed as non-asbestos by additional TEM analysis

100%



2.2 Results of Asbestos Analysis by TEM

The USEPA has suggested that materials that are non-friable organically bound materials such as mastic adhesives, etc., are recommended for further confirmatory analysis utilizing Transmission Electron Microscopy (TEM). Thirty-nine of the samples analyzed by PLM were also analyzed by TEM for verification purposes. The results of TEM analysis, which are summarized below in *Table 3*, indicated that seven of the 39 samples originally reported as none detected by the PLM analysis, did in fact contain asbestos at concentrations greater than 1%, and were therefore categorized as ACM.

Sample Location	Material Type	Sample No.	Asbestos Content
Stair 7 (Landing and Stair Tread)	Brown (Thick) Vinyl 12x12 Flooring with Diamond Pattern	818DD-01A	ND
Stair 7 (Landing and Stair Tread)	Tan Adhesive a/w Brown (Thick) Vinyl 12x12 Flooring with Diamond Pattern	818DD-02A	ND
Room 105	4" Light Brown Vinyl Baseboard	818DD-09A	ND
Room 105	Tan Mastic Associated with 4" light Brown Vinyl Baseboard	818DD-10A	ND
Library	Brown Pliable Window Caulk at Aluminum Frame	818DD-13A	ND
Room 203	2" Brown Vinyl Baseboard	818DD-17A	ND
Room 203	Mastic Associated with 2" Brown Vinyl Baseboard	818DD-18A	4.6% Chrysotile
Room 205/205A	Brown, Tan, and Green Swirl 9x9 Floor Tile	818DD-22A	ND
Office Area (205/205A)	Black Paper Mastic Associated with 9x9 Floor Tile	818DD-24A	<0.25% Chrysotile
Room 214A/B	Grey Mottled 12x12 Floor Tile	818DD-34A	ŇD
Room 209A/B	Brown and Tan Mottled 12x12 Floor Tile	818DD-35A	ND
Room 552	Bluish Green 12x12 Floor Tile	818DD-37A	ND
Room 502 (Stair and Closet)	Brown, Beige, and Tan Mottled Floor Tile	818DD-47A	ND
Hallway Outside Former HS Office	Red Mottled 12x12 Floor Tile (Top Layer)	76DD-48A	ND
Hallway Outside Former HS Office	Grey/Yellow Mastic Associated with Red Mottled 12x12 Floor Tile (Top Layer)	76DD-49A	0.45% Chrysotile
Hallway Outside Former HS Office	Grey Vinyl Floor Tile Beneath Plywood Underlayment	76DD-50A	3.2% Anthophyllite
Hallway Outside Former HS Office	Blue Vinyl Floor Tile Beneath Plywood Underlayment	76DD-51A	28.2% Chrysotile

Table 3 Materials Analyzed By TEM





			Asbestos
Sample Location	Material Type	Sample No.	Content
	Beige with White and Brown 9x9		0.68%
Library Book Storage Room	Floor Tile	76DD-56A	Chrysotile
Former HS Main Office	Brownish Grey with White and	76DD-57A	1.9%
	Brown Specks 9x9 Floor Tile	70DD-37A	Chrysotile
Former HS Main Office	White with Brown Splotches 9x9	76DD-59A	ND
	Floor Tile		
Library	Green 9x9 Floor Tile Beneath Carpet	76DD-61A	ND
Rooms 350 - 353	4" Shiny Black Vinyl Baseboard	76DD-70A	ND
	Brown Mastic Associated with 4"		
Rooms 350 - 353	Shiny Black Vinyl Baseboard	76DD-71A	ND
New Gym	Thick Brown Baseboard	77DD-96A	ND
New Gym	Tan/Yellow Mastic Associated	77DD-97A	ND
-	with Thick Brown Baseboard		
Room 462	Brown Corkboard Mastic	711DD-110A	ND
Room 455	Brown Glue Associated with Luan	711DD-114A	ND
	Paneling Concealed Grey Vinyl Floor Tile		
Hallway Outside Room 464	underneath Plywood	711DD-117A	4.3%
	Underlayment		Anthophyllite
Room 556	Concealed Bottom Vinyl Floor Tile	711DD-131A	19.9%
	(Assume 9x9) – Mixed Pattern	TIDD-IJIA	Chrysotile
	Greenish Brown with Dark Grey		4.5%
Room 554	and White Splotches 12x12 Floor Tile	711DD-140A	Chrysotile
Room 306	Grey Vinyl Baseboard	711DD-149A	ND
	Brown Mastic Associated with		
Room 306	Grey Vinyl Baseboard	711DD-150A	ND
Room 258	6" Black Vinyl Baseboard	810DD-164A	ND
Room 258	Dark Brown Mastic Associated	810DD-165A	ND
	with 6" Black Vinyl Baseboard	010DD-103A	
Old Gym	Thick Black Vinyl Baseboard	812DD-195	ND
y	(Right Angle) Brown Mastic Associated with		
Old Gym	Thick Black Vinyl Baseboard	812DD-195A	ND
Old Cym	(Right Angle)	012DD-193A	ND
			>0.25%
HS Main Office	4" Dark Brown Vinyl Baseboard	812DD-198A	Chrysotile
	Dark Brown Mastic Associated		>0.25%
HS Main Office	with 4" Dark Brown Vinyl	812DD-199A	Chrysotile
	Baseboard		
Room 105	Black Mastic Associated with 9x9 Floor Tile	812DD-212A	ND
ND - Nono Datastad			

ND = None Detected

The results of confirmatory analysis by TEM did identify asbestos at greater than 1% for some of the analyzed materials. The materials have been included in *Table 1* or *Table 2* above, as appropriate, based on the confirmatory analysis. Those materials containing asbestos have also been included in the



following *Table 4*, and cost estimate. Refer to *Appendix C* for TEM results, including applicable data validation materials.

2.3 Asbestos Analysis Conclusions

Materials confirmed to contain asbestos by the PLM and TEM methods, along with an estimate of the quantity of those materials, are included in the *Table 4*, below. *Table 4* identifies the location, material type, and quantity of ACM identified during this assessment. Any suspect material not characterized during this assessment should be presumed to contain asbestos.

Sample Location	Material Type	Estimated Quantity
Throughout School	9x9 / 12x12 Floor Tile (All Layers) & Associated Mastics (Includes Removal of Plywood Underlayment & Flooring Layers)	150,000 SF
Classrooms, Offices, Gymnasiums, Cafeteria, Auditorium, Boiler Tunnels, Boiler Breeching, Classroom Risers, Mechanical Areas, and Basement Wings	AirCell, Pre-Formed Block Type Insulation & Associated Mudded Fittings	10,000 SF
Typical (Exterior) Windows	Caulk at Brick Molding Concealed underneath Aluminum Window Frames	All Windows (Approx. 646 EA)
Main Boiler Room	Boiler Demolition: Includes Removal of All Interior Boiler Debris, Concealed Interior Friable Components, Interior Door Blocking, Firebrick, Millboard, Rib-Sealant Material, Boiler Foundation, and Associated Gaskets, etc.	4 EA (10′x22′x12′h / Boiler)
Main Boiler Room	Friable Insulation & Cement Overcoat at Top of Boilers	1,100 SF
Small Boiler Room	Asbestos Debris on Concrete Floor	500 SF
Throughout School (e.g. Projector Room)	Cement Fiber Board (Transite Panels)	1,550 SF
Classrooms	Cement Fiber Board Associated with Classroom Chalkboards	10 EA
Classrooms (e.g. Home Economics)	Sink Undercoating Material at Classrooms	12 EA
Classrooms and Offices	2" Brown Vinyl Baseboard & Associated Mastic at Classrooms	1,500 LF
Classrooms and Offices	4" Reddish-Brown Vinyl Baseboard & Associated Mastic	2,000 LF
Classrooms and Offices	6" (Thick) Black Vinyl Baseboard & Associated Mastic at Classrooms	700 LF
Girls Locker Room (Old Gym)	Yellow Mastic Associated with Ceramic Floor Tile	750 SF
Offices	Brown Glue Daubs Associated with Luan Wall Paneling at Offices	3,000 SF

Table 4Estimated Quantities of Asbestos Containing Materials





Sample Location	Material Type	Estimated Quantity
Classrooms	Tan Glue Strips On Wood at Classrooms	2,000 SF
(Interior) Hallway Doors at Classroom Wings	Window-Glazing Compound Associated with	10 EA

LF = Linear Feet, SF = Square Feet

Materials determined to contain asbestos that are anticipated to be impacted by any proposed renovation and/or demolition work must be abated by a licensed asbestos abatement contractor prior to disturbance. This includes both friable and non-friable ACM materials. This is a requirement of RIDOH, RIDEM, and USEPA NESHAP standards for asbestos abatement.

Fuss & O'Neill also recommends that a comprehensive scope of work and technical specification be developed as part of renovation plans for the site. In addition, an asbestos abatement plan must be prepared and submitted to RIDOH for review and approval. The plan must be prepared by a certified asbestos project designer, and be approved prior to disturbance during demolition or renovations.

We have developed an opinion of cost for the removal of the identified ACM, which is included as *Appendix H*. The estimated cost is inclusive of removing all identified ACM, and a more limited scope can be tailored to any specific renovation work as necessary.

Any suspect material encountered during renovation/demolition that is not identified in this report as being non-ACM should be assumed to be ACM unless sample results prove otherwise.

3 Lead-Based Paint Determination

A lead-based paint determination was performed for representative building components by Fuss & O'Neill representative Mr. Jonathan Hand, on July 6 and 7, 2011. An X-ray fluorescence (XRF) analyzer was used as a field screening tool to perform the lead-based paint determination. The testing was conducted in accordance with the protocol outlined in the site-specific *QAPP Addendum*.

The XRF utilized for the lead-based paint determination was an RMD X-Ray Fluorescence Analyzer, Serial No. 1138. The instrument was checked for proper calibration prior to each use as detailed by the manufacturer and the Performance Characteristic Sheet (PCS) developed for the instrument.

For the purpose of this lead-based paint determination, representative building components were tested in situ. The tested components were selected by identifying homogenous painted surfaces by location to result in a representative evaluation of painted surfaces throughput the structure. Due to site conditions, the age of the building, and the limited nature of the lead-based paint determination conducted at the site, all individual repainting efforts were not discoverable, and therefore all historical painted surfaces may not have been included in the evaluation.

Lead-based paint issues involving properties that are not residential are regulated to a limited degree to protect workers involved in paint-disturbing work activities and waste disposal. Worker protection is regulated by OSHA as well as RIDOH regulations. These regulations involve air monitoring of workers to determine exposure levels when disturbing lead-containing paint. A lead-based paint determination



cannot determine a safe level of lead, but is intended to provide guidance as to the locations of leadbased paint considered characteristic by industry standards for lead in paint. Contractors may then better determine exposure of workers to airborne lead by understanding the different concentrations of lead paint on representative components and surfaces. Air monitoring can then be performed during activities that disturb paint on representative surfaces.

A concentration of lead exceeding the lead-free standard of 150 milligrams per kilogram (mg/kg) is considered lead-paint in accordance with RIDOH regulations for residential dwelling units and child care facilities. Use of XRF alone for testing cannot fully determine compliance with lead-free standards. As an industry standard, painted surfaces with an XRF screening result greater than 1.0 milligrams of lead per square centimeter (mg/cm²) are typically expected to exceed the lead-free standard of 150 mg/kg. Screening results less than 1.0 mg/ cm² typically require collection and laboratory analysis of paint chip samples for confirmation of the lead concentration by mass. For purpose of this lead-based paint determination, the level of 1.0 mg/cm² has been utilized as a threshold for areas where possible worker exposures may occur.

3.1 Lead-Based Paint Screening Results

The complete field-screening results of lead-based paint determination documented herein are included in *Appendix D*, and summarized below. The lead-based paint determination indicated consistent painting trends associated with representative building components that may be impacted by possible renovation work. Numerous painted components were determined to contain levels of lead greater than 1.0 mg/cm², including the following:

Location	ltem	Xrf Reading (Mg/Cm ²)
Main Entrance	BCD Wall	1.5
Main Entrance	AC Molding	6.2
Room 360	Lower Walls	1.6 – 2.3
Room 360	Radiator	3.2
Room 360	Safe	6.2
Room 360B	ABC Upper Wall	1.0
Room 360B	ABC Lower Wall	2.2
Room 360B	Radiator	3.2
Room 360C	Upper Wall	1.0
Room 360C	Lower Wall	1.3
Room 360C	Radiator	3.2
Library Hall	BD Wall	0.0 - 1.0
Library Hall	BD Lower Wall	1.0
Storage Closet Across From Room 355B	Wall	1.0
Stair 15	Wall	2.2

Table 5 Lead XRF Screening Results



Location	Item	Xrf Reading (Mg/Cm ²)
Stair 15	Newel Post	1.3
Stair 15	Baluster	1.0
Stair 15	Stringer	1.0
Stair 15	Riser	1.0
Room 362	Upper Wall	1.3
Room 362	Lower Wall	1.0
Room 362	Radiator	2.5
Room 357 Library	BCD Upper Wall	2.5
Room 357 Library	BCD Lower Wall	1.7
Room 357 Library	Radiator	3.4
Rooms 355, 355A, and 355B	Upper Wall	1.2
Rooms 355, 355A, and 355B	Lower Wall	3.3
Rooms 355, 355A, and 355B	Radiator	3.2
Library Work Room	BCD Upper wall	1.6
Library Workroom	BCD Lower Wall	2.3
Library Workroom	Radiator	3.3
Room 358	Wall	1.0 – 2.3
Room 358	Radiator	3.0
Room 356	Wall	1.3
Room 354	Wall	2.2
Room 354	Radiator	3.1
Room 456	Wall	0.8 – 1.7
Room 456	Radiator	3.1
Room 458	ACD Wall	1.1
Room 458	Radiator	3.3
Room 460	B Wall	1.5
Room 460	Radiator	3.2
Room 462	Wall	1.2 - 5.0
Room 462	Molding	1.0
Room 464	Wall	1.0 – 2.2
Room 464	Radiator	3.0
Room 463	Wall	1.5 – 3.0
Room 463	Radiator	3.0
Room 454	BCD Wall	1.3 – 2.0
Room 454	Radiator	3.1
Room 556	Wall	1.1 – 2.5
Room 556	Radiator	3.1
Room 558 & 560	Wall	1.6
Room 558 & 560	Radiator	3.3
Hall Outside Room 558	Wall	0.8 – 1.2
Room 562	Wall	1.2 – 2.5
Room 562	Radiator	3.1
Room 561	Wall	1.1 – 2.6
Room 561	Radiator	3.0
Room 561A	Wall	1.0
Room 561A	Baluster	1.0
Room 559	Wall	0.7 – 1.2



Location	Item	Xrf Reading (Mg/Cm ²)
Room 559	Radiator	3.1
Rooms 554, 555, and 557	Wall	0.7 – 1.7
Rooms 554, 555, and 557	Radiator	3.1
Room 554A	Wall	1.0
Room 256	Radiator	1.1
Girl's Bathroom Near Room 256	Ceramic Tile	2.3
Girl's Bathroom Near Room 256	Wall	1.0
Room 258	Wall	1.2
Room 260	BCD Wall	1.0
Boy's Bathroom Near Room 260	Wall	1.6
Boy's Bathroom Near Room 260	Radiator	1.6
Room 262	Wall	2.5
Hall Outside 262	Wall	1.0
Rooms 261 & 261A	CD Wall	0.3 – 2.3
Rooms 261 & 261A	Radiator	1.3
Room 257A & B	Wall	1.4
Room 259 and 259A	Wall	0.0 – 1.1
Room 255	Wall	0.0 - 1.5
Room 253	Wall	0.3 – 1.6
Room 254	Wall	0.6 – 1.2
Room 254	Radiator	2.2
Rooms 350, 351, 352, and 353	Radiator	1.4
Stairwell Outside Room 350	Newel Post	1.3
Stairwell Outside Room 350	Baluster	1.3
Stairwell Outside Room 350	Stringer	1.3
Stairwell 4, 6, 7, and 9	Door Frame	8.3
Stairwell 4, 6, 7, and 9	Radiator	3.1
Room 324	Ceiling	1.8
Room 324	Safe	7.3
Upper Auditorium	Walls	0.8 – 1.2
Room 309, 311, 313, 314, 316, 318,		
and 320	Wall	0.2 – 1.0
Room 309, 311, 313, 314, 316, 318,		4.5
and 320	Radiator	1.5
Hall Outside Room 309B	Wall	0.1 – 1.1
Room 312	Radiator	1.3
Room 301, 302, 303, 305, 307, 308, and 310	Wall	0.7 – 6.4
Room 301, 302, 303, 305, 307, 308, and 310	Radiator	0.0 – 1.2
Room 306	Wall	0.2 – 7.0
Room 306	Radiator	1.3
Room 300A	Lower Wall	5.8
Room 300A	Radiator	1.3
Room 300	Upper Wall	6.0
Room 300	Radiator	1.2
Auditorium Stage	Radiator	1.1
Auditorium Stage	Spiral Stair	1.0
Auditorium staye		1.0





Location	Item	Xrf Reading (Mg/Cm ²)
Cafeteria	Wall	4.0
Cafeteria	C Block wall	3.3
HS Gym	Support Beam	1.3
HS Gym	Bleacher Stringer	1.4
HS Gym	Bleacher Riser	1.5
Stairwell to Bleachers	Lower Wall	1.1
Stairwell to Bleachers	Stringer	1.3
Locker Rooms	Green Block Wall	1.1
Room 450, 451, 452, and 453	Radiator	1.7
Room 419	Lower Wall	1.9
Room 419	Radiator	1.8
Room 424	Wall	1.0
Room 424	C Handrail	3.0
Room 424	Radiator	1.9
Rooms 413, 415, and 417	Lower Wall	2.8
Rooms 413, 415, and 417	Radiator	1.9
Rooms 400, 401, 403, 404, 405, 406, 407, 409, 410, 411, 412, 416, 418, 420, and 422	Upper Wall	0.7 – 1.0
Rooms 400, 401, 403, 404, 405, 406, 407, 409, 410, 411, 412, 416, 418, 420, and 422	Lower Wall	2.6 – 7.0
Rooms 400, 401, 403, 404, 405, 406, 407, 409, 410, 411, 412, 416, 418, 420, and 422	Radiator	0.1 – 1.7
Hall Outside Room 418	Upper Wall	0.5 – 1.0
Hall Outside Room 418	Lower Wall	6.8
Room 414	Upper Wall	0.6 – 1.1
Room 414	Lower Wall	>9.9
Room 414	Radiator	1.3

POS = assumed positive

3.2 Lead-Based Paint Screening Conclusions

The present vacant status of the building does not currently subject this facility to the requirements of the RIDOH Rules and Regulations for Lead Poisoning Prevention R23-24.6-PB. In addition, the building is not considered a "child occupied facility" and therefore not subject to current RI Renovation Repair and Painting (RRP) rules. The results of the testing performed using XRF for this presently non-regulated facility were intended to provide documentation for potential worker exposures during any proposed renovation activities and for waste characterization purposes. Building components containing lead may cause worker exposures to lead above OSHA standards during demolition and renovation activities.

OSHA published a Lead in Construction Standard (OSHA Lead Standard) 29 CFR 1926.62 in May 1993. The OSHA Lead Standard has no set limit for the content of lead in paint below which the



standards do not apply. The OSHA Lead Standards are task-based and are based on airborne exposure and blood lead levels. Contractors must comply with exposure assessment criteria, interim worker protection, and other requirements of the regulation as necessary to protect workers during any renovation work which will impact lead paint.

Lead paint was identified on the numerous building components listed in *Table 5*, including, but not limited to, plaster walls and ceilings, brick walls, metal support columns, interior staircase components, interior door components, and trim/support pieces. The lead screening was carried out as part of a preliminary investigation for renovation planning purposes. However, Fuss & O'Neill understands that there are no definitive demolition or renovation activities scheduled at this time; the lead screening was carried out as part of a preliminary investigation for a project feasibility study. Any future work involving surface preparation or demolition of the identified lead-painted surfaces should be performed in accordance with OSHA worker protection requirements.

4 Waste Characterization for Lead

A waste is a solid or liquid material that one no longer uses. A waste is defined by USEPA to be hazardous if it contains certain properties that could pose dangers to human health and the environment after it is discarded. Wastes that are ignitable, corrosive, reactive, or contain certain toxic metals and chemicals are regulated under the Hazardous Waste Regulations. The Toxicity Characteristic Leaching Procedure (TCLP) is a sample preparation method utilized in RCRA hazardous waste determinations, that extracts the compounds of interest in a manner that simulates landfill conditions (40 CFR 261).

To determine if a building material waste stream to be generated during renovation or demolition activities may be considered a hazardous waste due to the presence of lead based paint, representative samples of the waste stream would need to be analyzed for TCLP lead. The analytical results are then compared to a concentration of 5.0 milligrams per liter (mg/L), which is the hazardous waste threshold under RCRA. If the result is below the established level, the material may not require management as a hazardous waste.

4.1 Lead Waste Characterization Sampling

On August 18, 2011, Fuss & O'Neill representatives, Mr. Dustin A. Diedricksen and Mr. Stephen Moulton, collected representative aliquots of various materials from the building. Painted material substrates such as concrete, wood, and sheetrock were segregated in accordance with previous lead paint screening data and representative composite samples were collected. In total, five samples, including four primary samples and one duplicate sample, were collected and submitted for analysis of lead by USEPA SW-846 methods, utilizing the TCLP extraction process, at Premier Laboratory of Dayville, Connecticut (Premier).

These samples were collected to characterize a potential waste stream that may result from selective demolition and/or renovation work at the site. While these composite samples may not specifically represent the actual waste stream generated during any future renovation activities, they were collected





to gauge the potential for the lead concentrations in painted surfaces in typical building materials to cause the anticipated waste stream to require management as a hazardous waste.

4.2 Lead Waste Characterization Results

The laboratory report for the waste characterization TCLP lead analysis and applicable data validation materials are provided as *Appendix E* in this report. The results of the primary and duplicate composite TCLP lead analyses are summarized below.

Sample Location	Material Type	Sample No.	Result (Mg/L)
1915 Building	Building Materials	818DD-TCLP-01	0.050
1915 Building	Building Materials	818DD-TCLP-02	0.080
Addition/Class Room Wing	Building Materials	818DD-TCLP-03	0.79
Newer Gym/Auditorium	Building Materials	818DD-TCLP-04	0.44
Newer Gym/Auditorium (Duplicate)	Building Materials	818DD-TCLP-05	0.18

Table 6TCLP Lead Waste Characterization Results

4.3 Lead Waste Characterization Conclusion

RCRA defines a hazardous concentration for lead as greater than 5.0 mg/L. The analytical results for the composite samples of building materials indicated a concentration of lead less than the RCRA threshold for a hazardous waste. These results suggest that a building material waste stream consistent with the types and ratio of materials represented by the composite samples would not likely require disposal as a hazardous waste.

At such a time when renovations or demolition activities are conducted at the site, additional characterization of the generated waste stream may be necessary.





5 Lead Paint Chip Analysis

5.1 Lead Paint Chip Sampling

On August 12, 2011, Fuss & O'Neill representative, Mr. Dustin Diedricksen, collected a total of 11 paint chip samples, including 10 primary samples and 1 duplicate sample, from representative surfaces throughout the former Woonsocket Middle School. Paint chip samples were collected using the following procedures to confirm lead content identified with XRF:

- a) Paint chips from targeted surfaces were carefully loosened and removed using a hand scraper. Plastic was placed under areas to be tested to prevent release of chips to the ground. The surfaces sampled were chosen based on the XRF screening results discussed in Section 3.
 Painted surfaces that elicited an XRF response close to the threshold value of 1.0 mg/cm² were targeted for laboratory analysis, as well as a collection of confirmatory samples which elicited an XRF screening result greater than 1.0 mg/cm².
- b) A section of paint two inches by two inches was removed. All layers down to, but not including, the substrate were included in the sample.
- c) Each sample was individually containerized and identified with a unique sample number to designate the location of the sample.
- d) The samples were submitted to Premier using proper chain of custody for Atomic Absorption Spectrometry analyses for lead by Method 6010B.

5.2 Lead Paint Chip Results

Analytical results, chains of custody, and applicable data validation materials for the paint chip sampling activities can be found in *Appendix F*. The laboratory analytical results are summarized in *Table 7*, which identifies the samples by location, sample number, and lead content.

Sample Location	Sample Number	Result (Mg/Kg)
Boiler - Black	812DD-01	3,000
Boiler Room Walls – Silver	812DD-02	640
Boiler Room Walls – Red	812DD-03	260
Auditorium Walls	812DD-04	6.0
Auditorium Balcony Ceiling	812DD-05	6,600
New Gym – Boy's Locker Room Walls	812DD-06	1.4
New Gym - Support Beams	812DD-07	9,200
Cafeteria Walls	812DD-08	30
Old Gym Walls	812DD-09	2,300
Old Gym – Girl's Locker Room	812DD-10	18

Table 7Paint Chip Sample Lead Results





Sample Location	Sample Number	Result (Mg/Kg)
Auditorium Walls (Duplicate)	812DD-11	10

These analytical laboratory results were compared to the RIDOH standards for lead-free and lead safe concentrations. RIDOH classifies paint to be lead-free when the lead concentration is less than 150 mg/kg. Paint containing lead at concentrations greater than 150 but less than 600 mg/kg is considered by RIDOH as lead-safe. Paint containing lead at concentrations in excess of 600 mg/kg that is intact is also considered by RIDOH as lead safe. The results in *Table 7* in bold text exceed 600 mg/kg.

The cost estimate included in *Appendix H* includes estimated allowances for OSHA lead compliance during renovation and demolition work as well as potential disposal of lead waste from demolition and disposal of removed components and surfaces.

6 PCB Bulk Product and Substrate Assessment

6.1 Background

PCBs are regulated under the Federal *Toxic Substances Control Act* (*TSCA*; 40 CFR 761). Prior to 1979, PCBs were freely used in industry as additives in a wide variety of chemical products, including building materials where long-term plasticity and insulation were necessary. These uses included mastics, adhesives, sealants, caulking, paint, and insulation. PCB production in the United States was categorically banned in 1979 with the exception of PCBs incidentally generated in the production of other chemicals (such as plastics or pesticides with similar chemical structures).

TSCA describes various uses of PCBs and categorically bans any use which is not authorized under 40 CFR 761.30. PCBs have never been authorized under *TSCA* for use in building materials. Therefore, PCBs in building materials constitute unauthorized uses and, unless excluded from further regulation, these materials must be removed in accordance with *TSCA*. The following definitions are pertinent to the discussion of *TSCA* implications of PCBs in building materials:

- PCB Bulk Products are materials containing PCBs at concentrations equal to or greater than 50 ppm. These materials are designated as "PCB Bulk Product Wastes" at the time when they are removed from service.
- PCB Remediation Waste is any material containing detectable concentrations of PCBs associated with the removal of a bulk product waste (examples may include porous or nonporous surfaces, such as window frames adjacent to PCB-contaminated caulking, which retain a PCB residue following caulking removal). For high occupancy uses, porous PCB remediation waste materials must be removed during PCB cleanup activities to a final concentration less than or equal to 1.0 ppm unless specifically approved by USEPA alongside engineering controls.
- Excluded PCB products are products which contain concentrations of PCBs less than 50 ppm which were generated and distributed in commerce prior to 1984 or were generated in an excluded process (such as the incidental PCB generation during pesticide manufacture described above). If claiming this exclusion for materials containing concentrations of PCBs greater than



1 ppm, the burden of proof lies with the generator to prove that the materials were used prior to 1984 or the PCBs were incidentally generated and are, therefore, excluded from regulation.

Sampling of building materials for PCBs is not presently mandated by the USEPA. However, PCB disposal carries significant liability risk, and contractors and disposal facilities have identified PCBs in building materials during disposal of C&D waste, leading to substantial project delays and cost overruns from the unplanned expense of PCB remediation and disposal. Because building materials are not considered an authorized use of PCBs, the discovery of PCBs in building materials (unless these materials are "excluded") triggers an owner's obligation to remove the PCBs from the site. Unlike ACM and lead in building materials, which need not be removed unless renovation will affect the materials, unauthorized PCBs must be removed regardless of the scope of the renovation project.

Additionally, PCBs have been documented to migrate from bulk product materials into adjacent porous substrates (plaster, concrete, wood) and contaminate surrounding materials, leading to an expanded scope of demolition solely for PCB removal. These materials, as PCB remediation wastes, must be remediated to PCB concentrations often orders of magnitude less than the concentration of the source material, typically at a substantial cost. The required clean-up standards depend on the type of substrate (i.e. porous versus non-porous) and the occupancy status (i.e. high or low as defined in 40 CFR 761) of the building. For porous media with high or unrestricted occupancy, PCBs must be remediated to a maximum concentration of 1.0 ppm, or engineering controls to prevent human exposure must be implemented.

6.2 Initial PCB Bulk Product Sampling

On August 18, 2011, Fuss & O'Neill's representatives, Mr. Dustin A. Diedricksen and Mr. Stephen Moulton, collected 34 bulk samples of building materials to be analyzed for PCBs. As multiple samples of each homogeneous material type were typically collected for quality control purposes, as detailed in the *QAPP Addendum*, samples specifically identified as duplicates were not collected.

Sampling involved removal of bulk product materials (source materials) using hand tools for laboratory analysis to determine PCB content. Tools utilized to collect samples were disposable items and discarded after each individual sample was collected to avoid cross contamination of samples. Each sample was placed in an individual container, labeled, and delivered to Premier using proper chain of custody. Samples were extracted by Premier using USEPA Method 3540 (Soxhlet) and analyzed for PCBs by USEPA Method 8082.

6.2.1 Initial PCB Bulk Product Sampling Results

Laboratory results of samples analyzed for PCBs and applicable data validation materials are included in *Appendix G*. The following table summarizes the 34 samples by location, material type, sample number, and reported PCB concentration.





Sample Location	Material Type	Sample No.	Pcb Content (Mg/Kg)
Old Gym	Poly Floor	914110818-PCB-01A	ND ND
Old Gym	Poly Floor	914110818-PCB-01B	ND
Old Gym	Poly Floor	914110818-PCB-01C	ND
Old Gym	Sleeper Floor	914110818-PCB-02A	ND
Old Gym	Sleeper Floor	914110818-PCB-02B	ND
Old Gym	Sleeper Floor	914110818-PCB-02C	ND
Old Gym	Mastic on Concrete	914110818-PCB-03A	ND
Old Gym	Mastic on Concrete	914110818-PCB-03B	ND
Old Gym	Mastic on Concrete	914110818-PCB-03C	ND
Old Gym Girl's Locker Room	Black Mastic Paper	914110818-PCB-04A	ND
Old Gym Boy's Locker Room	Black Mastic Paper	914110818-PCB-04B	ND
Old Gym Boy's Locker Room	Black Mastic Paper	914110818-PCB-04C	ND
Room 114	Black Mastic beneath Wood Floor	914110818-PCB-05A	ND
Room 114	Black Mastic beneath Wood Floor	914110818-PCB-05B	ND
Room 114	Black Mastic beneath Wood Floor	914110818-PCB-05C	ND
Room 109	Black Mastic on Concrete	914110818-PCB-06A	ND
Room 109	Black Mastic on Concrete	914110818-PCB-06B	ND
New Gym	Poly	914110818-PCB-07A	ND
New Gym	Poly	914110818-PCB-07B	ND
New Gym	Poly	914110818-PCB-07C	ND
Exterior – Side A	Brown Window Caulk at Aluminum	914110818-PCB-08A	ND
Exterior – Side B	Brown Window Caulk at Aluminum	914110818-PCB-08B	ND
Exterior – Side C	Brown Window Caulk at Aluminum	914110818-PCB-08C	ND
Room 212	Interior Brown Window Caulk	914110818-PCB-09A	ND
Library	Interior Brown Window Caulk	914110818-PCB-09B	4.2*
Room 501	Interior Brown Window Caulk	914110818-PCB-09C	3.5*
Side A Entry	Exterior Door Caulk	914110818-PCB-10A	ND
Stairs 2	Exterior Door Caulk	914110818-PCB-10B	ND
B Side	Exterior Door Caulk	914110818-PCB-10C	ND
A Side	Tan Caulk at Brick Molding	914110818-PCB-11A	ND
B Side	Tan Caulk at Brick Molding	914110818-PCB-11B	ND

Table 8PCB Bulk Product Sample Results



Sample Location	Material Type	Sample No.	Pcb Content (Mg/Kg)
D Side	Tan Caulk at Brick Molding	914110818-PCB-11C	ND
B Side	Interior Window Caulk	914110818-PCB-12	ND
Main Entry	Door Caulk	914110818-PCB-13	ND

ND = None Detected

* Elevated Reporting Limit

Results highlighted in bold text are less than 50 mg/kg but greater than 1 mg/kg PCBs

The Premier analytical results, summarized in *Table 8* above, documented concentrations of PCBs below 50 mg/kg in the bulk material samples. Two samples of the brown interior window caulk contained reported PCB concentrations of 3.5 mg/kg and 4.2 mg/kg. These results required further evaluation via analysis of the underlying substrate to determine if the material meets the definition of an excluded PCB Product.

Additionally, recoveries of laboratory surrogate compounds associated with analyses of a few materials were reported as 0% in the attached analytical report. The materials and samples affected by this laboratory non-conformance are summarized in *Table 9* below. Fuss & O'Neill and USEPA agreed in subsequent correspondence that data associated with the below-listed materials should be deemed suspect, and verified through supplemental confirmatory analyses, in an effort to more confidently evaluate the concentration of PCBs in these samples (i.e. the "affected samples").

Sample Location and	Affected Sample	
Material Type	Numbers	
	914110818-PCB-02A	
Old Gym - Sleeper Floor	914110818-PCB-02B	
	914110818-PCB-02C	
Room 114 - Black Mastic	914110818-PCB-05B	
Under Floor	914110818-PCB-05C	
	914110818-PCB-10A	
Exterior Door Caulk	914110818-PCB-10B	
	914110818-PCB-10C	
	914110818-PCB-11A	
Tan Caulk at Brick Molding	914110818-PCB-11B	
	914110818-PCB-11C	
Main Entry - Door Caulk 914110818-PCB-13		

Table 9 Bulk Samples Exhibiting Poor Surrogate Recoveries

In email correspondence provided to USEPA on November 9, 2011, Premier attributed the low surrogate recoveries to difficulty inherent in the Soxhlet extraction and subsequent clean-up of the affected sample matrices. According to Premier, all samples were subjected to Soxhlet extraction (USEPA Method 3540C) using hexane as the solvent. The extracts were then treated with a sulfuric acid clean up per USEPA Method 3665A. In the case of the affected samples, the sample volumes





completely dissolved into the hexane solvent and did not respond to multiple rounds of acid treatment, requiring dilutions of individual affected samples in the range of 10 to 50 times. The high level of dilution required for the affected samples led to the surrogate compounds being "diluted out." According to Premier, the raw analytical data indicated that surrogate compounds were detected in the affected samples, but at concentrations below the instrument calibration range (approximately 2%-4% recovery). Therefore, these surrogate recoveries were reported as 0%.

To address the surrogate recovery difficulties described above, and to evaluate the PCB content of the substrate underlying the brown interior window caulk, Fuss & O'Neill conducted additional PCB sampling, as described below in *Sections 6.4* and *6.5*.

6.3 Supplemental PCB Sampling

On June 11, 2012, Fuss & O'Neill representatives Mr. Dustin A. Diedricksen and Mr. Steven Hubbs, collected 11 additional samples of bulk product materials to address the laboratory quality control complications documented above (*Table 9*), as well as five additional substrate material samples to evaluate whether the initially-sampled materials exhibiting positive PCB detections (brown window caulk - *Table 8*) are Excluded PCB Products.

6.3.1 Supplemental PCB Bulk Product Sampling

On June 11, 2012, Fuss & O'Neill representatives Mr. Dustin A. Diedricksen and Mr. Steven Hubbs, recollected two samples of each of the materials listed in *Table 9*, plus an additional duplicate sample, for a total of 11 bulk material samples. Tools utilized to collect the bulk material samples were disposable items discarded after each individual sample was collected. Each sample was placed in an individual container, labeled, and delivered to ESS using proper chain of custody. Samples were extracted by ESS using USEPA Method 3540 (Soxhlet) and analyzed for PCBs by USEPA Method 8082. Laboratory results of samples analyzed for PCBs and applicable data validation materials are included in *Appendix G*. The following table identifies the supplemental samples by location, material type, sample number, and PCB content.

Sample Location	Material Type	Sample No.	PCB Content (Mg/Kg)
Old Gym	Sleeper Floor	914120611-03A	ND
Old Gym	Sleeper Floor	914120611-03B	ND
Room 114	Black Mastic beneath Wood Floor	914120611-04A	5.21
Room 114	Black Mastic beneath Wood Floor	914120611-04B	3.30
Side A Entry	Exterior Door Caulk	914120611-05A	ND
Stairs 2	Exterior Door Caulk (primary sample)	914120611-05B	ND

Table 10 Supplemental PCB Bulk Product Sample Results





Sample Location	Material Type	Sample No.	PCB Content (Mg/Kg)
Stairs 2	Exterior Door Caulk (duplicate sample)	914120611-06	ND
A Side	Tan Caulk at Brick Molding	914120611-07A	2.06
A Side	Tan Caulk at Brick Molding	914120611-07B	3.82
Main Entry	Door Caulk (D-2 door)	914120611-08A	ND
Main Entry	Door Caulk (D-3 door)	914120611-08B	ND

ND = None Detected

The analytical results, summarized in *Table 10* above, documented two bulk materials, black mastic and tan caulk at brick molding, which contained concentrations of PCBs greater than 1.0 ppm but less than 50 ppm. These two materials should be further evaluated to determine whether they were installed prior to 1984 (thereby meeting the definition of an "Excluded PCB product"). Additionally, further sampling of adjacent material is warranted to confirm that these materials have not been contaminated by PCBs leaching from adjacent media which were themselves contaminated by a PCB Bulk Product.

6.3.2 Supplemental PCB Substrate Sampling

To evaluate whether the initially-sampled materials exhibiting positive PCB detections (*Table 8*) are Excluded PCB Products, an evaluation of adjacent substrate materials was warranted. Initially, PCB detections were reported in two of three samples of a brown caulking material observed around windows. The caulking was additionally identified as the most likely material to have the potential to experience back-leaching from an adjacent substrate, as it was in contact with porous media.

On June 11, 2012, Fuss & O'Neill representatives, Mr. Dustin A. Diedricksen and Mr. Steven Hubbs, collected samples of porous substrate in the three window systems where the suspect brown caulk was sampled previously, to verify that the adjacent substrates are not a source of higher concentrations of PCBs. The suspect caulk was observed to contact only one type of porous substrate – wood. Fuss & O'Neill collected three wood substrate samples, plus one additional duplicate wood-substrate sample. Tools utilized to collect samples were either disposable items discarded after each individual sample was collected, and/or a reusable chisel. To avoid cross contamination of samples, the chisel was decontaminated with hexane in accordance Fuss & O'Neill's Standard Operating Procedures in between samples. At the end of the sampling event, the chisel was decontaminated and a wipe sample was subsequently collected from the chisel for QA/QC purposes. The four substrate samples and one wipe sample were placed in individual containers, labeled, and delivered to ESS using proper chain of custody. Samples were extracted by ESS using USEPA Method 3540 (Soxhlet) and analyzed for PCBs by USEPA Method 8082. Refer to *Appendix G* for analysis results of samples collected on June 11, 2012 and applicable data validation materials.



Sample Location	Material Type	Sample No.	PCB Content (Mg/Kg)
Room 212	Wood Substrate	914120611-01A	ND
Library	Wood Substrate (primary sample)	914120611-01B	0.375
Library	Wood Substrate (duplicate sample)	914120611-02	0.460
Room 501	Wood Substrate	914120611-01C	1.80
Chisel Wipe	Equipment Blank	914120611-09	ND

Table 11 Substrate Analytical Results

ND = None Detected

The analytical results, summarized in *Table 11* above, documented concentrations of PCBs below 50 mg/kg in the wood substrate samples. Three samples of the wood substrate contained reported PCB concentrations between 0.375 mg/kg and 1.80 mg/kg. None of the sampled substrate materials contained concentrations of PCBs equal to or greater than 50 mg/kg. These results confirm that the substrate materials do not meet the definition of a TSCA-regulated source material. Therefore, the adjacent PCB-containing materials can be considered excluded PCB products.

6.4 PCB Assessment Conclusions

Fuss & O'Neill performed an evaluation of specific suspect building materials for the presence of PCBs. The results of this evaluation indicated that regulated concentrations of PCBs were not present in the sampled materials.

Two samples of brown, interior window caulk were reported to contain total PCB arochlor concentrations of 3.5 mg/kg and 4.2 mg/kg. Substrate analyses were performed to determine if the material meets the definition of an Excluded PCB Product. Reported PCB concentrations in the substrate samples were below 50 mg/Kg. The brown interior window caulk therefore meets the definition of an Excluded PCB Product under TCSA. Therefore, these materials would not warrant management as TSCA regulated PCB waste. However, they must be disposed of as a PCB containing material with a PCB concentration less than 50 mg/kg, at a landfill facility licensed to accept such waste.

Two bulk materials analyzed during the supplemental sampling program (black floor mastic and tan window caulk) contained PCB concentrations above 1.0 ppm but below 50.0 ppm. These two materials should be further evaluated to determine whether they were installed prior to 1984 (thereby meeting the definition of an "Excluded PCB product"). Additionally, further sampling of adjacent material is warranted to confirm that these materials have not been contaminated by PCBs leaching from adjacent media which were themselves contaminated by a PCB Bulk Product.





7 Data Verification and Usability Assessment

7.1 Data Verification

Fuss & O'Neill conducted modified Tier II data verification of the field and analytical data resulting from the assessment documented herein. Modified Tier II verification narratives, as well as modified Tier II data validation checklists, are attached to each laboratory analytical report in *Appendices B, C, E, F, and G*.

Analyses Requested

During the course of the sampling events conducted at the subject property, samples of potentiallyhazardous building materials were laboratory analyzed for the following parameters:

- Asbestos by PLM
- Asbestos by TEM
- Lead by USEPA Method 6010
- TCLP lead by USEPA Methods 1311 and 6010
- PCBs by USEPA Method 8082
- PCBs by USEPA Method 8082 with Soxhlet Extraction by USEPA Method 3540

Based on a review of the proposed scope of work detailed in the *Site Specific QAPP Addendum* and QAPP Modifications, the field sampling data sheets, chains of custody, and resulting laboratory analytical reports, each of the collected samples were analyzed for the appropriate set of analytical parameters.

Sample Holding Times

According to information contained within the laboratory analytical data reports, all samples were analyzed within method-specified holding times.

Trip Blank Samples

Since no samples were collected for analysis of volatile organic compounds, no trip blanks were warranted.

Field Blank Samples

For the most part, dedicated disposable sampling equipment was used to collect samples at the site, removing the need for the collection and analysis of field/equipment blanks. On one field mobilization (supplemental PCB substrate sampling), a non-dedicated wood chisel was utilized to collect samples for analysis of PCBs. Since this reusable tool required field decontamination in between sampling locations, an equipment blank, consisting of a wipe sample for analysis of PCBs, was collected following decontamination. No PCB compounds were detected in the wipe sample at a concentration greater than the laboratory reporting limit.



Duplicate Samples

When warranted, duplicate samples were included in the sampling plan. For some matrices and analyses, multiple samples of each homogeneous material were collected in lieu of specific duplicate samples, as follows:

- <u>Asbestos Analysis</u>: For most materials, approximately three samples of each homogeneous building material were collected and analyzed for asbestos for quality control purposes. Therefore, specific additional duplicate samples were not analyzed for asbestos.
- <u>Lead Waste Characterization</u>: One duplicate composite sample was collected for TCLP lead analysis.
- Lead Paint Chip Analysis: One duplicate sample was collected for total lead analysis.
- <u>Initial PCB Bulk Product Analysis</u>: For most materials, approximately three samples of each homogeneous building material were collected and analyzed for PCBs for quality control purposes. Therefore, specific additional duplicate samples were not analyzed.
- <u>Supplemental PCB Bulk Product Analysis</u>: For most materials two samples of each homogeneous building material were collected and analyzed for PCBs for quality control purposes. However, due to the previously observed laboratory extraction and quality control difficulties, one additional duplicate sample was collected and analyzed for PCBs for quality control purposes during this assessment.
- <u>Supplemental PCB Substrate Analysis</u>: One duplicate sample was collected for PCB analysis.

Details regarding the primary and duplicate sample analyses and results, as well as calculated Relative Percent Differences (RPDs) of the primary/duplicate pairs are included in the data verification narratives included with each laboratory report in *Appendices B, C, E, F, and G*. For the most part, RPDs were within acceptable ranges, except where specifically noted and discussed sample heterogeneity, laboratory extraction, or quality control compliance difficulties affected the reproducibility of the data.

7.2 Detection Limits and Applicable Regulatory Criteria

The laboratory reporting and detection limits were sufficiently low enough to evaluate the resulting data for its intended purpose of comparison to applicable regulatory standards for asbestos, lead, and PCBs.

7.3 Data Usability

Based on the completed evaluation of field data as well as primary, duplicate, and other quality control laboratory analyses, the data collected as part of this assessment was usable to draw the conclusions outlined herein. While some laboratory quality control difficulties were encountered during the initial PCB bulk product analysis, selected samples were re-collected and analyzed along with additional



samples, which resulted in the acquisition of sufficient quality data to support the decisions necessary to meet the objective of the assessment as detailed herein.



Appendix A

Asbestos Inspector Licenses and Certifications



Rhode Island Department of Health Asbestos Program Consultants-Inspector

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Exp. Date: 02/28/2013 License #: AAC-0798 Member of C.O.N.E.S.





Appendix B

Asbestos PLM Laboratory Analytical Results





Modified Tier II Data Validation Narrative

Project: 20100607.A20 Site Investigation/Targeted Brownfields Assessment Former Woonsocket Middle School

EMSL Laboratory Project Numbers:	041124572B, 041126490C
Date Samples Received at Laboratory:	September 13, 2012
Date of Review:	November 2, 2012

On September 13, 2012, EMSL Analytical, Inc. (EMSL) received 403 bulk building materials samples from Fuss & O'Neill, care of ESS Laboratory. The samples were submitted to EMSL for analysis of asbestos content using a variety of analytical methods.

Initially 354 samples were analyzed via polarized light microscopy (PLM) using procedures documented in United States Environmental Protection Agency (USEPA) Method 600/R-93/116. Additionally, based on the documented results of a previous building materials assessment conducted at the site, 40 samples were selected for confirmatory analysis via Transmission Electron Microscopy (TEM).

Analytical results were expressed in percent asbestos content, with a quantification limit of <1% for PLM and TEM analyses. The correct samples were analyzed via the appropriate requested methods. When appropriate and as requested by Fuss & O'Neill, analyses of samples comprising a sample group of the same material were stopped upon confirmation that an initial sample in the group contained asbestos. The sample descriptions shown in the analytical reports matched those documented in the corresponding field data sheets/chains of custody.

No significant laboratory non-conformances or deviations from the *Site-Specific QAPP Addendum* were noted for the asbestos samples and analyses. According to the case narratives and the *Modified Tier II Data Validation Checklist* associated with these analytical reports, analyses of batch blanks, laboratory duplicates, and laboratory control samples were performed and within acceptable quality control ranges. In summary, the asbestos data were considered usable for the purposes of quantifying asbestos content in the sampled building materials and developing a cost estimate for abatement activities.



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

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PLM- 041124572B GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

	YES	NO
 SAMPLING AND FIELD MEASUREMENTS: 		
Field measurement calibration records		D N/A
Groundwater field measurements (if applicable)		
Soil sampling field measurements (if applicable)		
Sediment sampling field measurements (if applicable)		
Surface water sampling field measurements (if applicable)		
Low-flow sampling field measurements (if applicable)		
Documentation of field activities	X	
Sample numbering and labeling	X	
Chain-of-Custody records	X	
Trip blanks		DNA
Duplicate samples		
Equipment blanks		
Split samples (if any)		
2. LABORATORY MEASUREMENTS:		
Trip blanks		DNIA
Instrument blanks	X	
Laboratory control samples	X	
Duplicates samples	5×	
Equipment blanks		D NIA
Matrix spike/matrix spike duplicates		1
Analysis type	10×	
Chain-of-Custody records	X	
Surrogate recoveries		DNA
Sample Project Narratives	X	
Split samples (if any)		DNIA
	0	
TOTAL:		
PERCENT	COMPLETE:	100 %

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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	<u>COMMENTS</u>
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			
pH - \pm 0.3 pH units			DIR
S.C \pm 5% of calibration solution, within?			1
calibration range			
Temperature - \pm 0.5 °C			
D.O \pm 5% of calibration solution			
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ±2 ppm			
OVA - ±2 ppm			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)			
S.C ± 10%			
$pH - \pm 0.2 pH$ units			
Temperature - \pm 10%			
Turbidity - ±5 NTU			
Documentation of field activities			
Site-specific information documented in field notebook?	XX		
Field data sheets completed?	(A)		
Sample numbering and labeling			numbering system
Sample numbering conforms to sample I.D. system	_	a word	specific to building 1.
identified in QAPP?		X	space mater
Chain-of-Custody records	N	-	Cali
Chain-of-Custody forms completed?	X		neld dark
			sheets served as

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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	<u>COMMENTS</u>
Trip blanks			
Trip blanks submitted, one per day?			N/A
Any compounds detected in trip blanks?			
Duplicate samples		-	
Field duplicates performed, 1/20 samples?			
Duplicates performed on 10% of samples screened			
for explosives?			
Is percent difference within 30% for all field parameters?			
Equipment blanks	_	_	
Equipment blanks submitted, one per sampling day?			
Any compounds detected in equipment blank?			
Split samples (if any)		_	
Split samples collected?			
Is percent difference within 30% for split samples?			
 LABORATORY MEASUREMENTS: Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? 			NIA J
Instrument blanks**	\bigotimes		
Laboratory control samples**	×		and the second se
Duplicates samples**	X		
Equipment blanks**			NIA
Matrix spike/matrix spike duplicates**			1
Analysis type	X		
Chain-of-Custody records	×		
Surrogate recoveries**			NIA
Sample Project Narratives	X		
Split samples (if any)**			NIA
Most recent EPA WP-PE sample results**			V

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EMSL ANALYTICAL, INC. 200 ROUTE 130 NORTH CINNAMINSON, NJ 08077 PHONE: (800) 220-3675 FAX: (856) 786-0235

September 9, 2011

Pat Dowling Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040

PDowling@fando.com

Re: Narrative EMSL Order ID 041124572

Dear Pat:

On September 13, 2011 EMSL Analytical, Inc.(Woburn, MA) received 403 bulk samples for 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL project. These samples were brought in by client carrier from Fuss & O'Neill EnviroScience for bulk asbestos content. At that point the Woburn lab manager contacted the EMSL Corporate Asbestos Lab in Cinnaminson, NJ to see if they could accept the samples based on their quantity and time-frame for results. The EMSL NJ lab accepted these samples and received them on September 14, 2011. All samples were logged in following normal lab procedures and were received in acceptable condition. All 403 samples were present and in acceptable condition.

PLM EPA 600/R-93/11 -116

The bulk samples were analyzed via polarized light microscopy (PLM) using the procedures from the EPA 600/R-93/116 method. All data was reported on a %asbestos basis with a limit of quantification for this method of <1%. Positive stops as well as samples layers were established by the client.

Daily lab blanks, scope alignments, inter and intra QC analysis were performed in accordance with EMSL's QC SOP. All QC data was deemed as acceptable.

State Signed

Stephen Siegel, CIH Asbestos Lab Manager EMSL Cinnaminson, NJ





I	Pat Dowling Fuss & O'Neill Enviro	Scien	ce, LLC	Customer ID: Customer PO:	ENVI54		
	146 Hartford Road Manchester, CT 0604	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572		
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: DRMER W	()	EMSL Proj: Analysis Date:	9/18/2011		

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
818DD-01A 041124572-0001	STAIR 7 (LANDING & STAIR TREAD) - BROWN (THICK) VINYL 12X12 FLOORING W/ DIAMOND PATTERN	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-01B 041124572-0002	STAIR 9 (LANDING & STAIR TREAD) - BROWN (THICK) VINYL 12X12 FLOORING W/ DIAMOND PATTERN	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-02A 041124572-0003	STAIR 7 (LANDING & STAIR TREAD) - TAN ADHESIVE ASSOCIATED W/ BROWN (THICK) VINYL 12X12	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66)

Garret Vliet (45) Johnny Yu (46)

Laura Torres (38 Melanie Koenig

- Sien

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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I	Pat Dowling Fuss & O'Neill Enviro	Science,	LLC	Customer ID: Customer PO:	ENVI54	
	146 Hartford Road Manchester, CT 0604	0		Received: 09/14/11 9:25 AM EMSL Order: 041124572		
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	· · ·	0) 646-2469 NSOCKET	EMSL Proj: Analysis Date:	9/18/2011	

				Non-Asbest	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
818DD-02B 041124572-0004	STAIR 9 (LANDING & STAIR TREAD) - TAN ADHESIVE ASSOCIATED W/ BROWN (THICK) VINYL 12X12	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-05A 041124572-0005	ROOM 101 - WHITE MOTTLED W/ BROWN 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
818DD-05B 041124572-0006	ROOM 101 - WHITE MOTTLED W/ BROWN 12X12 FLOOR TILE					Stop Positive (Not Analyzed)
818DD-07A 041124572-0007	ROOM 101 - SUBFLOOR/SLEE PER FLOOR TAR FILLER (MASTIC)	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-07B 041124572-0008	ROOM 101 - SUBFLOOR/SLEE PER FLOOR TAR FILLER (MASTIC)	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
tial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sie	d
Christine Hatter (11) Erica Valent (66)		Garret Vliet (45) Johnny Yu (46)		Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laboratory Manager or other approved signatory	

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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011	

		Non-Asbestos				Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
818DD-08A 041124572-0009	ROOM 105 - WHITE W/ BROWN STREAKS 9X9 FLOOR TILE	White Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
818DD-08B 041124572-0010	ROOM 105 - WHITE W/ BROWN STREAKS 9X9 FLOOR TILE					Stop Positive (Not Analyzed)
818DD-09A 041124572-0011	ROOM 105 - 4" LIGHT BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-10A 041124572-0012	ROOM 105 - TAN MASTIC A/W 4" LIGHT BROWN VBB	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-10B 041124572-0013	ROOM 105 - TAN MASTIC A/W 4" LIGHT BROWN VBB	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

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	146 Hartford Road Manchester, CT 0604	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL		(860) 646-2469 OONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

				<u>Non-As</u>	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
818DD-13A 041124572-0014	LIBRARY (INTERIOR) - BROWN WINDOW CAULK @ ALUMINUM (PLIABLE)	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-13B 041124572-0015	ROOM 260 (EXTERIOR) - ALUMINUM FRAMES (TYPICAL)	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-14A 041124572-0016	TYPICAL WINDOWS - TAN CAULKING AT (WOOD) BRICK MOLDING CONCEALED BENEATH ALUMINUM WINDOW FRAMES	Non-Fibrous Heterogeneous			90% Non-fibrous (other)	10% Chrysotile

 Initial report from 09/19/2011 09:55:54

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 Laura Torres (3٤

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	146 Hartford Road		Received:	09/14/11 9:25 AM
	Manchester, CT 060	40	EMSL Order	: 041124572
Fax:	(888) 838-1160	Phone: (860) 646-	EMSL Proj:	
Project	20100607.A20/RIDEM - I MIDDLE SCHOOL	FORMER WOONSOCK		e: 9/18/2011

		tos	Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
818DD-14B 041124572-0017	TYPICAL WINDOWS - TAN CAULKING AT (WOOD) BRICK MOLDING CONCEALED BENEATH ALUMINUM WINDOW FRAMES					Stop Positive (Not Analyzed)
818DD-14C 041124572-0018	TYPICAL EXTERIOR DOORS - TAN CAULKING AT DOOR FRAMES (EXTERIOR)					Stop Positive (Not Analyzed)
818DD-16A 041124572-0019	ROOM 105 - BLACK SINK UNDERCOATING	Black Non-Fibrous Homogeneous			85% Non-fibrous (other)	15% Chrysotile
818DD-17A 041124572-0020	ROOM 203 - 2" BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-18A 041124572-0021	ROOM 203 - MASTIC A/W 2" BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sie	d
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ory Manager
Erica Valent (66)	Johni	ny Yu (46)		Melanie Koenig	or other approved signa	atory



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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: DRMER W	()	EMSL Proj: Analysis Date:	9/18/2011

				Non-Asbest	tos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
818DD-18B 041124572-0022	ROOM 212 - MASTIC A/W 2" BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
818DD-19A 041124572-0023	ROOM 211 - MINT GREEN W/ CREAM & GREEN SPLOTCHES 9X9 FLOOR TILE	Green Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile	
818DD-20A 041124572-0024	ROOM 203 - GREY & WHITE WASH OUT 9X9 FLOOR TILE	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile	
818DD-21A 041124572-0025	ROOM 204 - GREYISH GREEN W/ WHITE & GREY STREAKS 9X9 FLOOR TILE	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile	
818DD-22A 041124572-0026	ROOM 205/205A - BROWN, TAN & GREEN SWIRL 9X9 FT	Brown Non-Fibrous Homogeneous	20%	Cellulose	80% Non-fibrous (other)	None Detected	
tial report from 09/1	9/2011 09:55:54						
Analyst(s)					Style Sien	1	
Christine Hatter (11) Garre	t Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ry Manager	
Erica Valent (66)	Johnr	ny Yu (46)		Melanie Koenig	or other approved signa	itory	



I	Pat Dowling Fuss & O'Neill Enviro	oScien	ce, LLC	Customer ID: Customer PO:	ENVI54
	46 Hartford Road			Received:	09/14/11 9:25 AM
I	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
818DD-23A 041124572-0027	ROOM 205/205A - TAN & BROWN SWIRL 9X9 FT	Tan Non-Fibrous Homogeneous	20%	Cellulose	80% Non-fibrous (other)	None Detected
818DD-24A 041124572-0028	OFFICE AREA (205/205A) - BLACK PAPER MASTIC ASSOCIATED WITH 9X9 FLOOR TILE	Black Fibrous Homogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
818DD-24B 041124572-0029	ROOM 455 - BLACK PAPER MASTIC ASSOCIATED WITH 9X9 FLOOR TILE	Black Fibrous Homogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
818DD-24C 041124572-0030	ROOM 558 - BLACK PAPER MASTIC ASSOCIATED WITH 9X9 FLOOR TILE	Black Fibrous Homogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected

Analyst(s)

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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: RMER W	()	EMSL Proj: Analysis Date:	9/18/2011

		Non-Asbestos				Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type		
818DD-25A 041124572-0031	ROOM 202A - WHITE W/ TAN & GREY SPECKS 9X9 FLOOR TILE	Tan Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile		
818DD-26A 041124572-0032	ROOM 207A- RAISED FLOOR - OFF WHITE W/ CREAM & BROWN STREAKS 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
818DD-27A 041124572-0033	ROOMS 207A/B - BEIGE W/ CREAM & BROWN STREAKS 12X12 FT	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected		
818DD-28A 041124572-0034	ROOMS 207A/B - BLUE 9X9 FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT	Blue Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile		

 Initial report from 09/19/2011 09:55:54

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 Laura Torres (3E

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	46 Hartford Road			Received:	09/14/11 9:25 AM
l l	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER WOONS	SOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>		
Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
ROOM 211 - BEIGE W/ WHITE & BROWN SPLOTCHES 9X9 FT	Tan Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
ROOM 213 - LIGHT BROWN W/ CREAM & BROWN SPLOTCHES 9X9 FLOOR TILE	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
ROOM 213 - DARK BROWN W/ CREAM & LIGHT BROWN SPLOTCHES 9X9 FLOOR TILE	Brown Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
ROOM 220 (OFFICE) - GREEN MOTTLED 12X12 FT	Tan Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile
ROOM 216 - LIGHT BLUE W/ WHITE STREAKS 9X9 FLOOR TILE	Blue Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
9/2011 09:55:54					
				Style Siege	1
Garre	t Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborator	y Manager
Johni	ny Yu (46)		Melanie Koenig	or other approved signa	tory
	ROOM 211 - BEIGE W/ WHITE & BROWN SPLOTCHES 9X9 FT ROOM 213 - LIGHT BROWN W/ CREAM & BROWN SPLOTCHES 9X9 FLOOR TILE ROOM 213 - DARK BROWN W/ CREAM & LIGHT BROWN SPLOTCHES 9X9 FLOOR TILE ROOM 220 (OFFICE) - GREEN MOTTLED 12X12 FT ROOM 216 - LIGHT BLUE W/ WHITE STREAKS 9X9 FLOOR TILE	ROOM 211 - BEIGE W/ WHITE & BROWN SPLOTCHES 9X9 FTTan Non-Fibrous HomogeneousROOM 213 - LIGHT BROWN W/ CREAM & BROWN SPLOTCHES 9X9 FLOOR TILETan Non-Fibrous HomogeneousROOM 213 - LIGHT BROWN W/ CREAM & BROWN SPLOTCHES 9X9 FLOOR TILETan Non-Fibrous HomogeneousROOM 213 - DARK BROWN SPLOTCHES 9X9 FLOOR TILEBrown Non-Fibrous HomogeneousROOM 213 - DARK BROWN SPLOTCHES 9X9 FLOOR TILEBrown Non-Fibrous HomogeneousROOM 216 - LIGHT BLUE W/ WHITE STREAKS 9X9 FLOOR TILEBlue Non-Fibrous Homogeneous	ROOM 211 - Tan BEIGE W/ WHITE Non-Fibrous & BROWN SPLOTCHES 9X9 FT Tan ROOM 213 - Tan LIGHT BROWN Non-Fibrous W/ CREAM & Non-Fibrous BROWN SPLOTCHES 9X9 FLOOR TILE Tan Non-Fibrous Homogeneous ROOM 213 - Dark BROWN SPLOTCHES 9X9 Brown NARK BROWN Non-Fibrous W/ CREAM & Brown NARK BROWN Non-Fibrous Homogeneous Homogeneous ROOM 213 - DARK BROWN V/ CREAM & Brown Non-Fibrous Homogeneous MOTTLED 12X12 Tan Non-Fibrous Homogeneous MOTTLED 12X12 Blue Non-Fibrous Homogeneous W2011 09:55:54 June W2011 09:55:54 June	Description Appearance % Fibrous ROOM 211 - BEIGE W/ WHITE & BROWN SPLOTCHES 939 FT Tan Non-Fibrous Homogeneous Non-Fibrous Homogeneous Image: Comparison of the temperature of tempe	ROOM 211 - BEIGE W/ WHITE & BROWN SPLOTCHES 9X9 Tan Non-Fibrous Homogeneous 97% Non-fibrous (other) ROOM 213 - LIGHT BROWN W CREAM & BROWN SPLOTCHES 9X9 FLOOR TILE Tan Non-Fibrous Homogeneous 98% Non-fibrous (other) ROOM 213 - DARK BROWN W CREAM & BROWN SPLOTCHES 9X9 FLOOR TILE Brown Non-Fibrous Homogeneous 98% Non-fibrous (other) ROOM 213 - DARK BROWN SPLOTCHES 9X9 FLOOR TILE Brown Non-Fibrous Homogeneous 98% Non-fibrous (other) ROOM 220 (OFFICE) - Non-Fibrous Homogeneous Tan Non-Fibrous Homogeneous 95% Non-fibrous (other) ROOM 216 - LIGHT BLUE W/ WHITE STREAKS 9X9 FLOOR TILE Blue Non-Fibrous Homogeneous 98% Non-fibrous (other) WOTLED 12X12 FT Blue Non-Fibrous Homogeneous 98% Non-fibrous (other) WUTE STREAKS 9X9 FLOOR TILE Blue Non-Fibrous Homogeneous 98% Non-fibrous (other) V2011 09:55:54 Laura Torres (38 Stephen Siegel, CIH, Laboratou



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				<u>Non-Asl</u>	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
818DD-34A 041124572-0040	ROOM 214A/B - GREY MOTTLED 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			Suggest T	EM		
818DD-34B 041124572-0041	ROOM 557 - GREY MOTTLED 12X12 FLOOR TILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			Suiggest T	EM		
818DD-35A 041124572-0042	ROOM 209A/B - BROWN & TAN MOTTLED 21X12 FT	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
818DD-36A 041124572-0043	ROOM 218 - BROWN & TAN WASH OUT 9X9 FT	Tan Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile
818DD-37A 041124572-0044	ROOM 552 - BLUISH GREEN 12X12 FT	Green Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

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	Manchester, CT 0604	40	EMSL Order:	041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project	20100607.A20/RIDEM - FC MIDDLE SCHOOL	DRMER WOONSOCKET	Analysis Date:	9/18/2011

			Non-Asbest	<u>Asbestos</u>	
Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
ROOM 550 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
ROOM 301 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT					Stop Positive (Not Analyzed)
ROOM 553 - BROWN, TAN & WHITE MOTTLED 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
ROOM 550 - LIGHT PURPLE W/ PURPLE & WHITE STREAKS 12X12 FLOOR TILE	Purple Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
/19/2011 09:55:54					
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				Strole See	d
1) Garre	t Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	
	ny Yu (46)		Melanie Koenig	or other approved signa	atory
	ROOM 550 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT ROOM 301 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT ROOM 553 - BROWN, TAN & WHITE MOTTLED 12X12 FLOOR TILE ROOM 550 - LIGHT PURPLE W/PURPLE & WHITE STREAKS 12X12 FLOOR TILE	ROOM 550 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Tan Non-Fibrous Homogeneous ROOM 301 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Tan Non-Fibrous Homogeneous ROOM 553 - BROWN, TAN & WHITE MOTTLED 12X12 FLOOR TILE Tan Non-Fibrous Homogeneous ROOM 550 - LIGHT PURPLE W/ PURPLE & WHITE STREAKS 12X12 FLOOR TILE Purple Non-Fibrous Homogeneous	ROOM 550 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Tan Non-Fibrous Homogeneous ROOM 301 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Tan Non-Fibrous Homogeneous ROOM 553 - BROWN, TAN & WHITE MOTTLED 12X12 FLOOR TILE Tan Non-Fibrous Homogeneous ROOM 550 - LIGHT PURPLE W/ PURPLE & WHITE STREAKS 12X12 FLOOR TILE Purple Non-Fibrous Homogeneous	DescriptionAppearance%FibrousROOM 550 · TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENTTan Non-Fibrous HomogeneousNon-Fibrous HomogeneousROOM 301 · TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENTTan Non-Fibrous HomogeneousImage: Comparison of the state of the	DescriptionAppearance%Fibrous%Non-FibrousROOM 550 - TAN/BROWN VINYL FLOOR TILE UNDERNEATH PLYWOOD TILETan Non-Fibrous No



	Pat Dowling Fuss & O'Neill Enviro	Scien	ce, LLC	Customer ID: Customer PO:	ENVI54	
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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: DRMER W		EMSL Proj: Analysis Date:	9/18/2011	

		Non-Asbestos				<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
818DD-41A 041124572-0049	HALLWAY O/S #554-550 - BROWN & TAN MOTTLED 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
818DD-42A 041124572-0050	HALLWAY O/S #554-550 - BLACK W/ WHITE & GREEN STREAKS 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous			96% Non-fibrous (other)	4% Chrysotile	
818DD-44A 041124572-0051	ROOM 501 - REDDISH PINK W/ WHITE SPLOTCHES 12X12 FLOOR TILE	Pink Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
818DD-46A 041124572-0052	ROOM 502A - PEA GREEN W/ DARK GREEN & WHOTE SPLOTCHES 12X12 FT	Green Non-Fibrous Homogeneous			94% Non-fibrous (other)	6% Chrysotile	

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

 Christine Hatter (11)
 Garret Vliet (45)

 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
 Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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I	Pat Dowling Fuss & O'Neill Enviro	oScience, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road Manchester, CT 0604	10	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

				Non-Asbes	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
818DD-47A 041124572-0053	ROOM 502 (STAIR & CLOSET) - BROWN, BEIGE & TAN MOTTLED 12X12 FLOOR TILE	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
			suggest ter	m		
76DD-48A 041124572-0054	HALL O/S FORMER HS OFFICE - RED MOTTLED 12X12 FLOOR TILE (TOP LAYER)	Purple Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-49A 041124572-0055	HALL O/S FORMER HS OFFICE - GREY/YELLOW MASTIC A/W RED MOTTLED 12X12 FT	Gray/Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-49B 041124572-0056	HALL O/S FORMER HS OFFICE - GREY/YELLOW MASTIC A/W RED MOTTLED 12X12 FT	Brown/Tan Fibrous Heterogeneous	4%	Cellulose	96% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sien	1
Christine Hatter (11)) Garre	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborator	
Erica Valent (66)	John	ny Yu (46)		Melanie Koenig	or other approved signa	tory



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	Manchester, CT 0604	0	EMSL Order:	041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469	EMSL Proj: Analysis Date:	9/18/2011

			Non-Asbes	Asbestos	
Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
HALL O/S FORMER HS OFFICE - GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
HALL O/S FORMER HS OFFICE - BLUE VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT	Blue Non-Fibrous Heterogeneous	suggest fem		100% Non-fibrous (other)	None Detected
AUDITORIUM - PINKISH ORANGE MOTTLED 12X12 FLOOR TILE	Peach Non-Fibrous Heterogeneous	Suggest ten		100% Non-fibrous (other)	None Detected
LIBRARY - 1X1 PEGBOARD- TYPE CEILING TILE (SPLINE)	Brown/White Fibrous Heterogeneous	85%	Cellulose	15% Non-fibrous (other)	None Detected
9/2011 09:55:54					
				Style Siege	1
Garre	et Vliet (45)		 Laura Torres (38	Stephen Siegel, CIH, Laborator	y Manager
Johni	ny Yu (46)		Melanie Koenig	or other approved signa	tory
	HALL O/S FORMER HS OFFICE - GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT HALL O/S FORMER HS OFFICE - BLUE VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT AUDITORIUM - PINKISH ORANGE MOTTLED 12X12 FLOOR TILE LIBRARY - 1X1 PEGBOARD- TYPE CEILING TILE (SPLINE)	HALL O/S Gray FORMER HS OFFICE - GREY VINYL FLOOR Heterogeneous TILE UNDERNEATH PLYWOOD NON-Fibrous HALL O/S Blue FORMER HS OFFICE - BLUE VINYL FLOOR Blue NON-Fibrous Heterogeneous HALL O/S Blue FORMER HS OFFICE - BLUE VINYL FLOOR Heterogeneous VINYL FLOOR Heterogeneous VINYL FLOOR Non-Fibrous HALL O/S Blue NODERNEATH PLYWOOD UNDERLAYMENT Non-Fibrous AUDITORIUM - Peach NON-Fibrous Heterogeneous MOTTLED 12X12 Peach NONTILEO 12X12 Brown/White FBGBOARD- TYPE CEILING TILE (SPLINE) Heterogeneous 9/2011 09:55:54 Heterogeneous	HALL O/S Gray FORMER HS OFFICE - GREY VINYL FLOOR Heterogeneous TILE UNDERNEATH PLYWOOD UNDERLAYMENT HALL O/S Blue FORMER HS OFFICE - BLUE VINYL FLOOR Non-Fibrous FORMER HS OFFICE - BLUE VINYL FLOOR Heterogeneous TILE Non-Fibrous HALL O/S Blue NON-Fibrous Heterogeneous VINYL FLOOR Non-Fibrous HALL O/S Blue NODERNEATH Non-Fibrous Heterogeneous suggest tem AUDITORIUM - Peach NONTILED 12X12 Peach MOTTLED 12X12 Brown/White 85% TYPE CEILING Fibrous TILE (SPLINE) Heterogeneous 9/2011 09:55:54	Description Appearance % Fibrous HALL O/S FORMER HS OFFICE - GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Gray Non-Fibrous Heterogeneous Source - State Source - State VinyL FLOOR TILE UNDERNEATH PLYWOOD UND	Description Appearance % Fibrous % Non-Fibrous HALL O/S FORMER HS OFFICE - GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Gray Non-Fibrous Heterogeneous 100% Non-fibrous (other) 100% Non-fibrous (other) HALL O/S FORMER HS OFFICE - BLUE VINYL FLOOR TILE UNDERNEATH PLYWOOD UNDERLAYMENT Blue Non-Fibrous Heterogeneous 100% Non-fibrous (other) AUDITORIUM - PINKISH ORANGE MOTTLED 12X12 FLOOR TILE Peach Non-Fibrous Heterogeneous 100% Non-fibrous (other) LIBRARY - 1X1 PEGBOARD- TYPE CEILING TLE (SPLINE) Brown/White Heterogeneous 85% Cellulose Fibrous Heterogeneous 15% Non-fibrous (other) JUDITORIUM - PINKISH ORANGE MOTTLED 12X12 FLOOR TILE Brown/White Heterogeneous 85% Cellulose Fibrous Heterogeneous 15% Non-fibrous (other) JUBRARY - 1X1 PEGBOARD- TYPE CEILING TLE (SPLINE) Brown/White Heterogeneous 85% Cellulose Fibrous Heterogeneous 15% Non-fibrous (other)



F 1	Pat Dowling Fuss & O'Neill Envirc 46 Hartford Road Aanchester, CT 0604	ce, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
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			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
76DD-55A 041124572-0061	BOOK STORAGE RM (OFF LIBRARY) - MULIT-DOT 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous	40% 30%		30% Non-fibrous (other)	None Detected
76DD-56A 041124572-0062	LIBRARY BOOK STORAGE ROOM - BEIGE W/ WHITE & BROWN 9X9 FT	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-57A 041124572-0063	FORMER HS MAIN OFFICE - BROWNISH GREY W/ WHITE & BROWN SPECKS 9X9 FLOOR TILE (DOMINANT TYPE)	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-58A 041124572-0064	FORMER HS MAIN OFFICE - YELLOW CARPET GLUE	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-58B 041124572-0065	LIBRARY - YELLOW CARPET GLUE	Tan Non-Fibrous Heterogeneous	2%	Cellulose	98% Non-fibrous (other)	None Detected
itial report from 09/19	9/2011 09:55:54					
Analyst(s)					Style Siege	1
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (3t	Stephen Siegel, CIH, Laborator	ry Manager
Erica Valent (66)	John	ny Yu (46)		Melanie Koenig	or other approved signa	tory



I	Pat Dowling Fuss & O'Neill Enviro	oScience, LLC	Customer ID: Customer PO:	ENVI54
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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
76DD-59A 041124572-0066	FORMER HS MAIN OFFICE - WHITE W/ BROWN SPLOTCHES 9X9 FLOOR TILE	Beige Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-61A 041124572-0067	LIBRARY - GREEN 9X9 FLOOR TILE	Green Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-66A 041124572-0068	LIBRARY ANNEXE - GREY VINYL FLOOR TILE	Gray Non-Fibrous Heterogeneous			92% Non-fibrous (other)	8% Chrysotile
76DD-67A 041124572-0069	ROOM 353 - FISSURED 2X4 WALL PANEL	Brown/White Fibrous Heterogeneous	85%	Cellulose	15% Non-fibrous (other)	None Detected
76DD-68A 041124572-0070	ROOM 356A- COMP LAB OFFICE - FISSURE & DOT 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous		Cellulose Min. Wool	30% Non-fibrous (other)	None Detected
	ROOM 455 - FISSURE & DOT 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous		Cellulose Min. Wool	30% Non-fibrous (other)	None Detected
76DD-68B 041124572-0071 itial report from 09	ROOM 455 - FISSURE & DOT	Fibrous			30% Non-fibrous (other)	None Detec
nalyst(s)					Styphen Siege	d

Christine Hatter (11) Erica Valent (66)

Garret Vliet (45) Johnny Yu (46)

Laura Torres (38 Melanie Koenig

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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Fax: Project		()	EMSL Proj: Analysis Date:	9/18/2011	
	MIDDLE SCHOOL		, maryolo Duto.	0,10,2011	

		<u>Asbestos</u>			
Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
CORNER BATHROOM HS OFFICE HALL - WHITE 1X1 CEILING TILE	Brown/White Fibrous Heterogeneous	90%	Cellulose	10% Non-fibrous (other)	None Detected
ROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARD	Gray/Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
CORNER BATHROOM HS OFFICE HALL - GREY W/ PINK & GREEN SPLOTCHES 9X9 FLOOR TILE	Gray/Black Fibrous Heterogeneous	25%	Cellulose	70% Non-fibrous (other)	5% Chrysotile
9/2011 09:55:54					
				Styphen Siege	1
Garre	t Vliet (45)		Laura Torres (3t	Stephen Siegel, CIH, Laborato	ry Manager
Johnr	ny Yu (46)		Melanie Koenig	or other approved signa	tory
	CORNER BATHROOM HS OFFICE HALL - WHITE 1X1 CEILING TILE ROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARD ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB CORNER BATHROOM HS OFFICE HALL - GREY W/ PINK & GREEN SPLOTCHES 9X9 FLOOR TILE 9/2011 09:55:54	CORNER BATHROOM HS OFFICE HALL - WHITE 1X1 CEILING TILE Brown/White Fibrous Heterogeneous ROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARD Gray/Black Non-Fibrous Heterogeneous ROOMS 350- 353 - 8ROWN MASTIC A/W 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 9/2011 09:55:54 9/2011 09:55:54	CORNER BATHROOM HS OFFICE HALL - WHITE 1X1 CEILING TILE Brown/White Fibrous Heterogeneous 90% ROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARD Gray/Black Non-Fibrous Heterogeneous 90% ROOMS 350- 353 - 8ROWN MASTIC A/W 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 90% ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 90% ROOMS 350- 353 - BROWN MASTIC A/W 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 90% ROOMS 350- 353 - BROWN 	DescriptionAppearance%FibrousCORNER BATHROOM HS OFFICE HALL- 1 WHITE 1X1 CEILING TILEBrown/White Fibrous Heterogeneous90% CelluloseROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARDGray/Black Non-Fibrous Heterogeneous	CORNER BATHROOM HS OFFICE HALL- WHITE 1X1 CEILING TILE Brown/White Fibrous Heterogeneous 90% Cellulose 10% Non-fibrous (other) ROOMS 350- 353 - 4" SHINY BLACK VINYL BASEBOARD Gray/Black Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOMS 350- 353 - BROWN MASTIC AW 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOMS 350- 353 - BROWN MASTIC AW 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOMS 350- 353 - BROWN MASTIC AW 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOMS 350- 353 - BROWN MASTIC AW 4" SHINY BLACK VBB Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOMS 350- 353 - BROWN MASTIC AW 4" SHINY BLACK Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) VBB ORNER BATHROOM HS OFFICE HALL - GREY W/ PINK & GREEN SPLOTCHES 9X9 FLOOR TILE Gray/Black Fibrous Heterogeneous 25% Cellulose 70% Non-fibrous (other) 9/2011 09:55:54 Japace Stephen Siegel, CIH, Laborato Japace Stephen Siegel, CIH, Laborato



F	Pat Dowling Fuss & O'Neill Envirc I46 Hartford Road Manchester, CT 0604		ce, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone:	()	EMSL Proj: Analysis Date:	9/18/2011

				<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% -	Гуре
76DD-73A 041124572-0077	ROOMS 350- 353 - TAN W/ WHITE & BROWN SPLOTCHES 12X12 FT (CHECKERED)	Tan Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5%	Chrysotile
76DD-74A 041124572-0078	ROOMS 350- 353 - BROWN W/ DARK BROWN & WHITE SPLOTCHES 12X12 FT (CHECKERED)	Brown Non-Fibrous Heterogeneous			96% Non-fibrous (other)	4%	Chrysotile
76DD-75A 041124572-0079	ROOMS 350- 353 - GREEN W/ WHITE SPLOTCHES 12X12 (CHECKERED)	Green Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5%	Chrysotile
76DD-75B 041124572-0080	ROOMS 350- 353 - GREEN W/ WHITE SPLOTCHES 12X12 (CHECKERED)						Positive (Not Analyzed)
tial report from 09/1	9/2011 09:55:54						
Analyst(s)					Stople Sieg	d	
) Garre	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborato	ry Manag	jer
Christine Hatter (11,				Melanie Koenig	or other approved signa		



I	Pat Dowling Fuss & O'Neill Enviro	Scien	ce, LLC	Customer ID: Customer PO:	ENVI54
•	146 Hartford Road			Received:	09/14/11 9:25 AM
I	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
76DD-76A 041124572-0081	ROOMS 350- 353 - TAN W/ WHITE & BROWN SPLOTCHES 12X12 (CHECKERED)	Gray Non-Fibrous Heterogeneous			92% Non-fibrous (other)	8% Chrysotile
76DD-76B 041124572-0082	ROOMS 350- 353 - TAN W/ WHITE & BROWN SPLOTCHES 12X12 (CHECKERED)					Stop Positive (Not Analyzed)
76DD-77A 041124572-0083	ROOM 356 - LIGHT BROWN W/ WHITE & BROWN SPLOTCHES 12X12 (CHECKERED)	Brown Non-Fibrous Heterogeneous			92% Non-fibrous (other)	8% Chrysotile

Initial report from 09/19/2011 09:55:54 - Sien Analyst(s) Christine Hatter (11) Garret Vliet (45) Laura Torres (38 Stephen Siegel, CIH, Laboratory Manager or other approved signatory Erica Valent (66) Johnny Yu (46) Melanie Koenig EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAC unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.



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	Manchester, CT 06	040		EMSL Order:	041124572	
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:		
Project	20100607.A20/RIDEM - MIDDLE SCHOOL	FORMER W	OONSOCKET	Analysis Date:	9/18/2011	

			Asbestos				
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре	
76DD-77B 041124572-0084	ROOM 356 - LIGHT BROWN W/ WHITE & BROWN SPLOTCHES 12X12 (CHECKERED)					Stop Positive (Not Analyzed)	
76DD-78A 041124572-0085	ROOM 356 - BROWN W/ WHITE & DARK BROWN SPL 12X12 (CHECK)	Brown Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5% Chrysotile	
76DD-78B 041124572-0086	ROOM 356 - BROWN W/ WHITE & DARK BROWN SPL 12X12 (CHECK)					Stop Positive (Not Analyzed)	
76DD-79A 041124572-0087	ROOMS 351 & 352 - GREY W/ WHITE SPLOTCHES 12X12 (CHECK)	Gray Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5% Chrysotile	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66)

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Project	20100607.A20/RIDEM - MIDDLE SCHOOL	FORMER W	OONSOCKET	Analysis Date:	9/18/2011	

			Asbestos				
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
76DD-79B 041124572-0088	ROOMS 351 & 352 - GREY W/ WHITE SPLOTCHES 12X12 (CHECK)					Stop Positive (Not Analyzed)	
76DD-80A 041124572-0089	ROOMS 351 & 352 - DARK GREY W/ WHITE STREAKS 12X12 9CHECK)	Gray Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5% Chrysotile	
76DD-80B 041124572-0090	ROOMS 351 & 352 - DARK GREY W/ WHITE STREAKS 12X12 9CHECK)					Stop Positive (Not Analyzed)	
76DD-82A 041124572-0091	ROOMS 351 & 352 - TAN MASTIC A/W TAN & WHITE MOTTLED 12X12 PATCH	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	

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er (11) 66) Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

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			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
76DD-82B 041124572-0092	ROOMS 351 & 352 - TAN MASTIC A/W TAN & WHITE MOTTLED 12X12 PATCH	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-83A 041124572-0093	CORNER BATHROOM HS MAIN OFFICE HALL - 4" THICK BLACK VINYL BASEBOARD	Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-83B 041124572-0094	CORNER BATHROOM HS MAIN OFFICE HALL - 4" THICK BLACK VINYL BASEBOARD	Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-84A 041124572-0095	CORNER BATHROOM HS MAIN OFFICE HALL - MASTIC A/W 4" BLACK VINYL BASEBOARD (THICK)	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
tial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Siege	1
	Garre	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborator	
Christine Hatter (11)		ny Yu (46)		Melanie Koenig	or other approved signa	tory



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	Manchester, CT 0604	0		EMSL Order:	041124572
	,		000) 010 0100	EMOL OIGOI.	041124072
Fax:	(888) 838-1160	```	860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER WO	ONSOCKET	Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
76DD-84B 041124572-0096	CORNER BATHROOM HS MAIN OFFICE HALL - MASTIC A/W 4" BLACK VINYL BASEBOARD (THICK)	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-85A 041124572-0097	ROOM 317 - DRYWALL PARTITION WALLS	Brown/White Fibrous Heterogeneous	45%	Cellulose	55% Non-fibrous (other)	None Detected
76DD-85B 041124572-0098	ROOM 317 - DRYWALL PARTITION WALLS	Brown/White Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	None Detected
76DD-86A 041124572-0099	ROOM 317 - JOINT COMPOUND	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
76DD-86B 041124572-0100	ROOM 317 - JOINT COMPOUND	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66)

Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

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Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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Fus	: Dowling ss & O'Neill Enviro 6 Hartford Road	Science, LLC	Customer ID: Customer PO: Received:	ENVI54
		-		09/14/11 9:25 AM
Mai	nchester, CT 0604	0	EMSL Order:	041124572
Project: 20	388) 838-1160 0100607.A20/RIDEM - FO IIDDLE SCHOOL	Phone: (860) 646-2469 RMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

				<u>Asbestos</u>		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
76DD-87A 041124572-0101	ROOM 317- PARTITIONED OFFICES - ORANGE, BROWN & TAN MOTTLED 12X12 FT	Brown Non-Fibrous Heterogeneous			95% Non-fibrous (other)	5% Chrysotile
76DD-87B 041124572-0102	ROOM 317- PARTITIONED OFFICES - ORANGE, BROWN & TAN MOTTLED 12X12 FT					Stop Positive (Not Analyzed)
76DD-88A 041124572-0103	NEW GYM - TECTUM CEILING PANELS	Brown/Gray/White Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	None Detected
76DD-88B 041124572-0104	NEW GYM - TECTUM CEILING PANELS	Brown/White Fibrous Heterogeneous	85%	Cellulose	15% Non-fibrous (other)	None Detected
77DD-89A 041124572-0105	CAFETERIA - YELLOW MASTIC A/W 12X12 FT	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sie	d
Christine Hatter (11) Erica Valent (66)		et Vliet (45) ny Yu (46)		Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laborato or other approved signa	

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Attn: Pat Dowling Fuss & O'Neill Enviro 146 Hartford Road Manchester, CT 0604		Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax: (888) 838-1160 Project: 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

Description CAFETERIA - YELLOW MASTIC A/W 12X12 FT CAFETERIA (MAIN OFFICE HALL) - RED MOTTLED 12X12 FLOOR TILE AUDITORIUM (MAIN OFFICE HALL) - RED	Appearance Yellow Non-Fibrous Heterogeneous Red Non-Fibrous Heterogeneous	% suggest ten	Fibrous	% Non-Fibrous 100% Non-fibrous (other) 100% Non-fibrous (other)	% Type None Detected None Detected
YELLOW MASTIC A/W 12X12 FT CAFETERIA (MAIN OFFICE HALL) - RED MOTTLED 12X12 FLOOR TILE AUDITORIUM (MAIN OFFICE HALL) - RED	Non-Fibrous Heterogeneous Red Non-Fibrous Heterogeneous Red Non-Fibrous	suggest ten	1		None Detected
(MAIN OFFICE HALL) - RED MOTTLED 12X12 FLOOR TILE AUDITORIUM (MAIN OFFICE HALL) - RED	Non-Fibrous Heterogeneous Red Non-Fibrous	suggest ten	n	100% Non-fibrous (other)	
(MAIN OFFICE HALL) - RED	Non-Fibrous				
MOTTLED 12X12 FLOOR TILE	Heterogeneous			100% Non-fibrous (other)	None Detected
AUDITORIUM - 1X1 PEGBOARD (LARGE HOLE) CEILING TILE	Brown/White Fibrous Heterogeneous	80%	Cellulose	20% Non-fibrous (other)	None Detected
AUDITORIUM - 1X1 PEGBOARD (LARGE HOLE) CEILING TILE	Brown/White Fibrous Heterogeneous	80%	Cellulose	20% Non-fibrous (other)	None Detected
9/2011 09:55:54				Strate_ Sient	
9/				2011 09:55:54	

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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				Received:	09/14/11 9:25 AM
	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-91C 041124572-0111	AUDITORIUM - 1X1 PEGBOARD (LARGE HOLE) CEILING TILE	Brown/White Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
77DD-92A 041124572-0112	PROJECTOR BOOTH - TRANSITE PANELS	Gray/White Fibrous Heterogeneous			70% Non-fibrous (other)	30% Chrysotile
77DD-92B 041124572-0113	PROJECTOR BOOTH - TRANSITE PANELS					Stop Positive (Not Analyzed)
77DD-92C 041124572-0114	PROJECTOR BOOTH - TRANSITE PANELS					Stop Positive (Not Analyzed)
77DD-93A 041124572-0115	STAGE (AUDITORIUM) - BLACK FLOORING PAPER	Brown/Black Non-Fibrous Heterogeneous	50%	Cellulose	50% Non-fibrous (other)	None Detected

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	146 Hartford Road Manchester, CT 0604	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL		(860) 646-2469 OONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-93B 041124572-0116	STAGE (AUDITORIUM) - BLACK FLOORING PAPER	Brown/Black Non-Fibrous Heterogeneous	50%	Cellulose	50% Non-fibrous (other)	None Detected
77DD-93C 041124572-0117	STAGE (AUDITORIUM) - BLACK FLOORING PAPER	Brown/Black Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	None Detected
77DD-94A 041124572-0118	LEFT PRACTICE AREA OFF STAGE - TEXTURED CEILING SKIM COAT	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-94B 041124572-0119	LEFT PRACTICE AREA OFF STAGE - TEXTURED CEILING SKIM COAT	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

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	146 Hartford Road	•		Received:	09/14/11 9:25 AM
ſ	Manchester, CT 0604	.0		EMSL Order:	041124572
Fax:	(888) 838-1160		(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER W	OONSOCKET	Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-94C 041124572-0120	LEFT PRACTICE AREA OFF STAGE - TEXTURED CEILING SKIM COAT	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-95A 041124572-0121	NEW GYM - BROWN FLOORING PAPER	Brown Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
77DD-95B 041124572-0122	NEW GYM - BROWN FLOORING PAPER	Brown Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
77DD-96A 041124572-0123	NEW GYM - THICK BROWN BASECOVE	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-96B 041124572-0124	NEW GYM - THICK BROWN BASECOVE	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

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	Manchester, CT 0604	•0	EMSL Order:	041124572	
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	ect: 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL			Analysis Date:	9/18/2011

			Non-Asbestos			Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-97A 041124572-0125	NEW GYM - TAN/YELLOW MASTIC (THICK) A//W THICK BROWN BASECOVE	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-97B 041124572-0126	NEW GYM - TAN/YELLOW MASTIC (THICK) A//W THICK BROWN BASECOVE	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-97C 041124572-0127	NEW GYM - TAN/YELLOW MASTIC (THICK) A//W THICK BROWN BASECOVE	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-98A 041124572-0128	CAFETERIA - BUMPY 2X2 CEILING TILE (WHITE)	Gray Fibrous Heterogeneous	90%	Min. Wool	10% Non-fibrous (other)	None Detected
77DD-98B 041124572-0129	CAFETERIA - BUMPY 2X2 CEILING TILE (WHITE)	Gray Fibrous Heterogeneous	60%	Min. Wool	40% Non-fibrous (other)	None Detected
itial report from 09/2	19/2011 09:55:54					
Analyst(s)					Style Signl	
Christine Hatter (11 Erica Valent (66)	,	et Vliet (45) nny Yu (46)		Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laboratory or other approved signator	



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	146 Hartford Road	0		Received:	09/14/11 9:25 AM
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Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	tos	Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-99A 041124572-0130	CAFETERIA - 4" BLUE VINYL BASEBOARD	Blue Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-100A 041124572-0131	CAFETERIA - WHITE MASTIC A/W 4" BLUE VINYL BASEBOARD	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-100B 041124572-0132	CAFETERIA - WHITE MASTIC A/W 4" BLUE VINYL BASEBOARD	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-100C 041124572-0133	CAFETERIA - WHITE MASTIC A/W 4" BLUE VINYL BASEBOARD	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-101A 041124572-0134	LEFT STAGE - DOTTED 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous		Cellulose Min. Wool	30% Non-fibrous (other)	None Detected
77DD-101B 041124572-0135	LEFT STAGE - DOTTED 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous		Cellulose Min. Wool	30% Non-fibrous (other)	None Detected
itial report from 09/1	19/2011 09:55:54					
Analyst(s)					Style Siegel	
Christine Hatter (11) Erica Valent (66)	·	ret Vliet (45) nny Yu (46)		Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laboratory Ma or other approved signatory	anager



F	Pat Dowling Fuss & O'Neill Enviro I46 Hartford Road Manchester, CT 0604		e, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	RMER WO	DONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	tos	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
77DD-101C 041124572-0136	LEFT STAGE - DOTTED 2X4 CEILING TILE	Gray/White Fibrous Heterogeneous	40% 30%	Cellulose Glass	30% Non-fibrous (other)	None Detected	
77DD-102A 041124572-0137	NEW GYM LOCKER ROOM (BOYS) - PAPER COATING TO 1X1 FIBERGLASS CEILING TILE	Brown/Tan Fibrous Heterogeneous	80%	Glass	20% Non-fibrous (other)	None Detected	
77DD-102B 041124572-0138	NEW GYM LOCKER ROOM (BOYS) - PAPER COATING TO 1X1 FIBERGLASS CEILING TILE	Brown/Tan Fibrous Heterogeneous	80%	Glass	20% Non-fibrous (other)	None Detected	
77DD-102C 041124572-0139	ROOM 455 - PAPER COATING TO 1X1 FIBERGLASS CEILING TILE	White/Yellow Fibrous Heterogeneous	75%	Min. Wool	25% Non-fibrous (other)	None Detected	
77DD-103A 041124572-0140	CAFETERIA - DRYWALL	Gray/White Fibrous Heterogeneous	55%	Cellulose	45% Non-fibrous (other)	None Detected	
itial report from 09/1	9/2011 09:55:54						
Analyst(s)					Style Siege	1	
Christine Hatter (11)) Garr	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laboratory	Manager	
Erica Valent (66)		ny Yu (46)		Melanie Koenig	or other approved signate		



F 1	Pat Dowling Fuss & O'Neill Envirc I46 Hartford Road Manchester, CT 0604		ce, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	RMER W	OONSOCKET	Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
77DD-103B 041124572-0141	CAFETERIA - DRYWALL	Gray/White Fibrous Heterogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
77DD-103C 041124572-0142	CAFETERIA - DRYWALL	Gray/White Fibrous Heterogeneous	55%	Cellulose	45% Non-fibrous (other)	None Detected
77DD-104A 041124572-0143	CAFETERIA - JOINT COMPOUND	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-104B 041124572-0144	CAFETERIA - JOINT COMPOUND	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
77DD-104C 041124572-0145	CAFETERIA - JOINT COMPOUND	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-105A 041124572-0146	CLASSROOM WING TYPICAL BATHROOMS (#407) - WHITE DRYWALL 2X4 CEILING TILE	Tan/White Fibrous Homogeneous	18% 2%		80% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

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I	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-105B 041124572-0147	CLASSROOM WING TYPICAL BATHROOMS (#407) - WHITE DRYWALL 2X4 CEILING TILE	Tan/White Fibrous Homogeneous	8% 2%		90% Non-fibrous (other)	None Detected
711DD-105C 041124572-0148	CLASSROOM WING TYPICAL BATHROOMS (#407) - WHITE DRYWALL 2X4 CEILING TILE	Tan/White Fibrous Homogeneous	12% 3%		85% Non-fibrous (other)	None Detected
711DD-106A 041124572-0149	ROOM 405 - MAROON W/ BLACK & WHITE SPLOTCHES 12X12 FLOOR TILE	Violet Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-106B 041124572-0150	ROOM 405 - YELLOW MASTIC	Violet Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

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	Manchester, CT 0604	10	EMSL Order:	041124572
Fax: Project:		Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011
	MIDDLE SCHOOL			0, 10, 2011

			Non-As	<u>Asbestos</u>	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
711DD-107A 041124572-0151	ROOM 405 - ORANGE & TAN MOTTLED 12X12 FLOOR TILE	Tan/Various/Oran ge Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
	(BOTTOM LAYER)(BLACK)				
711DD-107B 041124572-0152	ROOM 405 - ORANGE & TAN MOTTLED 12X12 FLOOR TILE (BOTTOM LAYER)(BLACK)				Stop Positive (Not Analyzed)
711DD-108A	ROOM 451 -	Gray		100% Non-fibrous (other)	None Detected
041124572-0153	GREY WITH DARK GREY & WHITE SPLOTCHES 12X12 FLOOR TILE	Non-Fibrous Homogeneous			
			Suggest TEM.		
711DD-108B 041124572-0154	ROOM 451 - GREY WITH DARK GREY & WHITE SPLOTCHES 12X12 FLOOR TILE	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
			suggest tem		
tial report from 09/1	9/2011 09:55:54				
Analyst(s)				Styphen Sieg	d
Christine Hatter (11,) Garre	et Vliet (45)	Laura Torres (3		
Erica Valent (66)	John	ny Yu (46)	Melanie Koenig	or other approved sign	atory



I	Pat Dowling Fuss & O'Neill Envire	oScien	ce, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road Manchester, CT 0604	10		Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FO MIDDLE SCHOOL		(860) 646-2469 YOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
711DD-109A 041124572-0155	ROOM 459 - SMOOTH WHITE 1X1 CEILING TILE	Tan/White Fibrous Homogeneous	90%	Cellulose	10% Non-fibrous (other)	None Detected
711DD-109B 041124572-0156	ROOM 461 - SMOOTH WHITE 1X1 CEILING TILE	Tan/White Fibrous Homogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
711DD-110A 041124572-0157	ROOM 462 - BROWN CORKBOARD MASTIC	Brown/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-110B 041124572-0158	ROOM 462 - BROWN CORKBOARD MASTIC	Brown/Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-111A 041124572-0159	ROOM 459 - PAPER BACKING ACCOCIATED WITH FIBERGLASS BATT INSULATION	Tan/Black Fibrous Homogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

 Christine Hatter (11)
 Garret Vliet (45)

 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
 Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	DRMER WOONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	tos	<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-111B 041124572-0160	ROOM 459 - PAPER BACKING ACCOCIATED WITH FIBERGLASS BATT INSULATION	Tan/Black Fibrous Homogeneous	60%	Cellulose	40% Non-fibrous (other)	None Detected
711DD-112A 041124572-0161	CUSTODIAN ROOM NEXT TO ROOM 461 - BROWN WITH WHITE & BROWN SPECKS 9X9 FLOOR TILE	Brown Non-Fibrous Homogeneous			96% Non-fibrous (other)	4% Chrysotile
711DD-112B 041124572-0162	CUSTODIAN ROOM NEXT TO ROOM 461 - BROWN WITH WHITE & BROWN SPECKS 9X9 FLOOR TILE					Stop Positive (Not Analyzed)
711DD-113A 041124572-0163	ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILE	Green Non-Fibrous Homogeneous			94% Non-fibrous (other)	6% Chrysotile
itial report from 09/1	9/2011 09:55:54				Strate Sie	J
Analyst(s)						
Analyst(s) Christine Hatter (11) Garre	et Vliet (45)		Laura Torres (3t	Stephen Siegel, CIH, Laborato	orv Manager



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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - F	Phone: (860) 646-2469	EMSL Proj:	
Fiojeci.	MIDDLE SCHOOL		Analysis Date:	9/18/2011

	Asbestos			
Description	Appearance	% Fibrous	% Non-Fibrous	% Type
ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILE				Stop Positive (Not Analyzed)
ROOM 455 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
		Suggest TEM.		
CUSTODIAN ROOM N/T 461 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL)	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
CORRIDORS AT CLASSROOM WING - TAN WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS	Tan Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
)/2011 09:55:54				
			Styphen Siege	J
Garre	et Vliet (45)	Laura Torres (38	Stephen Siegel, CIH, Laborato	ry Manager
	. ,	Melanie Koenig		
	ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILE ROOM 455 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) CUSTODIAN ROOM N/T 461 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) CORRIDORS AT CLASSROOM WING - TAN WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS	ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILEBrown Non-Fibrous HomogeneousROOM 455 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL)Brown Non-Fibrous HomogeneousCUSTODIAN ROOM N/T 461 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL)Brown Non-Fibrous HeterogeneousCUSTODIAN ROOM N/T 461 WITH LUAN PANELING (WALL)Brown Non-Fibrous HeterogeneousCUSTODIAN ROOM N/T 461 BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL)Tan Fibrous HeterogeneousCORRIDORS AT CLASSROOM WING - TAN WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORSTan Fibrous Homogeneous	ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILE Brown Non-Fibrous Homogeneous ROOM 455 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) Brown Non-Fibrous Homogeneous CUSTODIAN ROOM N/T 461 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) Brown Non-Fibrous Heterogeneous CUSTODIAN ROOM N/T 461 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) Brown Non-Fibrous 	ROOM 458 - GREEN WITH WHITE 9X9 FLOOR TILE Brown Non-Fibrous Homogeneous 100% Non-fibrous (other) ROOM 455 - BROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) Brown Non-Fibrous Homogeneous 100% Non-fibrous (other) CUSTODIAN ROOM N/T 461 - SROWN GLUE ASSOCIATED WITH LUAN PANELING (WALL) Brown Non-Fibrous Heterogeneous 100% Non-fibrous (other) CORRIDORS AT CLASSROOM WING - TAN WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS Tan Fibrous Homogeneous 97% Non-fibrous (other) WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS Fibrous Homogeneous 97% Non-fibrous (other) WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS Fibrous Homogeneous 97% Non-fibrous (other) WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS Eaura Torres (32 Stephen Siegel, CIH, Laborato



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Project	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	DONSOCKET	Analysis Date:	9/18/2011

		Non-Asbestos				Asbestos		
Sample	Description	Appearance	%	Fibrous	%	Non-Fibrous	% Type	
711DD-115B 041124572-0168	CORRIDORS AT CLASSROOM WING (O/S ROOM 464) - TAN WINDOW GLAZING COMPOUND ASSOCIATED W/ DOORS						Stop Positive (Not Analyzed)	
711DD-116A 041124572-0169	ROOM 461 - ORANGE, BROWN & TAN SPECKLED 9X9 FLOOR TILE (LIGHTER)	Brown/Various/Or ange Non-Fibrous Homogeneous			S	95% Non-fibrous (other)	5% Chrysotile	
711DD-116B 041124572-0170	ROOM 461 - ORANGE, BROWN & TAN SPECKLED 9X9 FLOOR TILE (LIGHTER)						Stop Positive (Not Analyzed)	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

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			Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
711DD-117A 041124572-0171	HALLWAY OUTSIDE ROOM 464 - CONCEALED GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
			Suggest TEM.		
711DD-117B 041124572-0172	ROOM 464 - CONCEALED GREY VINYL FLOOR TILE UNDERNEATH PLYWOOD	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
			suggest tem		
711DD-118A 041124572-0173	ROOM 455 - LIGHT BROWN W/ WHITE STREAKS 9X9 FLOOR TILE (CHECKERED)	Tan Non-Fibrous Homogeneous		92% Non-fibrous (other)	8% Chrysotile
711DD-118B 041124572-0174	ROOM 455 - LIGHT BROWN W/ WHITE STREAKS 9X9 FLOOR TILE (CHECKERED)				Stop Positive (Not Analyzed)
itial report from 09/1	9/2011 09:55:54				
Analyst(s)				Strate Sie	d
Christine Hatter (11)	Garre	et Vliet (45)	Laura Torres (3٤	Stephen Siegel, CIH, Laborato	
Erica Valent (66)	John	ny Yu (46)	Melanie Koenig	or other approved signa	atory
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Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011

				Non-As	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
711DD-119A 041124572-0175	ROOM 455 - BROWN W/ WHITE STREAKS 9X9 FLOOR TILE (CHECKERED)	Brown Non-Fibrous Homogeneous			90% Non-fibrous (other)	10% Chrysotile
711DD-119B 041124572-0176	ROOM 455 - BROWN W/ WHITE STREAKS 9X9 FLOOR TILE (CHECKERED)					Stop Positive (Not Analyzed)
711DD-120A 041124572-0177	HALLWAY OUTSIDE ROOM 464 - ORANGISH BROWN W/ BROWN & TAN SPLOTCHES 12X12 FLOOR TILE (TOP LAYER)	Orange Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			Suggest TE	М.		

Initial report from 09/19/2011 09:55:54

Analyst(s)

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	146 Hartford Road Manchester, CT 0604	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	· · ·	0) 646-2469 NSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-121A 041124572-0179	CUSTODIAN ROOM N/T ROOM 461 - BROWN GLUE ASSOCIATED WITH WALL PANELING	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-121B 041124572-0180	CUSTODIAN ROOM N/T ROOM 461 - BROWN GLUE ASSOCIATED WITH WALL PANELING	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-122A 041124572-0181	ROOM 462 (UPPER) - OFF WHITE 1X1 CEILING TILE	Tan/White Fibrous Homogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
711DD-122B 041124572-0182	ROOM 462 (UPPER) - OFF WHITE 1X1 CEILING TILE	Tan/White Fibrous Homogeneous	90%	Cellulose	10% Non-fibrous (other)	None Detected

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Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	DRMER WOONSOCKET	Analysis Date:	9/18/2011

			Non-Asbest	<u>:05</u>	Asbestos
Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS)	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER)	Green Non-Fibrous Homogeneous			94% Non-fibrous (other)	6% Chrysotile
ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER)					Stop Positive (Not Analyzed)
9/2011 09:55:54				Styphen Sieg	J
Garre	t Vliet (45)		Laura Torres (3t	Stephen Siegel, CIH, Laborato	ry Manager
	ny Yu (46)		Melanie Koenig	or other approved signa	
	CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS) CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS) ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) 9/2011 09:55:54	CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS) CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS) ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) 9/2011 09:55:54 Garret Vliet (45)	CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS Gray Non-Fibrous Homogeneous CLASSROOM (@THRESHOLDS Gray Non-Fibrous Heterogeneous ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous P/2011 09:55:54 Garret Vliet (45)	CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS Gray Non-Fibrous Homogeneous CLASSROOM (@THRESHOLDS Gray Non-Fibrous Heterogeneous CLASSROOM (@THRESHOLDS Gray Non-Fibrous Heterogeneous ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous 800M 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous 9/2011 09:55:54 Laura Torres (3£	CLASSROOM WING (451) - GREY LEVELING COMPOUND (@THRESHOLDS Gray Non-Fibrous Homogeneous 100% Non-fibrous (other) CLASSROOM (@THRESHOLDS Gray Non-Fibrous Heterogeneous 100% Non-fibrous (other) CLASSROOM (@THRESHOLDS Gray Non-Fibrous Heterogeneous 100% Non-fibrous (other) ROOM 456 - GREENISH GREY W/WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Homogeneous 94% Non-fibrous (other) ROOM 456 - GREENISH GREY W/ WHITE STREAKS 12X12 FLOOR TILE (TOP LAYER) Green Non-Fibrous Heterogeneous 94% Non-fibrous (other) P/2011 09:55:54 Jagac Jagac Jagac B/2011 09:55:54 Laura Torres (38 Stephen Siegel, CIH, Laborato



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				Non-Asbest	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-125A 041124572-0187	ROOM 458 - TAN WITH WHITE & BROWN STREAKS 9X9 FLOOR TILE	Gray Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
711DD-125B 041124572-0188	ROOM 458 - TAN WITH WHITE & BROWN STREAKS 9X9 FLOOR TILE					Stop Positive (Not Analyzed)
711DD-125B-Mastic 041124572-0188A	ROOM 458 - TAN WITH WHITE & BROWN STREAKS 9X9 FLOOR TILE	Black Fibrous Heterogeneous	25%	Cellulose	75% Non-fibrous (other)	None Detected
711DD-126A 041124572-0189	ROOM 460 - GREY W/ PINK & WHITE ST 9X9 FLOOR TILE	Gray Non-Fibrous Homogeneous			96% Non-fibrous (other)	4% Chrysotile
711DD-126B 041124572-0190	ROOM 460 - GREY W/ PINK & WHITE ST 9X9 FLOOR TILE					Stop Positive (Not Analyzed)
itial report from 09/19 Analyst(s))/2011 09:55:54				Style_ Siej	d
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ory Manager
. ,		ny Yu (46)		Melanie Koenig	or other approved sign	atory



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		Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
711DD-127A 041124572-0191	ROOM 460 - LIGHT GREEN W/ PINK & BLACK STREAKS 9X9 FLOOR TILE	Green Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile	
711DD-127B 041124572-0192	ROOM 460 - LIGHT GREEN W/ PINK & BLACK STREAKS 9X9 FLOOR TILE					Stop Positive (Not Analyzed)	
711DD-128A 041124572-0193	CUSTODIAN ROOM N/T 461 - TAN W/ WHITE & BROWN SPECKS 9X9 FLOOR TILE	Tan Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile	
711DD-128B 041124572-0194	CUSTODIAN ROOM N/T 461 - TAN W/ WHITE & BROWN SPECKS 9X9 FLOOR TILE					Stop Positive (Not Analyzed)	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

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	46 Hartford Road	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572
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		<u>Non-Asbestos</u>				Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
711DD-129A 041124572-0195	ROOM 464 - GREY W/ DARK GREY & WHITE SPLOTCHES 12X12 FLOOR TILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
711DD-129B 041124572-0196	ROOM 464 - GREY W/ DARK GREY & WHITE SPLOTCHES 12X12 FLOOR TILE	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
711DD-130 041124572-0197	ROOM 554A - PINK SINK UNDERCOATING	Pink Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
711DD-131A 041124572-0198	ROOM 556 - CONCEALED BOTTOM VINYL FLOOR TILE (ASSUME 9X9)- MIXED PATTERN	Green Non-Fibrous Heterogeneous			94% Non-fibrous (other)	6% Chrysotile	

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	Pat Dowling Fuss & O'Neill Enviro	oScience, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road Manchester, CT 0604	10	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

		Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
711DD-131B 041124572-0199	ROOM 557 - CONCEALED BOTTOM VINYL FLOOR TILE (ASSUME 9X9)- MIXED PATTERN	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
711DD-131C 041124572-0200	ROOM 562 - CONCEALED BOTTOM VINYL FLOOR TILE (ASSUME 9X9)- MIXED PATTERN	Green Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
711DD-132 041124572-0201	STAIR TO ATTIC (561D) - BLACK MASTIC ON BRICK	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
711DD-133A 041124572-0202	ROOM 554 - BLACK COMPOSITE COUNTER TOP	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
711DD-133B 041124572-0203	ROOM 557 - BLACK COMPOSITE COUNTER TOP	Brown/Gray Fibrous Heterogeneous	60%	Cellulose	40% Non-fibrous (other)	None Detected	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66)

Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

- Sien

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Fax: Project:		`	860) 646-2469 DNSOCKET	EMSL Proj: Analysis Date:	9/18/2011
	MIDDLE SCHOOL				

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-133C 041124572-0204	ROOM 561 - BLACK COMPOSITE COUNTER TOP	Gray/Black Non-Fibrous Homogeneous	55%	Cellulose	45% Non-fibrous (other)	None Detected
711DD-134A 041124572-0205	ROOM 557A - CORKBOARD (BROWN) MASTIC	Brown Fibrous Heterogeneous	20%	Cellulose	80% Non-fibrous (other)	None Detected
711DD-134B 041124572-0206	ROOM 560 - CORKBOARD (BROWN) MASTIC	Brown Fibrous Heterogeneous	8%	Cellulose	92% Non-fibrous (other)	None Detected
711DD-134C 041124572-0207	ROOM 557A - CORKBOARD (BROWN) MASTIC (CAULKBOARD FASTNERS)	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-135A 041124572-0208	ROOM 557A - PEA GREEN MOTTLED 12X12 FT	Green Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

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 Garret Vliet (45)

 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
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				Non-Asbes	stos	<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-135B 041124572-0209	ROOM 557A - PEA GREEN MOTTLED 12X12 FT					Stop Positive (Not Analyzed)
711DD-136A 041124572-0210	HALLWAY O/S 557A - BROWN, DARK BROWN & TAN MOTTLED 12X12 FT (TOP LAYER)	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-136B 041124572-0211	HALLWAY O/S 557A - BROWN, DARK BROWN & TAN MOTTLED 12X12 FT (TOP LAYER)	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-137A 041124572-0212	ROOM 556 - ORANGISH-RED W/ BROWN SLOPTCHES 12X12 FT	Red Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-137B 041124572-0213	ROOM 556 - ORANGISH-RED W/ BROWN SLOPTCHES 12X12 FT	Red Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sie	d
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ry Manager
Erica Valent (66)	John	ny Yu (46)		Melanie Koenig	or other approved signa	atory
EMSL. EMSL bears no re must not be used by the cl report meet the requirement available upon request.	sponsibility for sample collect lient to claim product certification	tion activities or analytical me tion, approval or endorsemen ise specified. Samples receive	thod limitat t by NVLAF	ions. Interpretation and us P, NIST or any agency of the second	t be reproduced, except in full, without written a e of test results are the responsibility of the clien e federal government. The test results contain noted. Estimated accuracy, precision and unce	nt. This report ed within this



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			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-138A 041124572-0214	ROOM 562 - GREEN W/ DARK GREEN & WHITE 12X12 STICK TILE	Green Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-138B 041124572-0215	ROOM 562 - GREEN W/ DARK GREEN & WHITE 12X12 STICK TILE	Green Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-139A 041124572-0216	ROOM 561 - GREY W/ WHITE SPLOTCHES 12X12 FT (TOP LAYER)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-139B 041124572-0217	ROOM 561 - GREY W/ WHITE SPLOTCHES 12X12 FT (TOP LAYER)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

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		Non-Asbestos				<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-140A 041124572-0218	ROOM 554 - GREYISH BROWN W/ DARK GREY & WHITE SPLOTCHES 12X12 FT	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-140B 041124572-0219	ROOM 554 - GREYISH BROWN W/ DARK GREY & WHITE SPLOTCHES 12X12 FT	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-141A 041124572-0220	ROOM 300A - BROWN SWIRL LINOLEUM FLOORING	Tan/Black Fibrous Heterogeneous	65%	Cellulose	35% Non-fibrous (other)	None Detected
711DD-141B 041124572-0221	ROOM 300A - BROWN SWIRL LINOLEUM FLOORING	Tan/Black Non-Fibrous Heterogeneous	20% 25%	Cellulose Synthetic	55% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

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Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER WOONSOCH	(ET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-142A 041124572-0222	ROOM 300A - BLACK PAPER COATING A/W LINOLEUM FLOORING	Black Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected
711DD-142B 041124572-0223	ROOM 300A - BLACK PAPER COATING A/W LINOLEUM FLOORING	Tan/Black Fibrous Homogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected
711DD-143A 041124572-0224	ROOM 305 - GREEN W/ WHITE SPECKS 12X12 FT	Green Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
711DD-143B 041124572-0225	ROOM 305 - GREEN W/ WHITE SPECKS 12X12 FT					Stop Positive (Not Analyzed)
711DD-144A 041124572-0226	ROOM 316 - GREEN W/ WHITE STREAKS 12X12 FT	Green Non-Fibrous Heterogeneous			97% Non-fibrous (other)	3% Chrysotile

 Initial report from 09/19/2011 09:55:54

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Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	DRMER WOONSOCKET	Analysis Date:	9/18/2011

		tos	Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-144B 041124572-0227	ROOM 316 - GREEN W/ WHITE STREAKS 12X12 FT					Stop Positive (Not Analyzed)
711DD-145A 041124572-0228	BATHROOM BY ROOM 309 - WHITE CERAMIC TILE GROUT (ADHESIVE)	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-145B 041124572-0229	BATHROOM BY BR 301A - WHITE CERAMIC TILE GROUT (ADHESIVE)	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-146A 041124572-0230	ROOM 303 - CEMENT BOARD CHALK BOARD	Gray Fibrous Heterogeneous			70% Non-fibrous (other)	30% Chrysotile
711DD-146B 041124572-0231	ROOM 316 - CEMENT BOARD CHALK BOARD					Stop Positive (Not Analyzed)
711DD-147A 041124572-0232	ROOM 322 - OFF WHITE W/ BROWN SPECKS 12X12 FT (2ND LAYER)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sie	d
Christine Hatter (11,	Garre	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborate	
Erica Valent (66)	Johni	ny Yu (46)		Melanie Koenig	or other approved sign	atory



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Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-147B 041124572-0233	ROOM 322 - OFF WHITE W/ BROWN SPECKS 12X12 FT (2ND LAYER)	Tan/Beige Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-148 041124572-0234	ROOM 322 - TAN GLUE STRIPS ON WOOD	Various Non-Fibrous Heterogeneous			98% Non-fibrous (other)	2% Chrysotile
711DD-149A 041124572-0235	ROOM 306 - GREY VINYL BASEBOARD	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-149B 041124572-0236	ROOM 306 - GREY VINYL BASEBOARD	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-150A 041124572-0237	ROOM 306 - BROWN MASTIC A/W GREY VBB	Brown/Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
711DD-150B 041124572-0238	ROOM 306 - BROWN MASTIC A/W GREY VBB	Brown/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

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Fax: Project		()	EMSL Proj: Analysis Date:	9/18/2011	
	MIDDLE SCHOOL		, maryolo Duto.	0,10,2011	

				Non-Asbest	los	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
810DD-151A 041124572-0239	TYPICAL BATHROOMS (N/T #260) - GREEN COMPOSITE STALL PANELS	Gray/Tan Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected	
810DD-151B 041124572-0240	TYPICAL BATHROOMS (N/T #260) - GREEN COMPOSITE STALL PANELS	Various Non-Fibrous Homogeneous	50%	Cellulose	50% Non-fibrous (other)	None Detected	
810DD-152A 041124572-0241	ROOM 260 - STUCCO-TYPE 1X1 CEILING TILE	Brown Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected	
810DD-152B 041124572-0242	ROOM 260 - STUCCO-TYPE 1X1 CEILING TILE	Brown Fibrous Homogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected	
810DD-153A 041124572-0243	ROOM 260 - TAN MASTIC A/W 1X1 CT	Brown/Tan Fibrous Heterogeneous	20%	Cellulose	80% Non-fibrous (other)	None Detected	
810DD-153B 041124572-0244	ROOM 260 - TAN MASTIC A/W 1X1 CT	Brown Non-Fibrous Homogeneous	30%	Cellulose	70% Non-fibrous (other)	None Detected	
itial report from 09/1	9/2011 09:55:54						
Analyst(s)					Style Siegel		
Christine Hatter (11, Erica Valent (66)		t Vliet (45) ny Yu (46)		Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laboratory M or other approved signatory	anager	



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			Received:	09/14/11 9:25 AM
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Project	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011

OYS ATHROOM- ASEMENT -	Appearance Gray	%	Fibrous	% Non-Fibrous	% Type
ATHROOM-	Gray				Nama Datastad
REY ADHESIVE SSOCIATED W/ ERAMIC WALL	Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
GIRLS ATHROOM N/T COM 256 - GREY ADHESIVE SSOCIATED W/ CERAMIC WALL ILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
COOM 258 - EMENTITIOUS EVELING COMPOUND ON OURED CONCRETE	Gray/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
COOM 258 - CEMENTITIOUS EVELING COMPOUND ON OURED CONCRETE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
011 09:55:54					
				Style Sign	1
	. ,		Laura Torres (3٤ Melanie Koenig		
	ILE ILE ILE IRLS ATHROOM N/T OOM 256 - IREY ADHESIVE SSOCIATED W/ ERAMIC WALL ILE OOM 258 - EMENTITIOUS EVELING OMPOUND ON OURED ONCRETE OOM 258 - EMENTITIOUS EVELING OMPOUND ON OURED ONCRETE OONCRETE OONCRETE OONCRETE OONCRETE OONCRETE OONCRETE	ILE ILE ILE IRES ATHROOM N/T OOM 256 - BREY ADHESIVE SSOCIATED W/ ERAMIC WALL ILE OOM 258 - EMENTITIOUS EVELING OMPOUND ON OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous Homogeneous Homogeneous Homogeneous Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous ONCRETE	ILE I	ILE IILE IIRLS ATHROM N/T OOM 256 - SEY ADHESIVE SSOCIATED W/ ERAMIC WALL ILE OOM 258 - Gray/Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous OURED ONCRETE OUM 258 - Tan Non-Fibrous Homogeneous OURED OUN 00 OURED ONCRETE OUM 258 - Tan Non-Fibrous Homogeneous OURED OUN 00 OURED ONCRETE OUM 258 - Tan Non-Fibrous Homogeneous OURED OUN 258 - Tan Non-Fibrous Homogeneous OURED OUN 00 OUN 00 OURED OUN 00 OURED OUN 00 OU	ILE IILE IIRES ATHROOM NT ATHROOM NT OOM 256 - INEY ADHESIVE EXAMIC WALL ILE OOM 258 - EMENTITIOUS EVELING OMPOUND ON OURED ONCRETE OOM 258 - Tan Non-Fibrous Homogeneous Non-Fibrous Homogeneous Homogeneous OM 258 - Tan Non-Fibrous Homogeneous OM 258 - Tan Non-Fibrous Homogeneous OM 258 - Tan Non-Fibrous Homogeneous OM 258 - Tan Stephen Siegel, CIH, Laborator Rever Viet (45) Laura Torres (35 Stephen Siegel, CIH, Laborator Rever Viet (45)



F 1	Pat Dowling Fuss & O'Neill Enviro 46 Hartford Road		ce, LLC	Customer ID: Customer PO: Received:	ENVI54 09/14/11 9:25 AM
	Manchester, CT 0604		<i></i>	EMSL Order:	041124572
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Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	RMER W	OONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	Asbestos	
ample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
810DD-156A 041124572-0249	ROOM 258 - BROWN GLUE DAUBS A/W 1X1 CT (UNDER	Brown Fibrous Homogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected
810DD-156B	STAIRS ONLY) ROOM 260 -	Brown	5%	Cellulose	95% Non-fibrous (other)	None Detected
041124572-0250	BROWN GLUE DAUBS A/W 1X1 CT (UNDER STAIRS ONLY)	Non-Fibrous Homogeneous				
810DD-157A	ROOM 258 - PINHOLE 1X1 CEILING TILE	Brown	95%	Cellulose	5% Non-fibrous (other)	None Detected
041124572-0251		Fibrous Homogeneous				
810DD-157B	GIRLS	Tan/White	85%	Cellulose	15% Non-fibrous (other)	None Detected
041124572-0252	BATHROOM N/T ROOM 256 - PINHOLE 1X1 CEILING TILE	Fibrous Heterogeneous				
810DD-158A	TYPICAL	Brown	95%	Cellulose	5% Non-fibrous (other)	None Detected
041124572-0253	BATHROOMS (N/T 256) - BROWN PAPER INSULATION INSIDE STALL PANELS	Fibrous Homogeneous				
tial report from 09/1	9/2011 09:55:54					
nalyst(s)					Style Siege	1
Christine Hatter (11)) Garro	et Vliet (45)		Laura Torres (3t	Stephen Siegel, CIH, Laborato	
Erica Valent (66)	John	ny Yu (46)		Melanie Koenig	or other approved signa	itory



I	Pat Dowling Fuss & O'Neill Enviro	oScien	ce, LLC	Customer ID: Customer PO:	ENVI54
	46 Hartford Road			Received:	09/14/11 9:25 AM
I	Manchester, CT 0604	0		EMSL Order:	041124572
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Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
810DD-158B 041124572-0254	TYPICAL BATHROOMS (N/T 256) - BROWN PAPER INSULATION INSIDE STALL PANELS	Brown Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
810DD-159A 041124572-0255	TYPICAL BATHROOMS (N/T 260) - DRYWALL 2X4 CEILING TILE	Brown Non-Fibrous Homogeneous	15%	Cellulose	85% Non-fibrous (other)	None Detected
810DD-159B 041124572-0256	TYPICAL BATHROOMS (N/T 260) - DRYWALL 2X4 CEILING TILE	White Fibrous Heterogeneous	10% 20%	Glass Cellulose	70% Non-fibrous (other)	None Detected
810DD-160A 041124572-0257	BOYS BATHROOM N/T ROOM 260 - LIGHTWEIGHT CONCRETE UNDERNEATH WALL TILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54 - Sien Analyst(s) Christine Hatter (11) Garret Vliet (45) Laura Torres (38 Stephen Siegel, CIH, Laboratory Manager or other approved signatory Erica Valent (66) Johnny Yu (46) Melanie Koenig EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government. The test results contained within this report meet the requirements of NELAC unless otherwise specified. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data



	Pat Dowling Fuss & O'Neill Envir	oScience, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road	40	Received:	09/14/11 9:25 AM
	Manchester, CT 0604	40	EMSL Order:	041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	tos	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
810DD-160B 041124572-0258	GIRLS BATHROOM N/T ROOM 256 - LIGHTWEIGHT CONCRETE UNDERNEATH WALL TILE	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
810DD-161A 041124572-0259	BASEMENT CORRIDOR OLD HS BUILDING - ROUGH PLASTER DROP CEILING	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
810DD-161B 041124572-0260	BASEMENT CORRIDOR OLD HS BUILDING - ROUGH PLASTER DROP CEILING	Gray/White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
810DD-161C 041124572-0261	BASEMENT CORRIDOR OLD HS BUILDING - ROUGH PLASTER DROP CEILING	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
itial report from 09/	/19/2011 09:55:54						
Analyst(s)					Style Siege	1	
Christine Hatter (1	1) Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborator	y Manager	
Erica Valent (66)	,	ny Yu (46)		Melanie Koenig	or other approved signa		



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	146 Hartford Road Manchester, CT 0604	10	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

				<u>Non-As</u>	<u>bestos</u>	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре	
810DD-162A 041124572-0262	CAFETERIA HALLWAY (TO ROOM 255) - TAN WINDOW GLAZING A/W INTERIOR WOOD SASHES	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
810DD-162B 041124572-0263	CAFETERIA HALLWAY (TO ROOM 255) - TAN WINDOW GLAZING A/W INTERIOR WOOD SASHES	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
810DD-163A 041124572-0264	BASEMENT CORRIDOR OLD HS BUILDING - TEXT SKIM PLASTER (GOES WITH SAMPLE- 161)	Gray/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11)

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	146 Hartford Road Manchester, CT 0604	0	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 PRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

				<u>Asbestos</u>		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
810DD-163B 041124572-0265	BASEMENT CORRIDOR OLD HS BUILDING - TEXT SKIM PLASTER (GOES WITH SAMPLE- 161)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
810DD-163C 041124572-0266	BASEMENT CORRIDOR OLD HS BUILDING - TEXT SKIM PLASTER (GOES WITH SAMPLE- 161)	White/Beige Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
810DD-164A 041124572-0267	ROOM 258 - 6" BLACK VINYL BASEBOARD	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
810DD-164B 041124572-0268	ROOM 258 (THROUGHOUT) - 6" BLACK VINYL BASEBOARD	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
810DD-165A 041124572-0269	ROOM 258 - DARK BROWN MASTIC A/W 6" BLACK VBB	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Style Sien	1
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ry Manager
Erica Valent (66)	Johni	ny Yu (46)		Melanie Koenig	or other approved signa	tory

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			Received:	09/14/11 9:25 AM
	Manchester, CT 0604	40	EMSL Order:	041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
810DD-165B 041124572-0270	ROOM 258 - DARK BROWN MASTIC A/W 6" BLACK VBB	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
810DD-166A 041124572-0271	ROOM 256 MECH CLOSET - CEMENTITIOUS PENETRATION SEALANT (TYPICAL)	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
810DD-166B 041124572-0272	ROOM 256 MECH CLOSET - CEMENTITIOUS PENETRATION SEALANT (TYPICAL)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-167A 041124572-0273	ROOM 408 - BROWN PAPER UNDERNEATH WOOD FLOOR	Brown Fibrous Heterogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
711DD-167B 041124572-0274	ROOM 408 - BROWN PAPER UNDERNEATH WOOD FLOOR	Brown Non-Fibrous Homogeneous	50%	Cellulose	50% Non-fibrous (other)	None Detected
itial report from 09	/19/2011 09:55:54					
Analyst(s)				_	Style Siege	1
Christine Hatter (1	1) Garr	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborator	ry Manager

Erica Valent (66)

Johnny Yu (46)

Melanie Koenig

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F 1	Pat Dowling Fuss & O'Neill Envirc 46 Hartford Road Manchester, CT 0604	ce, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FO MIDDLE SCHOOL	(860) 646-2469 OONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-168A 041124572-0275	ROOM 419 - SELF STICK BROWN FLOOR TILE	Brown Fibrous Heterogeneous			95% Non-fibrous (other)	5% Chrysotile
711DD-168B 041124572-0276	ROOM 419 - SELF STICK BROWN FLOOR TILE					Stop Positive (Not Analyzed)
711DD-169A 041124572-0277	ROOM 452 CLOSET - TAN W/ RED SWIRL PATTERN LINOLEUM FLOORING	Brown/Black Fibrous Heterogeneous	60%	Cellulose	40% Non-fibrous (other)	None Detected
711DD-169B 041124572-0278	ROOM 452 CLOSET - TAN W/ RED SWIRL PATTERN LINOLEUM FLOORING	Brown/Black Fibrous Homogeneous		Synthetic Cellulose	30% Non-fibrous (other)	None Detected
711DD-170A 041124572-0279	ROOM 410 - LIGHT BLUE/GREY MOTTLED 12X12 FT	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
tial report from 09/1	9/2011 09:55:54					
Analyst(s)					Styphen Sieg	d
Christine Hatter (11,) Garre	et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ory Manager
Erica Valent (66)		ny Yu (46)		Melanie Koenig	or other approved signa	



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Fax: Project		Phone: (860) 646-2469 ORMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011
	MIDDLE SCHOOL		, maryolo Duto.	0,10,2011

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
711DD-170B 041124572-0280	ROOM 410 - LIGHT BLUE/GREY MOTTLED 12X12 FT	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-171A 041124572-0281	ROOM 411 - LIGHT BEIGE (LAYER II) FLOOR TILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-171B 041124572-0282	ROOM 411 - LIGHT BEIGE (LAYER II) FLOOR TILE	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-172A 041124572-0283	ROOM 413 - OFF WHITE W/ BROWN SPECKS 12X12 FLOOR TILE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
711DD-172B 041124572-0284	ROOM 413 - OFF WHITE W/ BROWN SPECKS 12X12 FLOOR TILE	Gray/Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

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Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

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	146 Hartford Road			Received:	09/14/11 9:25 AM
	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
811DD-173A 041124572-0285	BOILER ROOM - BLACK PIPE GASKETS	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
811DD-173B 041124572-0286	BOILER ROOM - BLACK PIPE GASKETS	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
811DD-174A 041124572-0287	BOILER ROOM - GREY INT DOOR CAULK TO GROUND LEVEL EXT	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
811DD-175A 041124572-0288	BOILER ROOM - RESIDUAL BLACK DUCT SEALANT A/W SAW DUST EXHAUST	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
811DD-176A 041124572-0289	BOILER ROOM - CEMENT OVERCOAT @ TOP OF BOILERS	Black Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

 Christine Hatter (11)
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 Laura Torres (3٤

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l 1	Pat Dowling Fuss & O'Neill Enviro I46 Hartford Road Manchester, CT 0604	,	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FC MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011

				Non-Asbest	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
811DD-176B 041124572-0290	BOILER ROOM - CEMENT OVERCOAT @ TOP OF BOILERS					Stop Positive (Not Analyzed)
811DD-177A 041124572-0291	BOILER ROOM - TAN DOOR INTERIOR BLOCKING	Orange Non-Fibrous Homogeneous			94% Non-fibrous (other)	6% Chrysotile
811DD-177B 041124572-0292	BOILER ROOM - TAN DOOR INTERIOR BLOCKING					Stop Positive (Not Analyzed)
811DD-178A 041124572-0293	BOILER ROOM	Orange Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
811DD-178B 041124572-0294	BOILER ROOM	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
811DD-179A 041124572-0295	BOILER ROOM OFFICE - SKIM COAT ON CONCRETE CEILING	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
itial report from 09/1	19/2011 09:55:54					
Analyst(s)					Style Sieg	d
Christine Hatter (11) Garre	t Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborato	
	la haa	ny Yu (46)		Melanie Koenig	or other approved signa	atory



	Pat Dowling Fuss & O'Neill Enviro	Scien	Customer ID: Customer PO:	ENVI54	
	146 Hartford Road			Received:	09/14/11 9:25 AM
	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

		Non-Asbestos				<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
811DD-179B 041124572-0296	BOILER ROOM OFFICE - SKIM COAT ON CONCRETE CEILING	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
811DD-180A 041124572-0297	BOILER ROOM - INTERIOR BOILER DEBRIS	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
811DD-180B 041124572-0298	BOILER ROOM - INTERIOR BOILER DEBRIS	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
811DD-180C 041124572-0299	BOILER ROOM - INTERIOR BOILER DEBRIS	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
811DD-181A 041124572-0300	BOILER ROOM - FRIABLE INSULATION @ BOILER TOP	Gray Fibrous Homogeneous			85% Non-fibrous (other)	15% Chrysotile	
811DD-181B 041124572-0301	BOILER ROOM - FRIABLE INSULATION @ BOILER TOP					Stop Positive (Not Analyzed)	

Initial report from 09/19/2011 09:55:54

Analyst(s)

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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469	EMSL Proj: Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
811DD-181C 041124572-0302	BOILER ROOM - FRIABLE INSULATION @ BOILER TOP					Stop Positive (Not Analyzed)
811DD-182A 041124572-0303	261A CLOSET - WHITE/TAN CLOTH VIBRATION ISOLATOR	Tan Fibrous Homogeneous	90%	Cellulose	10% Non-fibrous (other)	None Detected
811DD-182B 041124572-0304	SMALL BOILER ROOM - WHITE/TAN CLOTH VIBRATION ISOLATOR	Tan Fibrous Heterogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
811DD-183A 041124572-0305	SMALL BOILER ROOM - DEBRIS ON FLOOR	Gray Non-Fibrous Homogeneous	Samples ar	e not homogenous.	100% Non-fibrous (other)	None Detected
811DD-183B 041124572-0306	SMALL BOILER ROOM - DEBRIS ON FLOOR	Brown Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile

Initial report from 09/19/2011 09:55:54

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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FO MIDDLE SCHOOL	Phone: (860) 646-2469	EMSL Proj: Analysis Date:	9/18/2011

				Non-Asbest	<u>Asbestos</u>	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
811DD-184A 041124572-0307	SMALL BOILER ROOM - TAN PIPE-TREAD SEALANT	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
811DD-184B 041124572-0308	SMALL BOILER ROOM - TAN PIPE-TREAD SEALANT	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
811DD-185A 041124572-0309	BOILER TUNNEL - PREFORMED BLOCK-TYPE PIPE INSULATION	White Fibrous Homogeneous			78% Non-fibrous (other)	20% Chrysotile 2% Amosite
811DD-185B 041124572-0310	CAFETERIA - PREFORMED BLOCK-TYPE PIPE INSULATION					Stop Positive (Not Analyzed)
811DD-185C 041124572-0311	ROOM 314 - PREFORMED BLOCK-TYPE PIPE INSULATION					Stop Positive (Not Analyzed)
tial report from 09/1	9/2011 09:55:54					
Analyst(s)					Styple Sieg	d
Christine Hatter (11)) Garı	ret Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ry Manager
Erica Valent (66)	Johr	nny Yu (46)		Melanie Koenig	or other approved signa	atory



 ,	Pat Dowling Fuss & O'Neill Enviro 146 Hartford Road		LC	Customer ID: Customer PO: Received:	ENVI54 09/14/11 9:25 AM
	Manchester, CT 0604	0		EMSL Order:	041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC) 646-2469 SOCKET	EMSL Proj:	0/40/2044
-	MIDDLE SCHOOL			Analysis Date:	9/18/2011

		Non-Asbestos			Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
811DD-186A 041124572-0312	ROOM 255 - AIRCELL PIPE INSULATION	White Fibrous Homogeneous			75% Non-fibrous (other)	15% Chrysotile 10% Amosite
811DD-186B 041124572-0313	ROOM 256 MECH CLOSET - AIRCELL PIPE INSULATION					Stop Positive (Not Analyzed)
811DD-186C 041124572-0314	BOILER ROOM - AIRCELL PIPE INSULATION					Stop Positive (Not Analyzed)
811DD-187A 041124572-0315	BOILER TUNNEL - MUDDED FITTINGS	White Fibrous Homogeneous	10%	Cellulose	67% Non-fibrous (other)	8% Chrysotile 15% Amosite
811DD-187B 041124572-0316	GIRLS BATHROOM N/T 256 - MUDDED FITTINGS					Stop Positive (Not Analyzed)
811DD-187C 041124572-0317	CAFETERIA - MUDDED FITTINGS					Stop Positive (Not Analyzed)

Analyst(s)

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Sien

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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	Pat Dowling Fuss & O'Neill Enviro	oScience, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road Manchester, CT 0604	10	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-188A 041124572-0318	OLD GYM - CEILING SKIM COAT	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-188B 041124572-0319	OLD GYM - CEILING SKIM COAT	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-188C 041124572-0320	OLD GYM - CEILING SKIM COAT	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-189A 041124572-0321	OLD GYM BOYS LOCKER - TAN ADHESIVE A/W CERAMIC WALL TILE	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-189B 041124572-0322	OLD GYM BOYS LOCKER - TAN ADHESIVE A/W CERAMIC WALL TILE	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

 Christine Hatter (11)
 Garret Vliet (45)

 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
 Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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F 1	Pat Dowling Fuss & O'Neill Enviro 46 Hartford Road		ce, LLC	Customer ID: Customer PO: Received:	ENVI54 09/14/11 9:25 AM
N	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER W	OONSOCKET	Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-190A 041124572-0323	OLD GYM GIRLS LOCKER - BLACK BUILDING PAPER UNDERNEATH WOOD FLOOR	Brown/Black Fibrous Homogeneous	60%	Cellulose	40% Non-fibrous (other)	None Detected
812DD-190B 041124572-0324	ROOM 114 - BLACK BUILDING PAPER UNDERNEATH WOOD FLOOR	Brown/Black Fibrous Heterogeneous	45%	Cellulose	55% Non-fibrous (other)	None Detected
812DD-191A 041124572-0325	SCIENCE BASEMENT HALL - POURED CONCRETE FLOORING	Gray/Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-191B 041124572-0326	SCIENCE BASEMENT HALL - POURED CONCRETE FLOORING	Gray/Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

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 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
 Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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	Pat Dowling Fuss & O'Neill Enviro	Scien	Customer ID: Customer PO:	ENVI54	
	146 Hartford Road Manchester, CT 0604	0		Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: DRMER W	()	EMSL Proj: Analysis Date:	9/18/2011

				Non-Asbest	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-192A	OLD GYM GIRLS SHOWER -	Gray			75% Non-fibrous (other)	20% Chrysotile
041124572-0327	TRANSITE SHOWER STALLS	Fibrous Homogeneous				5% Amosite
812DD-192B 041124572-0328	OLD GYM GIRLS SHOWER - TRANSITE SHOWER STALLS					Stop Positive (Not Analyzed)
812DD-193A	ROOM 251C - BROWN GLUE	Brown/Green Non-Fibrous			60% Non-fibrous (other)	40% Chrysotile
041124572-0329	DAUBS A/W LUAN PANELING	Homogeneous				
812DD-193B	ROOM 251C -					Stop Positive (Not Analyzed)
041124572-0330	BROWN GLUE DAUBS A/W LUAN PANELING					, mary 2007
812DD-194A	WOODSHOP HALLWAY -	Brown			100% Non-fibrous (other)	None Detected
041124572-0331	DOOR GLAZING COMPOUND (WINDOWS)	Non-Fibrous Homogeneous				
itial report from 09/1	9/2011 09:55:54					
Analyst(s)					Styple Sieg	d
Christine Hatter (11)	Garre	et Vliet (45)		Laura Torres (38	Stephen Siegel, CIH, Laborato	
Erica Valent (66)	lohn	ny Yu (46)		Melanie Koenig	or other approved sign	atory

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F 1-	at Dowling uss & O'Neill Envirc 46 Hartford Road lanchester, CT 0604		Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FO MIDDLE SCHOOL	Phone: (860) 646-2469 RMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

		Non-Asbestos				Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type	
812DD-194B 041124572-0332	WOODSHOP HALLWAY - DOOR GLAZING COMPOUND (WINDOWS)	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
812DD-195 041124572-0333	OLD GYM - THICK BLACK VINYL BASEBOARD (RIGHT ANGLE)	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
812DD-195A 041124572-0334	OLD GYM - BROWN MASTIC A/W (-195 VBB)	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
812DD-195B 041124572-0335	OLD GYM - BROWN MASTIC A/W (-195 VBB)	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
812DD-196A 041124572-0336	OLD GYM GIRLS SHOWER - YELLOW MASTIC A/W CERAMIC FLOOR TILE	Yellow Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile	

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

Sien

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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Fax: (888) 838-1160 Project: 20100607.A20/RIDEM - F MIDDLE SCHOOL	Phone: (860) 646-2469 ORMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-196B 041124572-0337	OLD GYM GIRLS SHOWER - YELLOW MASTIC A/W CERAMIC FLOOR TILE					Stop Positive (Not Analyzed)
812DD-197A 041124572-0338	OLD HS OFFICE AREA - CLOTH WALL COVERING	Tan Fibrous Homogeneous	95%	Cellulose	5% Non-fibrous (other)	None Detected
812DD-197B 041124572-0339	ROOM 258 - CLOTH WALL COVERING	Tan Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-198A 041124572-0340	HS MAIN OFFICE - 4" DARK BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-199A 041124572-0341	HS MAIN OFFICE - DARK BROWN MASTIC A/W 4" DARK BROWN VBB	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

 Analyst(s)

 Christine Hatter (11)
 Garret Vliet (45)

 Johnny Yu (46)
 Laura Torres (3٤

 Melanie Koenig
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	146 Hartford Road	40	Received:	09/14/11 9:25 AM	
	Manchester, CT 0604	40	EMSL Order:	041124572	
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:		
Project:	20100607.A20/RIDEM - FO MIDDLE SCHOOL	ORMER WOONSOCKET	Analysis Date:	9/18/2011	

				Non-Asbest	tos	<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-199B 041124572-0342	HS MAIN OFFICE - DARK BROWN MASTIC A/W 4" DARK BROWN VBB	Brown Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-200A 041124572-0343	ROOM 108 - TAN/YELLOW MASTIC A/W FLOOR TILE (TOP LAYER)	Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-200B 041124572-0344	ROOM 550 - TAN/YELLOW MASTIC A/W FLOOR TILE (TOP LAYER)	Yellow Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-200C 041124572-0345	ROOM 557 - TAN/YELLOW MASTIC A/W FLOOR TILE (TOP LAYER)	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-201A 041124572-0346	HALLWAY O/S #554-550 - YELLOW/CLEAR MASTIC A/W TOP 12X12 FT	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
	19/2011 09:55:54				Strate Sien	1
tial report from 09/ Analyst(s) Christine Hatter (11		et Vliet (45)		Laura Torres (3)	Stephen Siegel, CIH, Laborato	



	Pat Dowling Fuss & O'Neill Enviro	Science, LLC	Customer ID: Customer PO:	ENVI54		
	146 Hartford Road Manchester, CT 0604	.0	Received: EMSL Order:	09/14/11 9:25 AM 041124572		
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011		

			<u>Asbestos</u>			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-201B 041124572-0347	ROOM 502A - YELLOW/CLEAR MASTIC A/W TOP 12X12 FT	Yellow Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-202A 041124572-0348	ROOM 218 (CLASSROOM WING) - 4" REDDISH BROWN VINYL BASEBOARD	Brown Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-203A 041124572-0349	ROOM 218 - BROWN MASTIC A/W 4" R/B VBB	Brown Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
812DD-203B 041124572-0350	ROOM 317 - BROWN MASTIC A/W 4" R/B VBB					Stop Positive (Not Analyzed)
812DD-204A 041124572-0351	ROOM 456 - TOP LAYER WHITE MASTIC A/W VINYL BASEBOARD	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

 Initial report from 09/19/2011 09:55:54

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Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

		Non-Asbestos					Asbestos
Sample	Description	Appearance	%	Fibrous		% Non-Fibrous	% Type
812DD-204B 041124572-0352	ROOM 550 - TOP LAYER WHITE MASTIC A/W VINYL BASEBOARD	White Non-Fibrous Heterogeneous				100% Non-fibrous (other)	None Detected
812DD-205-Cove Base 041124572-0353	ROOM 224 - 4" BLACK VBB (TYPICAL BROWN MASTIC)	Black Non-Fibrous Homogeneous				100% Non-fibrous (other)	None Detected
812DD-205-Mastic 041124572-0353A	ROOM 224 - 4" BLACK VBB (TYPICAL BROWN MASTIC)	Brown Non-Fibrous Homogeneous				100% Non-fibrous (other)	None Detected
812DD-206 041124572-0354	ROOM 458 - 6" BLACK (THIN) VBB	Black Non-Fibrous Homogeneous				100% Non-fibrous (other)	None Detected
812DD-207A 041124572-0355	ROOM 458 - DARK BROWN MASTIC A/W 6" BLACK VBB	Brown Non-Fibrous Homogeneous				100% Non-fibrous (other)	None Detected
812DD-207B 041124572-0356	ROOM 458 - DARK BROWN MASTIC A/W 6" BLACK VBB	Brown Non-Fibrous Heterogeneous				100% Non-fibrous (other)	None Detected
itial report from 09/1	9/2011 09:55:54						
Analyst(s)						Styple Siege	1

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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	46 Hartford Road	0	Received: EMSL Order:	09/14/11 9:25 AM 041124572	
Fax: (888) 838-1160 Phone: (860) 646-2469 Project: 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL				EMSL Proj: Analysis Date:	9/18/2011

				Non-Asb	<u>estos</u>	Asbestos
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
812DD-208 041124572-0357	ROOM 259A - 6" BLACK (THICK) VBB	Black Non-Fibrous Homogeneous			97% Non-fibrous (other)	3% Chrysotile
812DD-209A 041124572-0358	ROOM 259A - BLACK MASTIC A/W6" BLACK (THICK) VBB	Black Non-Fibrous Homogeneous			94% Non-fibrous (other)	6% Chrysotile
812DD-209B 041124572-0359	ROOM 259A - BLACK MASTIC A/W6" BLACK (THICK) VBB					Stop Positive (Not Analyzed)
812DD-210A 041124572-0360	ROOM 306 - BLACK MASTIC (UNDER WOOD)	Black Non-Fibrous Homogeneous	60%	Cellulose	40% Non-fibrous (other)	None Detected
812DD-210B 041124572-0361	ROOM 409 - BLACK MASTIC (12X12 FT) TOP LAYER	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-210C 041124572-0362	HALL O/S 464 - BLACK MASTIC (12X12 FT) TOP LAYER	Black Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

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Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

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l	Pat Dowling Fuss & O'Neill Enviro I46 Hartford Road Manchester, CT 0604		Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572	
Fax: (888) 838-1160 Phone: (860) 646-2469 Project: 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL MIDDLE SCHOOL<				EMSL Proj: Analysis Date:	9/18/2011

				Non-Asbes	tos	<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-210D 041124572-0363	ROOM 456 - BLACK MASTIC (12X12 FT) TOP LAYER	Black Non-Fibrous Homogeneous			96% Non-fibrous (other)	4% Chrysotile
			Samples II	n group do not appear homo	ogenous.	
812DD-210E 041124572-0364	ROOM 553 - BLACK MASTIC (12X12 FT) TOP LAYER					Stop Positive (Not Analyzed)
812DD-211A 041124572-0365	ROOM 259A - BLACK (BOTTOM) MASTIC A/W 9X9 FT	Black Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
812DD-211B 041124572-0366	ROOM 356 - BLACK (BOTTOM) MASTIC A/W 9X9 FT					Stop Positive (Not Analyzed)
812DD-211C 041124572-0367	HALL O/S 456 - BLACK (BOTTOM) MASTIC A/W 9X9 FT					Stop Positive (Not Analyzed)
itial report from 09/1	9/2011 09:55:54					
					Style Sie	d
Analyst(s)		et Vliet (45)		Laura Torres (3٤	Stephen Siegel, CIH, Laborato	ory Manager
Analyst(s) Christine Hatter (11)) Garre	(VIIEL (40)			or other approved sign	



Attn: Pat Dowling Fuss & O'Neill Env 146 Hartford Road Manchester, CT 06	<i>.</i>	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax: (888) 838-1160 Project: 20100607.A20/RIDEM - MIDDLE SCHOOL	ject: 20100607.A20/RIDEM - FORMER WOONSOCKET		9/18/2011

			Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
812DD-212A 041124572-0368	ROOM 105 - BLACK MASTIC A/W 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
			Samples do not appear homogen	ous.	
812DD-212B 041124572-0369	ROOM 203 - BLACK MASTIC A/W 9X9 FLOOR TILE	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
812DD-212C 041124572-0370	BOILER ROOM - BLACK MASTIC A/W 9X9 FLOOR TILE	Black/Silver Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
812DD-212D 041124572-0371	ROOM 109 WOODSHOP - BLACK MASTIC A/W 9X9 FLOOR TILE (UNDER WOOD FLOOR)	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
812DD-213A 041124572-0372	AUDITORIUM WALL - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54 - Sien Analyst(s) Christine Hatter (11) Garret Vliet (45) Laura Torres (38 Stephen Siegel, CIH, Laboratory Manager or other approved signatory Erica Valent (66) Johnny Yu (46) Melanie Koenig EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report

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Fax: Project	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011	

				<u>Non-As</u>	<u>bestos</u>	<u>Asbestos</u>
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-213B 041124572-0373	AUDITORIUM PANEL - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-213C 041124572-0374	AUDITORIUM BALCONY CEILING - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-213D 041124572-0375	ROOM 251C WALL - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-213E 041124572-0376	SCIENCE HALL LOW CEILING - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-213F 041124572-0377	KITCHEN CEILING - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11)	
Erica Valent (66)	

Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

Sien

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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F 1	Pat Dowling Fuss & O'Neill Enviro I46 Hartford Road Manchester, CT 0604	·	, LLC	Customer ID: Customer PO: Received: EMSL Order:	ENVI54 09/14/11 9:25 AM 041124572
Fax:	(888) 838-1160	Phone: (86	60) 646-2469	EMSL Proj:	
Project:	20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL			Analysis Date:	9/18/2011

				<u>Non-Asl</u>	Asbestos	
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
812DD-213G 041124572-0378	GRAND ENTRY WALL - SKIM PLASTER (NOT HORSE HAIR)	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
812DD-214A 041124572-0379	AUDITORIUM WALL - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Homogeneous	1%	Synthetic	99% Non-fibrous (other)	None Detected
812DD-214B 041124572-0380	AUDITORIUM PANEL - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-214C 041124572-0381	AUDITORIUM BALCONY CEILING - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Homogeneous	1%	Synthetic	99% Non-fibrous (other)	None Detected
812DD-214D 041124572-0382	ROOM 251C WALL - ROUGH PLASTER (NOT HORSE HAIR)	Gray Fibrous Homogeneous	2%	Synthetic	98% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (3٤ Melanie Koenig

Sien

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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	Pat Dowling Fuss & O'Neill Enviro	Scien	Customer ID: Customer PO:	ENVI54		
146 Hartford Road Manchester, CT 06040				Received: EMSL Order:	09/14/11 9:25 AM 041124572	
Fax: Project:	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL		(860) 646-2469 OONSOCKET	EMSL Proj: Analysis Date:	9/18/2011	

			Non-Asbestos				
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре	
812DD-214E 041124572-0383	SCIENCE HALL LOW CEILING - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
812DD-214F 041124572-0384	KITCHEN CEILING - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
812DD-214G 041124572-0385	GRAND ENTRY WALL - ROUGH PLASTER (NOT HORSE HAIR)	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected	
812DD-215A 041124572-0386	OLD HS ENTRANCE (WALL) - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
812DD-215B 041124572-0387	OLD GYM GIRLS LOCKER CEIL - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected	
itial report from 09/1	9/2011 09:55:54				0 1 0	,	
Analyst(s)					Style Siege	1	
Christine Hatter (11, Erica Valent (66)		et Vliet (45) ny Yu (46)		– Laura Torres (3٤ Melanie Koenig	Stephen Siegel, CIH, Laborator or other approved signat		

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	Pat Dowling Fuss & O'Neill Enviro	oScience, LLC	Customer ID: Customer PO:	ENVI54
	146 Hartford Road Manchester, CT 0604	10	Received: EMSL Order:	09/14/11 9:25 AM 041124572
Fax: Project	(888) 838-1160 20100607.A20/RIDEM - FC MIDDLE SCHOOL	Phone: (860) 646-2469 DRMER WOONSOCKET	EMSL Proj: Analysis Date:	9/18/2011

			<u>bestos</u>	Asbestos		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-215C 041124572-0388	ROOM 109 WOODSHOP CEIL - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-215D 041124572-0389	ROOM 258 LOWER WALL (ON BRICK) - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-215E 041124572-0390	ROOM 356 WALL - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-215F 041124572-0391	ROOM 451 WALL - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
812DD-215G 041124572-0392	ROOM 501 WALL - SKIM PLASTER (A/W HORSE HAIR)	White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

Analyst(s)

Christine Hatter (11) Erica Valent (66)

Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

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I	Pat Dowling Fuss & O'Neill Enviro 146 Hartford Road	oScien	Customer ID: Customer PO: Received:	ENVI54 09/14/11 9:25 AM	
	Manchester, CT 0604	0	EMSL Order:	041124572	
Fax:	(888) 838-1160	Phone:	(860) 646-2469	EMSL Proj:	
Project:	ect: 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL		Analysis Date:	9/18/2011	

			Asbestos			
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type
812DD-216A 041124572-0393	OLD HS ENTRANCE (WALL) - ROUGH HORSE HAIR PLASTER	Gray Fibrous Homogeneous	5%	Synthetic	95% Non-fibrous (other)	None Detected
812DD-216B 041124572-0394	OLD GYM GIRLS LOCKER CEIL - ROUGH HORSE HAIR PLASTER	Gray Non-Fibrous Homogeneous	1%	Cellulose	99% Non-fibrous (other)	None Detected
812DD-216C 041124572-0395	ROOM 109 WOODSHOP CEIL - ROUGH HORSE HAIR PLASTER	Gray Fibrous Homogeneous	4%	Cellulose	96% Non-fibrous (other)	None Detected
812DD-216D 041124572-0396	ROOM 258 LOWER WALL (ON BRICK) - ROUGH HORSE HAIR PLASTER	Gray Fibrous Homogeneous	4%	Synthetic	96% Non-fibrous (other)	None Detected
812DD-216E 041124572-0397	ROOM 356 WALL - ROUGH HORSE HAIR PLASTER	Gray Fibrous Homogeneous	2%	Synthetic	98% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66)

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I	Pat Dowling Fuss & O'Neill Enviro	Science, L	LLC	Customer ID: Customer PO:	ENVI54
	46 Hartford Road			Received:	09/14/11 9:25 AM
l l	Manchester, CT 0604	0		EMSL Order:	041124572
Fax:	(888) 838-1160	Phone: (860) 646-2469	EMSL Proj:	
Project:	ct: 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL		SOCKET	Analysis Date:	9/18/2011

				<u>Asbestos</u>		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Туре
812DD-216F 041124572-0398	ROOM 451 WALL - ROUGH HORSE HAIR PLASTER	Gray Non-Fibrous Homogeneous	1%	Cellulose	99% Non-fibrous (other)	None Detected
812DD-216G 041124572-0399	ROOM 501 WALL - ROUGH HORSE HAIR PLASTER	Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected

Initial report from 09/19/2011 09:55:54

Analyst(s)

Christine Hatter (11) Erica Valent (66) Garret Vliet (45) Johnny Yu (46) Laura Torres (38 Melanie Koenig

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036



Appendix C

Asbestos TEM Laboratory Analytical Results





EMSL ANALYTICAL, INC. 200 ROUTE 130 NORTH CINNAMINSON, NJ 08077 PHONE: (800) 220-3675 FAX: (856) 786-0235

September 9, 2011

Steven Hubbs Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040

shubbs@fando.com

Re: Narrative EMSL Order ID 041126490

Dear Steven:

On September 14, 2011 EMSL Analytical, Inc. (Woburn, MA) received 415 bulk samples for 20100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL project. These samples were brought in by Federal Express. The EMSL NJ lab accepted these samples and received them on September 14, 2011. All samples were logged in following normal lab procedures and were received in acceptable condition. All 415 samples were present and in acceptable condition.

TEM EPA NOB (Gravimetric Reduction)

After initial PLM analysis and data review by the client, 40 samples were chosen by the client for follow-up TEM analysis via EPA 600/R-93/11 -116. This method incorporates matrix reduction and preparation (organic/inorganic components). Asbestos content in the samples are reported on a % basis for the asbestos concentration. The limit of quantification for this method of <1%. Positive stops as well as sample layers were established by the client as applicable.

TEM batch lab blanks, scope alignments, inter and intra QC analysis were performed in accordance with EMSL's QC SOP. All QC data was deemed as acceptable.

State Siegel

Stephen Siegel, CIH Asbestos Lab Manager EMSL Cinnaminson, NJ





INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

TEM-041126490

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

	YES	<u>NO</u>
1. SAMPLING AND FIELD MEASUREMENTS:		
Field measurement calibration records		DNA
Groundwater field measurements (if applicable)		
Soil sampling field measurements (if applicable)		
Sediment sampling field measurements (if applicable)		
Surface water sampling field measurements (if applicable)		
Low-flow sampling field measurements (if applicable)		
Documentation of field activities	X	
Sample numbering and labeling	X	
Chain-of-Custody records	X	
Trip blanks		ONIA
Duplicate samples		
Equipment blanks		
Split samples (if any)		
2. LABORATORY MEASUREMENTS:		
Trip blanks		DN/A
Instrument blanks	1×	
Laboratory control samples	X	
Duplicates samples	X	
Equipment blanks		DNA
Matrix spike/matrix spike duplicates		$\Box \gamma$
Analysis type	X	
Chain-of-Custody records	×	
Surrogate recoveries		D NIA
Sample Project Narratives	X	
Split samples (if any)		DNA
	G	
TOTAL:		
		100
PERCENT	COMPLETE: _	%



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

1. SAMPLING AND FIELD MEASUREMENTS:	YES	NO	COMMENTS
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			
$pH - \pm 0.3 pH$ units			NIA
S.C \pm 5% of calibration solution, within?			N
calibration range			
Temperature - \pm 0.5 °C			
D.O \pm 5% of calibration solution			
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ±2 ppm			
OVA - ±2 ppm			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)			
S.C ± 10%			
$pH - \pm 0.2 pH$ units			
Temperature - ± 10%			
Turbidity - ±5 NTU			$\overline{\mathbf{v}}$
Documentation of field activities	1		
Site-specific information documented in field notebook?	X		and the second se
Field data sheets completed?	X		
Sample numbering and labeling			monkering specific to
Sample numbering conforms to sample I.D. system	_	al	winding specific to
identified in QAPP?		0x	
Chain-of-Custody records	¥	-	
Chain-of-Custody forms completed?	K		





INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			
Duplicate samples			
Field duplicates performed, 1/20 samples?			
Duplicates performed on 10% of samples screened			
for explosives?			
Is percent difference within 30% for all field parameters?			
Equipment blanks			
Equipment blanks submitted, one per sampling day?			
Any compounds detected in equipment blank?			
Split samples (if any)	-	_	
Split samples collected?			
Is percent difference within 30% for split samples?			
2. LABORATORY MEASUREMENTS:			
Trip blanks			
Trip blanks submitted, one per day?			AIG
Any compounds detected in trip blanks?			1
Instrument blanks**	X		
Laboratory control samples**	X		
Duplicates samples**			NIA
Equipment blanks**			
Matrix spike/matrix spike duplicates**			1
Analysis type	₩		
Chain-of-Custody records	JS.		
Surrogate recoveries**			NIA
Sample Project Narratives	X		
Split samples (if any)**			NIA
Most recent EPA WP-PE sample results**			Y



Attn: Karron Redfield Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040			Customer ID: Customer PO: Received: EMSL Order:	ENVI54 10/03/11 3:00 PM 041126490
Fax: Project:	Fax: (888) 838-1160 Phone: (860) 646-2469		EMSL Proj: Analysis Date:	10/5/2011

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
818DD-01A 041126490-0001		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-02A 041126490-0002		Tan Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-09A 041126490-0003		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-10A 041126490-0004		Tan Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-13A 041126490-0005		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-17A 041126490-0006		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-18A 041126490-0007		Tan Non-Fibrous Heterogeneous	95.4	None	4.6% Chrysotile
818DD-22A 041126490-0008		Brown /Tan /Green Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Initial report from 10/05/2011 13:11:44

Analyst(s)

Peter Harrison (39)

Sient

Stephen Siegel, CIH, Laboratory Manager or other approved signatory



Attn: Karron Redfield Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040			Customer ID: Customer PO: Received: EMSL Order:	ENVI54 10/03/11 3:00 PM 041126490
Fax: Project:	(888) 838-1160 Phone: (860) 646-2469 orct: ORIG 04112457220100607.A20/RIDEM - FORMER WOONSOCKET MIDDLE SCHOOL		EMSL Proj: Analysis Date:	10/5/2011

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
818DD-24A 041126490-0009		Black Non-Fibrous Heterogeneous	100	None	<0.25% Chrysotile
818DD-34A 041126490-0010		Gray Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-35A 041126490-0011		Brown /Tan Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-37A 041126490-0012		Blue /Green Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
818DD-47A 041126490-0013		Brown /Tan /Beige Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-48A 041126490-0014		Red Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-49A 041126490-0015		Gray /Yellow Non-Fibrous Heterogeneous	99.6	None	0.45% Chrysotile
76DD-50A 041126490-0016		Gray Non-Fibrous Heterogeneous	96.8	None	3.2% Anthophyllite

Initial report from 10/05/2011 13:11:44

Analyst(s)

Peter Harrison (39)

Sient

Stephen Siegel, CIH, Laboratory Manager or other approved signatory



Attn: Karron Redfield Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040			Customer ID: Customer PO: Received: EMSL Order:	ENVI54 10/03/11 3:00 PM 041126490
Fax: Project:	(888) 838-1160 ORIG 0411245722010060 WOONSOCKET MIDDLE S		EMSL Proj: Analysis Date:	10/5/2011

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
76DD-51A 041126490-0017		Blue Non-Fibrous Heterogeneous	71.8	None	28.2% Chrysotile
76DD-56A 041126490-0018		Brown /White /Beige Non-Fibrous Heterogeneous	99.3	None	0.68% Chrysotile
76DD-57A 041126490-0019		Brown /Gray /White Non-Fibrous Heterogeneous	98.1	None	1.9% Chrysotile
76DD-59A 041126490-0020		Brown /White Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-61A 041126490-0021		Green Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-70A 041126490-0022		Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-71A 041126490-0023		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

76DD-89A 041126490-0024

Insufficient Material

Initial report from 10/05/2011 13:11:44

Analyst(s)

Peter Harrison (39)

Stephen Siegel, CIH, Laboratory Manager or other approved signatory



Attn: Karron Redfield Fuss & O'Neill EnviroScience, LLC 146 Hartford Road Manchester, CT 06040			Customer ID: Customer PO: Received: EMSL Order:	ENVI54 10/03/11 3:00 PM 041126490
Fax: Project:	(888) 838-1160 ORIG 0411245722010060 WOONSOCKET MIDDLE S		EMSL Proj: Analysis Date:	10/5/2011

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
76DD-96A 041126490-0025		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
76DD-97A 041126490-0026		Tan /Yellow Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
711DD-110A 041126490-0027		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
711DD-114A 041126490-0028		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
711DD-117A 041126490-0029		Gray Non-Fibrous Heterogeneous	95.7	None	4.3% Anthophyllite
711DD-131A 041126490-0030		Gray Non-Fibrous Heterogeneous	80.1	None	19.9% Chrysotile
711DD-140A 041126490-0031		Gray /White Non-Fibrous Heterogeneous	95.5	None	4.5% Chrysotile
711DD-149A 041126490-0032		Gray Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Initial report from 10/05/2011 13:11:44

Analyst(s)

Peter Harrison (39)

Sient

Stephen Siegel, CIH, Laboratory Manager or other approved signatory



Attn: Karron Redfield Fuss & O'Neill Er 146 Hartford Roa Manchester, CT (Customer ID: Customer PO: Received: EMSL Order:	ENVI54 10/03/11 3:00 PM 041126490
			10/5/2011

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
711DD-150A 041126490-0033		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
810DD-164A 041126490-0034		Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
810DD-165A 041126490-0035		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
812DD-195 041126490-0036		Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
812DD-195A 041126490-0037		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
812DD-198A 041126490-0038		Brown Non-Fibrous Heterogeneous	100	None	<0.25% Chrysotile
812DD-199A 041126490-0039		Brown Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
812DD-212A 041126490-0040		Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Initial report from 10/05/2011 13:11:44

Analyst(s)

Peter Harrison (39)

Stephen Siegel, CIH, Laboratory Manager or other approved signatory



EMSL ORDER ID 04/124572 PLM+TEM

INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

-7

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

			<u>YES</u>	NO	<u>COMMENTS</u>
1.		SDG Project Narratives			MA
2.		Traffic Report		п.	1/1/
3.		Volatiles Data	td	<u> </u>	{
	a.	Sample Data			/
		Target Compound List (TCL) Results			/
		Reconstructed total ion chromatograms (RIC) for each sam	ple		
		For each sample:	1	-	
		Raw spectra and background-subtracted mass spectra of			
		target compounds identified		□ _	
		Mass spectra of all reported TICs with three best library			
		matches		Ω.	
		Percent solids calculations		□ _	
	b.				
		Initial Calibration Data		□ _	
		RICs and Quan Reports for all Standards		Ξ_	
		Continuing Calibration			
		RICs and Quan Reports for all Standards		□ _	
		Internal Standard Area Summary		Ο	
	c.	Raw QC Data			
		Blank Data	D		
		Matrix Spike Data			
		Matrix Spike Duplicate Data			
4.		Semivolatiles Data			
	a.	QC Summary			
		Surrogate Percent Recovery Summary		0	
		MS/MSD Summary		0 _	
		Method Blank Summary		0 C]
		Tuning and Mass Calibration	. 🗆		



INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS (Continued)

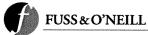
PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
b.	Sample Data TCL Results Tentatively Identified Compounds Reconstructed total ion chromatograms (RIC) for each			1/1A
	Sample For each sample: Raw spectra and background-subtracted mass			
	spectra of TCL compounds Mass spectra of TICs with 3 best library matches			
	GPC chromatograms (if GPC performed)			
c.	Standards Data (all instruments) Initial Calibration Data RICs and Quan Reports for all Standards Continuing Calibration RICs and Quan Reports for all Standards Internal Standard Areas Summary Internal Standard Areas Summary			
d.	Raw QC Data Decafluorotripbenylphosphine (DFTPP)			
	Blank Data Matrix Spike Data Matrix Spike Duplicate Data			
5.	Miscellaneous Data Original preparation and analysis forms or copies of prepara and analysis log book pages Internal sample & sample extract transfer chain-of custody records Screening Records	tion		pr pr D

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All instrument output, including strip charts from screening activities (describe or list)	INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0	



INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 **REVISION: 0.0**

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST **ORGANIC COMPOUNDS** (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

			<u>YES</u>	NO	<u>COMM</u>	<u>ENTS</u>
6.	Sample	of-Custody Records e Log-in Sheet (Lab & DC1) laneous Shipping/Receiving Records (describe or list)				
	7.	Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)	₹ €∕		/	
	8.	Other Records (describe or list)				
	9.	Comments:				
	**	See laboratory Quality Assurance Plan for limits.				
Comple (Lab)	ted by:	(Signature) Shoke (Printed Name/Title	5 Sar 2)	el	(65 mare	9/19/1 Date
associat	ed with	above information is true and accurate. I further certif the above analyses will be made available for review for his document.	seven		rs following	

(Signature)

Certified by: (Lab)

45 MS7

Date

(Printed Name/Title)



INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST INORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

	94-1	YES	NO	<u>COMME</u>
SDG Project Narratives		0/	1	
Inorganic Analysis Data Sheet		Y.		
Initial and Continuing Calibration Verification		6/	Ø	1/10
CRDL Standard for AA and ICP			16	TV JP
Blanks				t a
ICP Interference Check Sample			Q	MB
Spike Sample Recovery				J.
Post Digest Spike Sample Recovery				
Duplicates				NA
Laboratory Control Sample				
Standard Addition Results				
ICP Serial Dilutions				
Instrument Detection Limits, Quarterly				
ICP Interelement Correction Factors, Annually				
ICP Linear Ranges Quarterly			D	J
Preparation Log				
				و المحمد ال
Analysis Run Log				NT
ICP Raw Data				1
Furnace AA Raw Data				/
Mercury Raw Data				1
Percent Solids Calculations				
Digestion Logs				
EPA Shipping/Receiving Records				
(List all individual records)				
Chain-of Custody Records				
Sample Log-In sheet			Π.	
Miscellaneous Shipping/Receiving Records			Ο.	
(List all individual records)				

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				IAL DATE: JULY 2007 ON DATE: JULY 2007 REVISION: 0.0
	GENERIC QUALITY ASSURANCE F FOR PROJECTS IN RHODE LABORATORY MODIFIED TIER II DATA VA INORGANIC COMPOUN (Continued)	ISLÂND LIDATI)	
	PERFORME WITHIN AC			RE APPLICABLE, MTS?**
		<u>YES</u>	<u>N0</u>	COMMENTS
25.	Internal Lab Sample Transfer Records and Tracking Shee (Describe or List) J-HQ/AN (UC)	ets		
26.	Internal Original Sample Preparation and analysis Record (Describe or List Preparation Records Analysis Records			
27.	Description Other Records (Describe or List)		L _	
28.	Comments:		e dreame and derrar	
**	See laboratory Quality Assurance Plan for limits.	<u> </u>		
Comp	oleted by: Stepk			1
(Lab)	(Signature) (Printed Name/7	Title)		Date

certification of this document.

(Signature)

Stich Sul Lby Mg (Printed Name/Title)

979-11 Date

Certified by: (Lab)



Appendix D

XRF Lead Testing Field Data Sheets





Address _____

Date___

Room	Side	Surface	Pb by XRF	Defective	Cult - Arr 4
Main Ent	B	Door Filane		Defective	Substrate*
	ß	Door	-0.1		W III
	BCD	inll	1.5		M
	Ċ	Vall Door Radiator Molding	-0.1		 い
	C	Rediator	0.5		M
	Ac	Mold	6.2	y	
340	ABCD	Part	0.0	Y	
	K	2001 Frame	0.2		$\overline{\omega}$
			0.3-0.4		$\frac{\omega}{\rho}$
	+	Wall upper + lower	14-13		P
	\mathcal{D}	Reduktor	1.6-2.3 3.2		M
	MCD	Rad abor Chair rail	0.1	/	
		5:(1	0.1		W NO
	B	window components	0.0		ay
	B	L France	0.0		W
740B	B	L France L Sill L France	0.1		2
	1	+ Frame	0.0		w
	B	+ conponents	~0.1		M
	みわし君	capper wall	1.0	Y	
	L	lover t	2.2	V	P P
	ABC	Chair Reil + Baseboard	0.2		w
×	B D	Rad abor	3.2	Y	M
	\mathcal{D}	hall	0.3	-/	\mathcal{D}
360C	ABCD	Upper well	1.0	Y	P
	×	lover L	1.3	V	P
	B	had rator	3.2	4	M
	B	nindar comp	Del		ω
	ABCT	window comp CR +BB	0.1		w
	AD	Door + Fram	0.2		W
340 L: brary Hull	D BD	CK + BD Door + Fram Safe upper wall Tore wall Door & France wall Shelfes Door + Frame	4.2	y t	M
Library Hall	BD	upper wall	0.0-1.0	Ý I	P P
/		lover wall		ý l	P
	$\overline{D2}$	Door a Flame	6,0		4
Morac Closet	ABCD	wall	1.0	Y	P
Horac Closed across From 355 B Starr 15	AbcD B D	Shelves	0.0		W
355B		Voor + Frame	0.3		
Stair 15	ABLD	wall	2.2	y	B
		Stair Newel fost	0.0	7	C
·		Nevel fost	1.3	Y	M

and a figure of the second second

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

Page _____ of _____



Address _____

Date

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Room	Side	Surface	Pb by XRF	Defective	Substrate*
		Bullister	1-0	1	M
		Stringer	1.0	Y	M
·		Riser	1.1	1	M
		undernath Stains	0-1	<i>l</i>	M
		Metal Handrail	0.1		N
	BD	Door	0.1		M
342	ABCD	upper walf	1.3	K	P
	L	laver L	1-0	X	ρ
	B	Pad stor	2.5	Ý	M
	B	window S. []	0,0		W
	B	window conp	-0.1		M
	AACD	CR +BB	0.0		W
2	\mathcal{D}^{-}	Door + France	0.0-0.4		M.
357 LIBRARY		Celling (TIN)	-0.1		M (TIN)
		Ceiling (ABOVE TIN)	0.1		P
	BACD	hover &	2.5	Y	P
		buce I	1.7	Y Y	P
	ĊD	ind the	3.4	Y	M
	LD	windows:11	0.1		W
	LL	+ components	0.0		M
		Shelving	0.0		M
			0.0		W
	A	wall	0.1		P
355,355A+355B	ABCD	upp call	1.2	Y	P
		love +	3,3	Y	P
	\mathcal{D}	Red Tatos	3.2	Y	M
		Window comp Poor & Frame	0-1		M
· · · · · · · · · · · · · · · · · · ·	BI		0.0-0.1		W
		5 helves	0-1	i	ω
	#BCD	ingger wall	1.6	Y	ρ
work Room	+	lower +	2.3	X	ρ
	A D	wall	0-1		Ð
	<u>D</u>	window pomps	0,1		W
2 -64	D	Radiator	0,1 3.3	Y	al
358	ABCD	wall	1.0-2.3	Ý	ρ
	٤	BB-CR	0.1		W
	Ð	Door + Frank	-0.i		\checkmark
	β	Radiator	3.0	У	M
		Cest my heetrock) L=Lead Containing Alloy (No Coating)	0.0		

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl



Address _

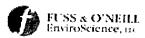
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11 M. A. Market and Management of the second s

Room	Side	Surface	Pb by XRF	Defective	Substrate
356	ABCD	wall	1.3	1	ρ
	AB	wondar comp	0.1	<u> </u>	M
	Ľ_	+ 57(1	0.2		W
	Ċ	Obl Dawy	0.3		
354	ADED	wall	2.2	Y	₩ ₽
		CR-BB	0.2		W
	A	window comp	-0.1		M
	A	1 all	0.(w
		Computer parches	0.3		W/M
· · · · · · · · · · · · · · · · · · ·	AD	Radiators	3.(V	a
	AD BP	Door + Frame	0.1	/	M
Hall outside	ABCD	walf	0.2		P
353	ABCD	wood Trim	0.1		W
	1	Door + Franc	0.1		W
	L	locker	0.2		M
456	ABCD	wall	0,8-1.7	V	$\dot{\rho}$
	★B	Pad ator	3-1	-	M
	.×	wordow sill			w
		+ comp	0.2		M
tall outside	BD	wall	9.0-0.2		 P
458		CR+BB	0,1		- W
		Poor + Fime Wall	0.1		Ŵ
458	B	Wall	0.0		P
	ACD	1	1.1	×	P
	B	Radgitor	3.3	X	M
460	3	nall	1.5	Y	P
	ACD	wall	0.1		P
	B	Rodeator	3.2	V	RI
	B	s: l/	0.1		W
	B	windows comp	0.2		M
	B	BB	0.0		W W
	D	Door + Frame	-0.1		W
462	ABCD		1.2-5.0		P
		mold my	1,0	-{ +	- V
		Ceilow	0.0	-/	P
164	ABCD	nal)	1.0-2.2	- y	 P
		Rodiator	3.0	- 	M
	BC D	Don	0.0	-/	M
· ·	Ą	Door	0,0		<u></u>

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

Page <u>3</u> of _____



Project #		Address		Date	<u> </u>
Room	Side	Surface	Pb by XRF	Defective	Substrate*
463	ABCD	hall	1.5-3.0	Y	P
		BBOCR	0.0		Ŵ
	CD_	Radiator	3,0	Y	M
	B	Door & France	0.2	_	M
Castodra R	m taca	wall Pareling Door & Frank	0,0		W
uth Floor	9	Dor & Frank	0.1		w
459+461	ABED		0.0		Ŵ
		- Ceiling	01		ρ
4570455	ABCD		0.0		6
	ß	Door & France	-0.1		W
	\mathbb{D}	windon sill	0.2		w
	$1\overline{\mathcal{D}}$	+ conservicts	O. d		M
	Ď	Radiator	0.1		n
454	AACD	Wall	1.3-2.0	Y	P
	AT)	Rad ator	3.1	V	M
	A	wall	0.1	雾	P
556	ABCD	wall	1.1-2.5	Ŷ	ρ
	AB	Radrators	3.1	4	M
·····	ABCD	CR+BB	0.3		W
556 storage 58 - 560		Floor	0.1		Ŵ
58-560	ABCD	walls	1.6	X	P
	B	bad into	3.3	y y	M
	ABCD	CRLAB	0.2		W
Vall outside 558	BD	walls	0.8-1.2	V	p
	B	Door mitters	-0.2		(e)
	BD	BB+CR	0,1		<u> </u>
·		Door	0.0		M
562	BD C HBCD	wall	1,2-2.5	Y T	D M P
·	BC	Rad tor	3.1	Y	M
	D	Door	-0.1		M
	BC D D	cabinets	0.3		Ŵ
561	ABCD BD	walls	1.1-2.6	Y	p
	ED)	Door wall Rad tor Door Cabonets walls Red for	3.0	¥.	M
561A	AMED	Wall Pareline	0.0		~
		Wall Panel: 12 Ce. (mg Wall	-0.1		CT
	ApeD	hall	1.0	Y	P
		Hand rail	0.1		$\overline{\omega}$
		Ballaster Wall		Y	M
559	ANCD	wall	1.0	V	P

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Address _____

Date___

Room	Side	Surface	Pb by XRF	Defective	Substrate*
559	ABED	CRZBB	@,(Delective	
	2	Rudiator	3,1	X	W M
557 +555 ~554	ABCD	wall	0.7-1.7		P
a554	Ð	Radiator	3.1	- <u>/</u>	M
	\mathcal{P}	wall Radiator window 5:1/	0.1		
	\mathcal{D}	+ comp	-0,1		M
		+ comp Cabriets	-0.2		Ŵ
554A	ABCD	wall	1.0	Y	$\overline{\rho}$
		ce:/m	0.4		M
	A	Doon	8.1		an
256	Abc) AD	walls	0.4		B
	A J	Doon Doon walls Rudsator	1,1	Y	M
		Floor	0.4		Ċ
		P.pcs Window France Ceilony Certaine Tile Stall; Walls	0.5		as
	AB	window France	0.3		W
<i>a 1 i</i>		Ceiliny	0.2		ρ
Girls Jase	ABCD	cernine Tile	23	Y	Count
near 256		Stalls	0,2		
- <u> </u>	ABCD	walls	1,0	X	B
	D	DOD L	0.0		W
258	ABAD	fuall		Y	В
	C	Wall	0.5-0.7	,	P
240	BC D	ivall	1-0	¥	B
	A		0.6-0.8		Ρ
<u></u>	0	511/	0.0		W
Boys law		Ceraine Tile	0.4		Corner
nen 240	ABCD	wall	1.4	<u> </u>	ß
	A	Radeato	1.6	X	M
262	ABCD	wall	25	Y	B
	A	wall	0.2		\cup
		Door	0.0		w
Hall outside 262	BD	will	1.0	<u> </u>	3
		Ce:1mg	@,5	·	Ø
	5D	Door INFrand	6.2		<u>~</u>
116201A		Fire pipe	0.1		M
L614761A	ABCD	wall	Atte 0.0		Glazal B
		hall	_ € € 0.3-2 3	<u>y</u>	B
·	B	Door Frank	0.0		m
		eetrock) L=Lead Containing Alloy (No Co	1-3	<u> </u>	M

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

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Page <u>5</u> of _____



Project #	Address

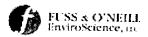
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Date_____

Room	Side	Surface	Pb by XRF	Defective	Substrate*
257	ABCD	wall	0.0-0,3		B
257A	ABCD	wall	1.4	X	B
a257B	B	Door + France	03		
		Salves	0.1		
259+259A	AACD	Shelves Walls	0-0-1.1	Y	B W
	Z	Door	0.1		W
	L		0.0		M
		Cellone	0.1		P
		1 cites trane	03		M
255	ABCD	walls	0.0-0.5	Y	B
		Floor	0.2		C
		walls Floor Cetmy	01		P
		Pipe Walls Floor Wall Floor	0.5		M
253	ABOD	walls	03-166	Ý	B
		Floor	6.0 0.6-1.2		G
254	ABCD	wall	0.6-1.2	У	B
	-	Floor	0.2	, , , , , , , , , , , , , , , , , , , ,	Ĉ
	A	Floor Floor window Ivane + Comp Rad rates	0.2		Ŵ
•	A	+ Comp			M
	AB	Rod rator	0,1	Y	M
Hall ontside 252	ABC	wall	0.0-0.5		P
252	ABCD	Molding	0.0		Ŵ
<u> </u>	CI	Door & France	0.0		W
	4	Pol Door	6.0		M
352,350, 351,≈353	ABCD	Wall	0.1-0.2		P
351,-353	1	CR+BB	0.2		W
	A	window soll	0.1		W
	A	+ comp	-0.1		M
	A	had ontor	1-4	<u> </u>	A
	E	Door + France	0.0		Ŵ
Harwell	ABCD	wall	0.0		ß
outride 350		Floor	.0.0		C
		Hand rail	0.4		M
		Nevel fost	1.3	Y	bet
		Bullaster	1.3	У	M
		Rifer	0.5	-	M
		Stringen	1.3	Y	M
	ADCD	well	0.8		P
	D	Dbl Door	0.2		M

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

Page 6 of



Project #_____ Address _____

Date____

Room	Side	Surface	Pb by XRF	Defective	Substrate [*]
317	ADED	Surface Wall banding Wall Part ator Door Wall Door France L			Ś
		wall	0.0		$\overline{\mathfrak{I}}$
	C	Padinter	0.0 0.3 -0.7		14
	A	Door	0,3		ny m
starmell 41	6 ADCD	wall	-0.2		B
\$7 99		Door France	8-3	Y	M
		LL	0.1		Ŵ
		L Door Reductor Floor Stair Conformats wall Ceiling Safe Radiator Walls Cinon Moulding Floor Chairs Walls Door Frame Radiator CR + BB	0.1		M
		Rudvator	3-(¥.	M
		Floor	0.5	7	C
		Star Conporents	0.3-0.5		M
324	ABCD	irall	0,4		P
		Ceiling	0,4 1.8 7.3	X	P
		Safe	7.3	4	M
		Pad alon	0.4		M
Audstorm	ABD	walls	0.4	У	p
upper_	Anch	Crown Moulding	0.4-0.6		P
		Floor	0.0		W
		Chairs	0.0		WIM
320,313,311	, AbcD	walls	0.2-1.0	У	W/M P
320,313,311 318,309,314 +314	·,	Door + France	0,4		
+314		Rad rator	0.4	У	M
		CRABB	0.0		
309B	ADOD	Walls Floor Door & Frank	6.0-0.1		<u></u> β
		Floor		_	w
		Door & Frang	0.1		W
all outside	ABCD	Wall	0.1-1.1	V	P
309B		Door + France	0-1	7	W
		chain Rail	01		Ŵ
		Lockers	0.4		M
312	ABCD	walls	0.0.0.6		P
		Chain Rail	-0.1		w
	$\widehat{\mathcal{D}}$	Wardow sill	0.0		V
	D	+ comp			M
	\mathcal{D}	Radiator	0.1	Y	M
10, 308, 307,	ABCD	walls.	0.7-6.4	- y	ρ
305, 304, 303		Chain Rail & BB	0.0		Ŵ
102, 2301	<u> </u>	Pad: atos	0.0-1.2	y	M
•		wordow S.M	0.0		w

Page _____ of _____



Project #_____ Address _____

Date

Room	Side	Surface	Pb by XRF	Defective	Substrate*
Boys Room near	ABCD	walls Ceraine	0.0-0.3		Caramie
- 307	L	L	0.1	1	Block
	B	Radoator	-0.1		M
306	ADCD		0.2-7.0	Ý	
	4	CR + AB	0.1		w
	\mathcal{D}	Radrator	1.3	Y	M
	B	Door & Frank	-0.1		/
Girls Recom	ADED	wall & ceramic	-0-1		Ceranica
Near 303	L	+			Mock
	B	Radiator	-0,1		M
	B	window Sill	0.3		W
301 A	AncD	walls	00-0.3		\mathcal{D}
	ABC	shelves	NC		Ŵ
	D	Davis + France	OIT		
300A	ABCD	Down + France Wall & ypen Lover	0.1-0.7		DP PP S
	L	here;	5-8		
	\mathcal{D}	Radrator	1.3		M
	A	Shaves	0-0		<u>در</u>
		E/a.D	0-0 0.3		$\overline{\mathbb{V}}$
300	ABCD	valls baren + upper wondowsself + Comp De E	0.0-0.4		P
	t L	J luna	6.0	V	
	C	wond a syll	-0-1		w
	C	¥ Com	0-1		M
	·B	Door a Frame	-0-1		W
	Å	Radiator	1.2	1/	
And Hornum /	ABCD	Walls	0.0-0.2	Y	M
Stage	+	+ infer			P
- p	3D	And into cover	0.1		<u>р</u>
	BD	had the	1.1		•
	~	Inva action	0.0		P
	ABCI)	C P	0,1		
	-	BB	0.1-0.5		
		Store Floor	0.0		w
	BD	Stage Door & Frame	0,1	<u> </u>	W
	BCD	Stage wall	-0.1-0.5		R
	C			1/	M
		Sporal stair	1.1		M
		Decorat ne Pluster			ρ
	ADCD	Back stage wells	0.4-0.7		φ

and a state of the second state

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

Page <u>8</u> of _____



Project #_____ Address _____

Date_____

Room	Side	Surface	Pb by XRF	Defective	Substrate*
Hall From Cafe To Aud town	AC	wall	0.1		M
To And form		Floor	-0-1		C
	BD	Dor	0.0		w
	MD	+ Frank	0.0		M
	C	Padraton	0.1		M
		Hand mil	0.4	· · · · · · · · · · · · · · · · · · ·	M
Cafe	ABCD	wall	0.4 4.0	Ý	B
0	L	1	-0.1		Ø
		Vert columns	0.1		
		Mandrail	0.7		M
	C	Black will	3.3	4	Block
		Door & Frank	-0.1	5	
Kitchen	ABCD	Wall Ce: Trug Door + Frang	0.1-0.7		M B
		Ce: 1mg	00		P
	$\overline{\mathbf{r}}$	Door + Frang	0-3		M
45 Gym	ABCD	wall	0.1		ß
1	AC	well	Diz		Black
	BD	Bleechers	0.3		W
	BD	Sumart Bennis	1.3	У	M
		Support Bears Floor	0.0	- /	Ŵ
	B	test Duits	0.5		M
	C	Stringer to plughes	1-4	y	M
	L	Riser L	1.5	Y	M
	AC	Dleechers	0.0		W
	AC	uper Floor	0.1		C
	1	Door France	0.0		M
HS Gym Entry	ABCD	wall	0.4		Block
/ /		Radiator	0.2		M
HS Gym Beits	AACD	walls	0.0		Block
		Stalls	0.1		M
			-0.1		
259B2C	AMCD	Coiling Wall	0.2		B
stair wells to	ABED	wall boven	6-1	Y	Block
Bleeders	X	L upper	811		L
		stronger	1.3	Y	M
Boys locker	AND	Tan Block wall	0.0		Bloch
Room 9	L	Grun L	1.1	Y	Black
Girls		Door Fram	0,1	/	M
		Ceilme	0.7	·····	$-\rho$

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl

Page _____ of _____



Project #		Address		Date	
Room	Side	Surface	Pb by XRF	Defective	Substrate*
**************************************		Vert colem	0.5		M
			0.0		M
452,453451	ABCD	lockers ABCD wall	0.0-0.3		P.
452,453,451, ~450		CR + BB	~0.1		Ŵ
		CR + BB Red 4 ator	1.7	У	M
		Ceilore	0.0		P
		Dar	0.0		Ŵ
		Ce: long Door + Frame winder 5511	0.0		W
	· · · ·	window still	0.0		W
		+ con Danate	-0-1		M
tall outside	ABCD	wall	0.3		
450		L conponents wall Door & Frame	0-1		Ŵ
•		locker 5	-0.1		M
419	ABCD	will loven	1.9	V.	
	ABCD	CR + BB Door + Frame	0.5	/	
···	i	CP + BB	-0.1		- L
		Por + Fin de	0.1		M
		Radiator	1.8	V	M
424	ABCD	wall	1.0	V V	P
	<u> </u>	Hand rail			M
	A	Pad ator	3.0		1
<u> </u>	A A	windor 5.11	-0.1		W
417,415,413			0.6		- P
((), (), ()	L	wall upper	2.8		ρ
		CR + BB	0.1		
		Door + France	-0.1		w
·		Stairs	0.1		$\frac{\omega}{\omega}$
		winder 5:11	0.0		
		+ Comp	0-1		m
		Puda to	1.9		M
422,411,420,	AMOD	10	0.7-1.0	-/,	P
409,418,416,	L	Jower +	2.4-7.0	-ý	$\frac{\rho}{\rho}$
412 417410		AB & CR	0.1	($\frac{\rho}{\omega}$
405,407,406		Dot a France	00		
404,401400		Padeator	0.1-1.7		11
		wondow Soll		/	/~/
		& Cons	0.1		M
409B ~A	n.h.	vall conp	0.2		P
	AMLD	Fluor	-0.1		
· · · · · · · · · · · · · · · · · · ·		heetrock) L=Lead Containing Alloy (No Coating			w

*P=Plaster S=Gypsum Wallboard (sheetrock) L=Lead Containing Alloy (No Coating) M=Metal A=Alumimum W=Wood V=Vinyl



Project #		Address		Date	
Room	Side	Surface	Pb by XRF	Defective	Substrate*
Hall outside	ABED	wall upper. t Lover			ρ
418	L	+ Leven	05-1.0	Ý	p
			D. (W
		Lockers Door + Frame	0.0		aj
		Door + Frame	0.1		W
		Ceilmy	0.3		P
414	AMCD	inall upper	0.3	Y	P
	<u> </u>	L Tower	>9.9	Y	Ø
		Rodrator Window S: // + Comp	1.3	Y	M
		wondon Sill	-0.1		ω
		- Comp	0.1		M
		0.			
<u> </u>					
				*	
······································					

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Appendix E

TCLP Lead Laboratory Analytical Results and Data Verification Documentation





Modified Tier II Data Validation Narrative

Project: 20100607.A20 Site Investigation/Targeted Brownfields Assessment Former Woonsocket Middle School

ESS Laboratory Project Number:	E108E35
Date Samples Received at Laboratory:	August 19, 2011
Date of Review:	November 7, 2012

Five composited building materials sample, including one duplicate sample, were collected and submitted to Premier Laboratory (Premier) and analyzed for lead via the Toxicity Characteristic Leaching Procedure (TCLP) by United States Environmental Protection Agency (USEPA) Method 1311/6010.

Dedicated sampling equipment was utilized, so equipment blanks and field blanks were not collected during these sampling activities. The samples were analyzed within the method-specific holding times.

No analytical method non-conformances were reported in this analytical report. The relative percent difference (RPD) calculated for the primary duplicate pair was 76%. The elevated RPD for the primary-duplicate sample pair was most likely attributable to sample heterogeneity and/or matrix interference.

Analytical results were compared to the USEPA Resource Conservation and Recovery Act (RCRA) hazardous waste criterion for TCLP lead of 5.0 milligrams per liter. For all five samples, the laboratory reporting limits were low enough to allow direct comparison to this criterion.



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

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GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

	YES	NO
1. SAMPLING AND FIELD MEASUREMENTS:		
Field measurement calibration records		DNIA
Groundwater field measurements (if applicable)		
Soil sampling field measurements (if applicable)		
Sediment sampling field measurements (if applicable)		
Surface water sampling field measurements (if applicable)		
Low-flow sampling field measurements (if applicable)		
Documentation of field activities	X	
Sample numbering and labeling	X	
Chain-of-Custody records	X	
Trip blanks		AIND
Duplicate samples	X	
Equipment blanks		DNA
Split samples (if any)		
2. LABORATORY MEASUREMENTS:		
Trip blanks		DNA
Instrument blanks	X	
Laboratory control samples	₿¥	
Duplicates samples	0×	
Equipment blanks		ONIA
Matrix spike/matrix spike duplicates		□ J
Analysis type	K)	
Chain-of-Custody records	M	
Surrogate recoveries		Alen
Sample Project Narratives	1201	
Split samples (if any)		AIU D
TOTAL:	10	
PERCENT CO	MPLETE:	100_%



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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			NIA
pH - \pm 0.3 pH units			<u> </u>
S.C \pm 5% of calibration solution, within?			1
calibration range			
Temperature - ± 0.5 °C			
D.O \pm 5% of calibration solution			
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ±2 ppm			
OVA - ±2 ppm			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)		-	
S.C ± 10%			
pH - ± 0.2 pH units			
Temperature - ± 10%			
Turbidity - ±5 NTU			<u>_</u>
Documentation of field activities			
Site-specific information documented in field notebook?	X		
Field data sheets completed?	X		
Sample numbering and labeling			simple numbering specific to building materials
Sample numbering conforms to sample I.D. system			to building materials
identified in QAPP?		×	0
Chain-of-Custody records			
Chain-of-Custody forms completed?	X		

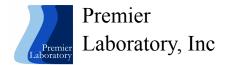
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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	<u>YES</u>	NO	<u>COMMENTS</u>
Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			
Duplicate samples	1		
Field duplicates performed, 1/20 samples?	0×		
Duplicates performed on 10% of samples screened		_	AIU
for explosives?			
Is percent difference within 30% for all field parameters?			
Equipment blanks	1 1		
Equipment blanks submitted, one per sampling day?			
Any compounds detected in equipment blank?			
Split samples (if any)			
Split samples collected? Is percent difference within 30% for split samples?			
is percent difference within 50% for split samples:	اسا		
2. LABORATORY MEASUREMENTS: Trip blanks			
 LABORATORY MEASUREMENTS: Trip blanks Trip blanks submitted, one per day? 			NIA
Trip blanks Trip blanks submitted, one per day?			L
Trip blanks			NIA J
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks?			NIA V
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**}			<u>AIN</u>
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**}	A N -		NIA
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**}	反反对口		
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**}			
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**} Matrix spike/matrix spike duplicates ^{**}			
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**} Matrix spike/matrix spike duplicates ^{**} Analysis type	MOD N N N O		
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**} Matrix spike/matrix spike duplicates ^{**} Analysis type Chain-of-Custody records	发发口口及发发口!		
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**} Matrix spike/matrix spike duplicates ^{**} Analysis type Chain-of-Custody records Surrogate recoveries ^{**}	文友 文文ダ		
Trip blanks Trip blanks submitted, one per day? Any compounds detected in trip blanks? Instrument blanks ^{**} Laboratory control samples ^{**} Duplicates samples ^{**} Equipment blanks ^{**} Matrix spike/matrix spike duplicates ^{**} Analysis type Chain-of-Custody records Surrogate recoveries ^{**} Sample Project Narratives	XOXXOOXXO		NIA V



61 Louisa Viens Drive Dayville, CT 06241 Fax: 860-774-2689 Phone: 860-774-6814 Toll-Free: 800-334-0103

ANALYTICAL DATA REPORT

prepared for:

Fuss & O'Neill, Inc. 317 Iron Horse Way Suite 204 Providence, RI 02908 Attn: Pat Dowling

Report Number: E108E35 Project: 20100607.A20/ Former Middle School

Received Date: 08/19/2011 Report Date: 08/26/2011

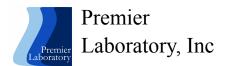
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Premier Laboratory, Inc Authorized Signature



Certified and Compliant with: CT (PH-0465), EPA (CT00008), MA (M-CT008), ME (CT0050), NH (2020), NJ (CT007), NY (11549), PA (68-04413), RI (LAO00300), UCMR2 (CT00008), VT (VT11549)





61 Louisa Viens Drive Dayville, CT 06241 Fax: 860-774-2689 Phone: 860-774-6814 Toll-Free: 800-334-0103

> Report No: E108E35 Client: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory, Inc received five samples from Fuss & O'Neill on 08/19/2011. The samples were analyzed for the following list of analyses:

TCLP Metals by SW-846 6010B[3000]

Non-Conformances: Work Order:

None

Sample:

None

Analysis:

None

Premier Laboratory, Inc Analytical Data Report

Report No: E108E35 Date Received: 08/19/2011 15:46		stomer: Fuss & C ject: 20100607.A		er Middle School		
Parameter	Result	DL	Units	Completed	By	Dilution
(1) 818DD-TCLP-01 Date Collected: 08/18/2011 10:00	Matrix: Other					
Metals by ICP by SW-846 6010B, TCLP Lead	0.050	0.040	mg/L	08/26/2011 10:14	NJB	
(2) 818DD-TCLP-02 Date Collected: 08/18/2011 11:00	Matrix: Other					
Metals by ICP by SW-846 6010B, TCLP Lead	0.080	0.040	mg/L	08/26/2011 10:16	NJB	
(3) 818DD-TCLP-03 Date Collected: 08/18/2011 12:00	Matrix: Other					
Metals by ICP by SW-846 6010B, TCLP Lead	0.79	0.040	mg/L	08/26/2011 10:18	NJB	
(4) 818DD-TCLP-04 Date Collected: 08/18/2011 12:30	Matrix: Other					
Metals by ICP by SW-846 6010B, TCLP Lead	0.44	0.040	mg/L	08/26/2011 10:21	NJB	
(5) 818DD-TCLP-05 Date Collected: 08/18/2011 13:00	Matrix: Other					
Metals by ICP by SW-846 6010B, TCLP Lead	0.18	0.040	mg/L	08/26/2011 10:23	NJB	

						(1001)	72 TRCh	2				
9	FUSS & O'NEILL Disciplines to Deliver (860) 646-2469 • www.FandO.com)'NEILL <i>beliver</i> www.FandO.com			L 146 Ha 56 Quai 1419 Ri 1419 Ri 78 Inter	TOUL rtford Road, Man. ry Road, Trumbu chland Street, Coi estate Drive, West	 <i>CODEOULOCON</i> 146 Hartford Road, Manchester, CT 06040 56 Quarry Road, Trumbull, CT 06611 1419 Richland Street, Columbia, SC 29201 78 Interstate Drive, West Springfield, MA 01089 		3:7 50 Redfield Street, Suite 100, Boston, MA 02122 275 Promenade Street, Suite 359, Providence, RI 02908 0 80 Washington Street, Suite 301, Poughkeepsie, NY 12601	ite 100, Boston, M , Suite 350 , Provis , Suite 301, Pough	317 IA 02122 FROM lence, RI 02908 keepsie, NY 12601	- Stan
	CH	CHAIN-OF-CUSTODY RECORI	ODY RI	ECORI	O 24401			□ 1 Day*	L 3 Days*	Turnaround D Othe days) *Surch	d Dother (days) *Surcharge Applies	
PRO PRO	PROJECT NAME	BONET MS	PROJECT LOCATION	DCATION R	H	Pro Pro	PROJECT NUMBER	R ATC	PR	PREMIER	Laboratory	
REPORT TO: INVOICE TO:	–		G Cynhuc	a Cresha	Analysis Crenterness co		80100			Con	Containers	Para
P.O. No.:	91420	914 ZOLOOGOT. AZO	2	8		21 Strang	- NOI		The SOLIN		1990 111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1111 1000 1000 1111 1000 1000 1111 1000000	
Saurplet s orginal Source Codes: MW=Monitoring W SW=Surface Water	Jatupuer s Juguature: Source Codes: MW=Monitoring Well PW SW=Surface Water T=	PW=Potable Water S=Soil T=Treatment Facility B=Sediment	LZALE: W=Waste A=Air			10.00 C			50 30		0001 - 1 - 200 0001 - 1 - 200 0001 - 1 - 200 0001 - 1 - 200 	
X=Other	X=Other BULLANNG	MERINS			.8	Le la		/ R	1300		22 122 220 23- 122- 12	
Item No.	Transfer Check	Sample Number	Source Code	Date Ti Sampled Sam	Time Sampled	ar ar	2 10 S	Soil VOA VALORIA CONTRACT	101 103 CA	11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	Comments	
1	200	818 DD- TCUP - Ø	×	12NUE 1/ 100	10000 ×							
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m >		81800-70-40-83	X						×			
エ) > >			× >						χ >			
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Transfer Number	Relinq	Relinquished By	Accepted By		Date Time	Reporting and	Reporting and Detection Limit Requirements: ${\sf S}$	squirements: S	7/ tw			
- 0		La Car	to Frid	2	(1)60° 11/81/8	Additional Comments:	aments:				4. 1-4 0 1-1-1-0	
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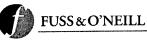


INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST INORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		<u>YES</u> NO	COMMENTS
1.	SDG Project Narratives		
2.	Inorganic Analysis Data Sheet		
3.	Initial and Continuing Calibration Verification		
4.	CRDL Standard for AA and ICP		
5.	Blanks		
6.	ICP Interference Check Sample		
7.	Spike Sample Recovery		
8.	Post Digest Spike Sample Recovery		NA
9.	Duplicates		
10.	Laboratory Control Sample		
11.	Standard Addition Results		147
12.	ICP Serial Dilutions		INA
13.	Instrument Detection Limits, Quarterly	e, o .	Annual
14.	ICP Interelement Correction Factors, Annually		
15.	ICP Linear Ranges Quarterly		
16.	Preparation Log	e, o.	
17.	Analysis Run Log		
18.	ICP Raw Data		
19.	Furnace AA Raw Data		NA
20.	Mercury Raw Data		NA
21.	Percent Solids Calculations		NA
22.	Digestion Logs		
23.	EPA Shipping/Receiving Records	_	
	(List all individual records)		
	Chain-of Custody Records		200 01
	Sample Log-In sheet		Umo_
24.	Miscellaneous Shipping/Receiving Records		
	(List all individual records)		



GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST INORGANIC COMPOUNDS (Continued) PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?** **COMMENTS** YES NO Internal Lab Sample Transfer Records and Tracking Sheets 25. (Describe or List) NA Internal Original Sample Preparation and analysis Records 26. Π (Describe or List M Preparation Records Analysis Records Π Description Other Records (Describe or List) 27. 28. Comments: See laboratory Quality Assurance Plan for limits. ** Nicole Bat Completed by: NICAL BLOG (Printed Name/Title) (Signature) (Lab)

INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007

REVISION: 0.0

FUSS&O'NEILL

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

(Printed Name/Title) ID/51/12 Date Certified by: (Lab)



Appendix F

Lead Paint Chip Laboratory Analytical Results and Data Verification Documentation





Modified Tier II Data Validation Narrative

Project: 20100607.A20 Site Investigation/Targeted Brownfields Assessment Former Woonsocket Middle School

Premeir Laboratory Project Number:	E108E34
Date Samples Received at Laboratory:	August 19, 2011
Date of Review:	November 7, 2012

Eleven paint samples, including one duplicate sample, were collected and submitted to Premier Laboratory (Premier) for analysis of total lead concentration by United States Environmental Protection Agency (USEPA) Method 6010.

Dedicated sampling equipment was utilized, so equipment blanks and field blanks were not collected during these sampling activities. The samples were analyzed within the method-specific holding times.

No non conformances were noted in this analytical report.

The RPDs calculated for the primary-duplicate sample pair was approximately 50%. The elevated RPDs are likely attributed to sample heterogeneity and/or matrix interference.

Analytical results for the building materials samples were compared to the Rhode Island Department of Health definition of lead-containing paint, which is 150 milligrams per kilogram (mg/kg) for building occupancy. Laboratory reporting limits were low enough to allow a direct comparison to this criteria.



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

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GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

	YES	NO
 SAMPLING AND FIELD MEASUREMENTS: 		
Field measurement calibration records	X	
Groundwater field measurements (if applicable)		ain D
Soil sampling field measurements (if applicable)		
Sediment sampling field measurements (if applicable)		
Surface water sampling field measurements (if applicable)		
Low-flow sampling field measurements (if applicable)		
Documentation of field activities	Ċ\$K	
Sample numbering and labeling	X	
Chain-of-Custody records	X	
Trip blanks		AIUD
Duplicate samples	X	
Equipment blanks		AIND
Split samples (if any)		
2. LABORATORY MEASUREMENTS:	-	ALCI D
Trip blanks		hand
Instrument blanks	X	
Laboratory control samples	X	
Duplicates samples	DX.	
Equipment blanks		DNIA
Matrix spike/matrix spike duplicates		
Analysis type	Ø	
Chain-of-Custody records	X	
Surrogate recoveries		DNSMA
Sample Project Narratives	X	DNIA
Split samples (if any)		
TOTAL:		
		160
PERCENT COM	IPLETE:	100_%

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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			
pH - \pm 0.3 pH units			NIA
S.C \pm 5% of calibration solution, within?			
calibration range			
Temperature - ± 0.5 °C			
D.O \pm 5% of calibration solution			
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ± 2 ppm			
$OVA - \pm 2 ppm$			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)			
S.C ± 10%			
pH - \pm 0.2 pH units			
Temperature - \pm 10%			
Turbidity - ±5 NTU			V
Documentation of field activities			
Site-specific information documented in field notebook?	X		
Field data sheets completed?	X		
Sample numbering and labeling			
Sample numbering conforms to sample I.D. system			specific to building mater
identified in QAPP?		Ø.	specific to building mater
Chain-of-Custody records			
Chain-of-Custody forms completed?	R		

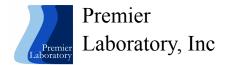


GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			V
Duplicate samples			
Field duplicates performed, 1/20 samples?	VSK		
Duplicates performed on 10% of samples screened			
for explosives?			- NIA
Is percent difference within 30% for all field parameters?			
Equipment blanks)
Equipment blanks submitted, one per sampling day?			
Any compounds detected in equipment blank?			
Split samples (if any)			
Split samples collected?			
Is percent difference within 30% for split samples?			V
2. LABORATORY MEASUREMENTS: Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			J
Instrument blanks**	X		
Laboratory control samples**	X		
Duplicates samples ^{**}	X		
Equipment blanks**			NIA
Matrix spike/matrix spike duplicates**			1
Analysis type	X		
Chain-of-Custody records	X		-
Surrogate recoveries**			NIA
Sample Project Narratives	X		
Split samples (if any)**			NIA
Most recent EPA WP-PE sample results**			V

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61 Louisa Viens Drive Dayville, CT 06241 Fax: 860-774-2689 Phone: 860-774-6814 Toll-Free: 800-334-0103

ANALYTICAL DATA REPORT

prepared for:

Fuss & O'Neill, Inc. 317 Iron Horse Way Suite 204 Providence, RI 02908 Attn: Pat Dowling

Report Number: E108E34 Project: 20100607.A20/ Former Middle School

Received Date: 08/19/2011 Report Date: 08/26/2011

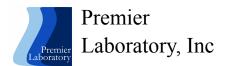
Murasm

Premier Laboratory, Inc Authorized Signature



Certified and Compliant with: CT (PH-0465), EPA (CT00008), MA (M-CT008), ME (CT0050), NH (2020), NJ (CT007), NY (11549), PA (68-04413), RI (LAO00300), UCMR2 (CT00008), VT (VT11549)





61 Louisa Viens Drive Dayville, CT 06241 Fax: 860-774-2689 Phone: 860-774-6814 Toll-Free: 800-334-0103

> Report No: E108E34 Client: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory, Inc received 11 samples from Fuss & O'Neill on 08/19/2011. The samples were analyzed for the following list of analyses:

Trace Metals by 6010B 6010B[3000]

Non-Conformances: Work Order:

None

Sample:

None

Analysis:

None

Premier Laboratory, Inc Analytical Data Report

Report No: E108E34 Date Received: 08/19/2011 15:46			uss & O'Neill 00607.A20/ Form	er Middle School		
Parameter	Result	DL	Units	Completed	By	Dilution
(1) 812DD-01 Date Collected: 08/12/2011 13:00 Trace Metals by 6010B Lead	<u>Matrix: Other</u> 3000	0.10	mg/kg	08/25/2011 12:46	NJB	
(2) 812DD-02 Date Collected: 08/12/2011 13:10	Matrix: Other					
Trace Metals by 6010B Lead	640	0.10	mg/kg	08/25/2011 12:48	NJB	
(3) 812DD-03 Date Collected: 08/12/2011 13:15 Trace Metals by 6010B Lead	Matrix: Other 260	0.10	mg/kg	08/25/2011 12:51	NJB	
(4) 812DD-04 Date Collected: 08/12/2011 13:20 Trace Metals by 6010B Lead	Matrix: Other 6.0	0.10	mg/kg	08/25/2011 12:53	NJB	
(5) 812DD-05 Date Collected: 08/12/2011 13:25 Trace Metals by 6010B	Matrix: Other					
Lead (6) 812DD-06 Date Collected: 08/12/2011 13:30	6600 Matrix: Other	0.50	mg/kg	08/25/2011 13:57	NJB	5
Trace Metals by 6010B Lead	1.4	0.10	mg/kg	08/25/2011 13:53	NJB	
(7) 812DD-07 Date Collected: 08/12/2011 13:35 Trace Metals by 6010B Lead	Matrix: Other 9200	0.50	mg/kg	08/25/2011 14:00	NJB	5
(8) 812DD-08 Date Collected: 08/12/2011 13:40 Trace Metals by 6010B	Matrix: Other					
Lead (9) 812DD-09	30	0.10	mg/kg	08/25/2011 13:11	NJB	
Date Collected: 08/12/2011 13:45 Trace Metals by 6010B 000000000000000000000000000000000000	Matrix: Other					
Lead	2300	0.10	mg/kg	08/25/2011 13:13	NJB	

Premier Laboratory, Inc Analytical Data Report

Report No: E108E34 Date Received: 08/19/2011 15:46		stomer: Fuss & (ject: 20100607		er Middle School		
Parameter	Result	DL	Units	Completed	By	Dilution
(10) 812DD-10 Date Collected: 08/12/2011 13:55 Trace Metals by 6010B Lead	Matrix: Other	0.10	mg/kg	08/25/2011 13:16	NJB	
(11) 812DD-11 Date Collected: 08/12/2011 14:00 Trace Metals by 6010B Lead	Matrix: Other	0.10	mg/kg	08/25/2011 13:18	NJB	

				7200
FUSS & O'NEILL Disciplines to Deliver (860) 646-2469 • www.FandO.com		LIONE OC 146 Hartford Road, Manchester, CT 06040 56 Quarry Road, Trumbull, CT 06611 1419 Richland Street, Columbia, SC 29201 78 Interstate Drive, West Springfield, MA 01089	3:7 1 1 1 2:4 1 6040 50 50 Redfield Street, Suite 100, Boston, MA 02122 804 50 50 Redfield Street, Suite 100, Boston, MA 02122 804 50 50 Redfield Street, Suite 350, Providence, RI 02908 801 50 80 Washington Street, Suite 301, Poughkeepsie, NY 12601 80 90 80 Washington Street, Suite 301, Poughkeepsie, NY 12601	02908 Y 12601
CHAIN-OF-CUSTODY RECO	TODY RECORD	24402	Turnaround D 1 Day* D 3 Days* O Other (d D 2 Days* X Standard (days) *Surcharge Applies	(days) Lies
PROJECT NAME		PROJECT NUMBER		
N DALLAS L	TY (LANDANA			
REPORT TO: R. MAY / P. DOWLING	Eunthie Cicolitancesco	Analysis Request	Containers	2350
100601.Arc				I DE ERE
Sampler's Signature:	Date: 8/18/11	Col 20		ared L
Source Codes: MW=Monitoring Well PW=Porable Water S=Soil SW=Surface Water T=Treatment Facility B=Sediment	W=Waste A=Air	1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	121 201 201 201 201 201 201 201 201 201	211.5 12
CHIPS		- Die		
-		*	Lar Con Con Dr Ber	
Item Italister Uncuk Sample Number No. 1 2 3 4	Source Date Time Code Sampled Sampled		20 20 20 30 30 30 20 20 20 20 20 20 20 20 20 20 20 20 20	mments
1 1 1 1 212 010 - 021	× 12AUG11 13000	X	×	
2 11 81200-02	X IZAUKII 1310	×	×	
3 11 81200 - Ø3	X 12AUEI 1315	×	×	
4 V 1 8120D - X4	X RANGH 1320 X	×	~	
5 / 1 8120D-65	X IZANGII 1325 X	×	×	
6 V 1 812 DD - ØC	X 12AVG11/3395		×	
7 1/ 8/200-61	X 12AVE11 1335		×	
8 V 8120D-28	X 12AUGH 134 0	X	×/	
9 VIII/ 8/200 - 09	X IZAUGH (7345		~	
1 × 1 V V 81200 - 10	× 124411 1355		×	
Transfer Relinquished By Number	Accepted By Date	Time Reporting and Detection Limit Requirements: iSO pprv	it Requirements:	
I Mat IM	11/8/18 8/18/11	1760 Additional Comments:		
2 Fro Filse	AC	111 090 pieuss see	attached reard/checklist	
A A A A A A A A A A A A A A A A A A A	1	11. 15:41 0		RP ØI
		1000		



INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST INORGANIC COMPOUNDS

FUSS&O'NEILL

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		YES	<u>NO</u>	COMMENTS
1.	SDG Project Narratives			
2.	Inorganic Analysis Data Sheet	7	Π	
2. 3.	Initial and Continuing Calibration Verification		Π	
J. 4.	CRDL Standard for AA and ICP		Π	
4. 5.	Blanks		П	····
5. 6.	ICP Interference Check Sample		п	
	Spike Sample Recovery			
7.				NA
8.	Post Digest Spike Sample Recovery		ю. П	
9.	Duplicates	6	ш. п	
10.	Laboratory Control Sample			NA
11.	Standard Addition Results			NA
12.	ICP Serial Dilutions		<u> </u>	Provide
13.	Instrument Detection Limits, Quarterly	_/		Annum
14.	ICP Interelement Correction Factors, Annually	_/	□ .	
15.	ICP Linear Ranges Quarterly		□ .	
16.	Preparation Log		Ξ.	
17.	Analysis Run Log	g	□ .	
18.	ICP Raw Data		□⁄.	
19.	Furnace AA Raw Data		٢, .	NV+
20.	Mercury Raw Data		٢, .	NA
21.	Percent Solids Calculations		٢.	INF
22.	Digestion Logs		Ο.	
23.	EPA Shipping/Receiving Records		/	
	(List all individual records)		ď .	
	Chain-of Custody Records		Ω.	
	Sample Log-In sheet		□⁄ .	LIMS
24.	Miscellaneous Shipping/Receiving Records		d .	
	(List all individual records)			



131/12

INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST INORGANIC COMPOUNDS (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

YES NO COMMENTS

25. Internal Lab Sample Transfer Records and Tracking Sheets (Describe or List)

Internal Original Sample Preparation and analysis Records (Describe or List	, D		
Preparation Records	I	, 🗌	lugbook
Analysis Records			electro
Description			
Other Records (Describe or List)			

** See laboratory Quality Assurance Plan for limits.

Completed by: NICOL DOUT Nicole Batos (Printed Name/Title) (Signature) (Lab)

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

(Lab) (Signature) (Printed Name/ Itile)	Certified by Montgomery (Lab) (Signature)	(Printed Name/Title)
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FUSS&O'NEILL



Appendix G

PCB Laboratory Analytical Results and Data Verification Documentation





Modified Tier II Data Validation Narrative

Project: 20100607.A20 Site Investigation/Targeted Brownfields Assessment Former Woonsocket Middle School

Premier Laboratory Project Number:	E108E18
Date Samples Received at Laboratory:	August 19, 2011
Date of Review:	November 8, 2012

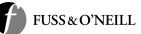
Thirty four building materials samples were collected and submitted to Premier Laboratory (Premier) for analysis of polychlorinated biphenyls (PCBs) by United States Environmental Protection Agency (USEPA) Method 8082, with extraction via Soxhlet Method 3540.

Dedicated sampling equipment was utilized, so equipment blanks and field blanks were not collected during these sampling activities. Samples were analyzed within the method-specific holding times. Since multiple samples of each homogeneous material type (typically 3 samples) were collected for quality control purposes, separate duplicate samples were not collected for analysis.

The case narrative included in the analytical report documented non-conformances associated with recovery of surrogate compounds utilized during the analyses. Recoveries of laboratory surrogate compounds associated with analyses of select materials were reported as 0% in the analytical report. Twelve samples were affected by this laboratory non-conformance. Premier attributed the low surrogate recoveries to difficulty inherent in the Soxhlet extraction and subsequent clean-up of the affected sample matrices. According to Premier, all samples were subjected to Soxhlet extraction (USEPA Method 3540C) using hexane as the solvent. The extracts were then treated with sulfuric acid per USEPA Method 3665A. In the case of the affected samples, the sample volumes completely dissolved into the hexane solvent and did not respond to multiple rounds of acid treatment, requiring dilutions of individual affected samples in the range of 10 to 50 times. The high level of dilution required for the affected samples led to the surrogate compounds being "diluted out." According to Premier, the raw analytical data indicated that surrogate compounds were detected in the affected samples, but at concentrations below the instrument calibration range (approximately 2%-4% recovery). Therefore, these surrogate recoveries were reported as 0%. To address the surrogate recovery difficulties described above, and to evaluate the PCB content of the substrate underlying the brown interior window caulk, Fuss & O'Neill conducted additional PCB sampling to resolve these quality control issues.

The case narrative also documented non conformances associated with elevated detection limits. Sixteen samples were reported to have elevated detections limits which exceeded the requested detection limit of one milligram per kilogram (mg/kg). No PCBs were reported above laboratory reporting limits in any of these samples. Premier attributed this to matrix interference. Because conclusions regarding compliance of these samples with applicable regulatory criteria could not be made, the additional PCB sampling mentioned above was conducted.

As noted previously, specific duplicate samples were not collected and analyzed as part of this sample group. However, multiple samples of each homogeneous material were collected for quality control



purposes to evaluate teh consistency of the matrices and PCB content. Since PCBs were not detected at concentrations above laboratory reporting limits in the majority of the samples, relative percent differences (RPDs) could not be calculated for most materials. Two samples of one three sample homogeneous material sample set (914110818-PCB-09A, 9B & 9C) were reported to contain PCB at concentrations greater than the laboratory reporting limit. The RPD between these two samples was 18%, within the typically acceptable range of RPDs (i.e. <30%). However, when these results were compared to the third sample in the data set which was not reported to contain a detectable concentration of PCB greater than the reporting limit, the resulting RPD was > 110%. These differences were attributed to the observed matrix interference, and the laboratory's difficulty in complying with the quality control requirements for these analyses. These questionable results were addressed by the supplemental sampling and analysis presented above.

Analytical results for the building materials samples were compared to regulatory limits established by USEPA under the Toxic Substances Control Act (TSCA). These limits included the regulated limit of 50 parts per million (ppm) and the potentially-regulated limit of 1 ppm. All laboratory reporting limits were low enough to allow direct comparison to these limits, with the exceptions noted above.



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

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GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

		YES	NO
1. SAMPLING AND FIELD MEASUREMENTS:			DN/A
Field measurement calibration records			
Groundwater field measurements (if applicable)			
Soil sampling field measurements (if applicable)		Ц	
Sediment sampling field measurements (if applicable)			
Surface water sampling field measurements (if applicable)			
Low-flow sampling field measurements (if applicable)			
Documentation of field activities		X	
Sample numbering and labeling		X	
Chain-of-Custody records		08	
Trip blanks			DNA
Duplicate samples		\mathbb{X}	
Equipment blanks			AIND
Split samples (if any)			
2. LABORATORY MEASUREMENTS: Trip blanks Instrument blanks Laboratory control samples Duplicates samples Equipment blanks			
Matrix spike/matrix spike duplicates		X	
Analysis type Chain-of-Custody records		DX.	
Surrogate recoveries		X	
Sample Project Narratives		X	
Split samples (if any)			AIN
Split samples (ii any)			
TC	TAL: _1_		
PE	RCENT COMP	PLETE:	160%



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			
$pH - \pm 0.3 pH$ units			NIA
S.C \pm 5% of calibration solution, within?			1
calibration range			
Temperature - ± 0.5 °C			
D.O $\pm 5\%$ of calibration solution			
Groundwater field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ±2 ppm			
OVA - ± 2 ppm			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)			
S.C ± 10%			
pH - \pm 0.2 pH units			
Temperature - \pm 10%			
Turbidity - ± 5 NTU			
Documentation of field activities			
Site-specific information documented in field notebook?	K		
Field data sheets completed?	Dec.		
Sample numbering and labeling			1 and an appropriate
Sample numbering conforms to sample I.D. system			numbering system spacet
identified in QAPP?		M	numbering system specific to building materials
Chain-of-Custody records			
Chain-of-Custody forms completed?	X		



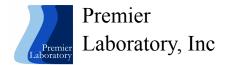
INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	<u>YES</u>	NO	COMMENTS
Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			
Duplicate samples			
Field duplicates performed, 1/20 samples?	A		
Duplicates performed on 10% of samples screened			× × × A
for explosives?			AIM
Is percent difference within 30% for all field parameters?			
Equipment blanks			
Equipment blanks submitted, one per sampling day?			
Any compounds detected in equipment blank?			
Split samples (if any)			
Split samples collected?			
Is percent difference within 30% for split samples?			V
2. LABORATORY MEASUREMENTS: Trip blanks			
Trip blanks submitted, one per day?			NIA
Any compounds detected in trip blanks?			
Instrument blanks**	X		
Laboratory control samples**	X		
Duplicates samples**	X		
Equipment blanks**			NIA
Matrix spike/matrix spike duplicates**			
Analysis type	X		
Chain-of-Custody records	X		
Surrogate recoveries**		X	several had 0% necevery
Sample Project Narratives	X		0
Split samples (if any)**			NIA
Most recent EPA WP-PE sample results**			V

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ANALYTICAL DATA REPORT

prepared for:

Fuss & O'Neill, Inc. 317 Iron Horse Way Suite 204 Providence, RI 02908 Attn: Pat Dowling

Report Number: E108E18 Project: 20100607.A20/ Former Middle School

Received Date: 08/19/2011 Report Date: 09/16/2011

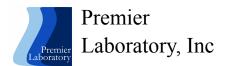
Murasm

Premier Laboratory, Inc Authorized Signature



Certified and Compliant with: CT (PH-0465), EPA (CT00008), MA (M-CT008), ME (CT0050), NH (2020), NJ (CT007), NY (11549), PA (68-04413), RI (LAO00300), UCMR2 (CT00008), VT (VT11549)





> Report No: E108E18 Client: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory, Inc received 34 samples from Fuss & O'Neill on 08/19/2011. The samples were analyzed for the following list of analyses:

PCBs by 8082 with Soxhlet Extraction 3540 8082[3540]

Non-Conformances: Work Order:

None

Sample:

None

Analysis:

Sample 1, 914110818-PCB-01A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference. The requested detection limit of 1 mg/kg could not be achieved.

Sample 10, 914110818-PCB-04A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 13, 914110818-PCB-05A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 14, 914110818-PCB-05B, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 15, 914110818-PCB-05C, PCB's by 8082: One surrogate spike was outside quality control limits for the sample due to matrix interference.

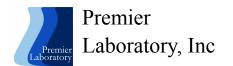
Sample 15, 914110818-PCB-05C, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 18, 914110818-PCB-07A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 19, 914110818-PCB-07B, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 2, 914110818-PCB-01B, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference. The requested detection limit of 1 mg/kg could not be achieved.

Sample 20, 914110818-PCB-07C, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.



> Report No: E108E18 Client: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Non-Conformances:

Analysis:

Sample 27, 914110818-PCB-10A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 27, 914110818-PCB-10A, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 28, 914110818-PCB-10B, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 28, 914110818-PCB-10B, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 29, 914110818-PCB-10C, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 29, 914110818-PCB-10C, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 3, 914110818-PCB-01C, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference. The requested detection limit of 1 mg/kg could not be achieved.

Sample 30, 914110818-PCB-11A, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 30, 914110818-PCB-11A, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 31, 914110818-PCB-11B, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 31, 914110818-PCB-11B, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

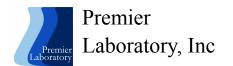
Sample 32, 914110818-PCB-11C, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 32, 914110818-PCB-11C, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 34, 914110818-PCB-13, PCB's by 8082: The detection limits are elevated for the sample due to matrix interference.

Sample 34, 914110818-PCB-13, PCB's by 8082: The sample required a dilution which effectively diluted out the surrogate components.

Sample 4, 914110818-PCB-02A, PCB's by 8082: One surrogate spike was outside quality control limits for the sample due to matrix interference.



> Report No: E108E18 Client: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Non-Conformances:

Analysis:

Sample 5, 914110818-PCB-02B, PCB's by 8082: One surrogate spike was outside quality control limits for the sample due to matrix interference.

Sample 6, 914110818-PCB-02C, PCB's by 8082: One surrogate spike was outside quality control limits for the sample due to matrix interference.

Report No: E108E18 Sample No: 1 Sample Description: 914110818-PCB-01A

Date Collected: 08/12/2011 09:00 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 11:59 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

70%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090807.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	80%	10%-103%	

Decachlorobiphenyl

Page 5 of 38

Report No: E108E18 Sample No: 2 Sample Description: 914110818-PCB-01B

Date Collected: 08/12/2011 09:05 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 12:26 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090808.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	60%	10%-103%	
Decachlorobiphen		61%	10%-142%	

Report No: E108E18 Sample No: 3 Sample Description: 914110818-PCB-01C

Date Collected: 08/12/2011 09:10 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 12:52 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

69%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090809.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	75%	10%-103%	

Report No: E108E18 Sample No: 4 Sample Description: 914110818-PCB-02A

Date Collected: 08/12/2011 09:15 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 13:19 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

49%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090810.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	, D

Tetrachloro-m-xylene Decachlorobiphenyl 10%-103% 10%-142%

Report No: E108E18 Sample No: 5 Sample Description: 914110818-PCB-02B

Date Collected: 08/12/2011 09:20 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 13:45 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

38%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090811.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	

Decachlorobiphenyl

10%-142%

Report No: E108E18 Sample No: 6 Sample Description: 914110818-PCB-02C

Date Collected: 08/12/2011 09:25 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 14:11 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

59%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090812.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	

Decachlorobiphenyl

10%-142%

Report No: E108E18 Sample No: 7 Sample Description: 914110818-PCB-03A

Date Collected: 08/12/2011 09:27 Date Received: 08/19/2011 15:46 Date Extracted: 08/22/2011 11:30 By: DPR Date Analyzed: 09/08/2011 14:38 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

59%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090813.D QC Batch#: 88322

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	54%	10%-103%	

Report No: E108E18 Sample No: 8 Sample Description: 914110818-PCB-03B

Date Collected: 08/12/2011 09:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/23/2011 11:30 By: DPR Date Analyzed: 09/08/2011 15:04 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

72%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090814.D QC Batch#: 88323

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	90%	10%-103%	, D

Tetrachloro-m-xylene Decachlorobiphenyl

Report No: E108E18 Sample No: 9 Sample Description: 914110818-PCB-03C

Date Collected: 08/12/2011 09:35 Date Received: 08/19/2011 15:46 Date Extracted: 08/23/2011 11:30 By: DPR Date Analyzed: 09/08/2011 15:31 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4090815.D QC Batch#: 88323

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
T-(100/ 1020/	

Tetrachloro-m-xylene	66%	10%-103%
Decachlorobiphenyl	71%	10%-142%

Report No: E108E18 Sample No: 10 Sample Description: 914110818-PCB-04A

Date Collected: 08/12/2011 09:45 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/09/2011 11:23 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

12%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 1.00 Dilution Factor: 1 Extract Volume: 5 Lab Data File: 4090907.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1000	ug/kg
11100-14-4	Aroclor 1268	ND	1000	ug/kg
12674-11-2	Aroclor 1016	ND	1000	ug/kg
11104-28-2	Aroclor 1221	ND	1000	ug/kg
11141-16-5	Aroclor 1232	ND	1000	ug/kg
53469-21-9	Aroclor 1242	ND	1000	ug/kg
12672-29-6	Aroclor 1248	ND	1000	ug/kg
11097-69-1	Aroclor 1254	ND	1000	ug/kg
11096-82-5	Aroclor 1260	ND	1000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	29%	10%-103%	

Report No: E108E18 Sample No: 11 Sample Description: 914110818-PCB-04B

Date Collected: 08/12/2011 09:50 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/09/2011 11:49 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 1.00 Dilution Factor: 1 Extract Volume: 5 Lab Data File: 4090908.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1000	ug/kg
11100-14-4	Aroclor 1268	ND	1000	ug/kg
12674-11-2	Aroclor 1016	ND	1000	ug/kg
11104-28-2	Aroclor 1221	ND	1000	ug/kg
11141-16-5	Aroclor 1232	ND	1000	ug/kg
53469-21-9	Aroclor 1242	ND	1000	ug/kg
12672-29-6	Aroclor 1248	ND	1000	ug/kg
11097-69-1	Aroclor 1254	ND	1000	ug/kg
11096-82-5	Aroclor 1260	ND	1000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	30%	10%-103%	
Decachlorobiphen	yl	10%	10%-142%	

Page 15 of 38

Report No: E108E18 Sample No: 12 Sample Description: 914110818-PCB-04C

Date Collected: 08/12/2011 09:57 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/09/2011 13:48 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

10%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 1.00 Dilution Factor: 1 Extract Volume: 5 Lab Data File: 4090909.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1000	ug/kg
11100-14-4	Aroclor 1268	ND	1000	ug/kg
12674-11-2	Aroclor 1016	ND	1000	ug/kg
11104-28-2	Aroclor 1221	ND	1000	ug/kg
11141-16-5	Aroclor 1232	ND	1000	ug/kg
53469-21-9	Aroclor 1242	ND	1000	ug/kg
12672-29-6	Aroclor 1248	ND	1000	ug/kg
11097-69-1	Aroclor 1254	ND	1000	ug/kg
11096-82-5	Aroclor 1260	ND	1000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	29%	10%-103%	

Report No: E108E18 Sample No: 13 Sample Description: 914110818-PCB-05A

Date Collected: 08/12/2011 10:15 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/12/2011 09:46 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 1.00 Dilution Factor: 2 Extract Volume: 5 Lab Data File: 4090910.D, 4091203.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	10000	ug/kg
11100-14-4	Aroclor 1268	ND	10000	ug/kg
12674-11-2	Aroclor 1016	ND	10000	ug/kg
11104-28-2	Aroclor 1221	ND	10000	ug/kg
11141-16-5	Aroclor 1232	ND	10000	ug/kg
53469-21-9	Aroclor 1242	ND	10000	ug/kg
12672-29-6	Aroclor 1248	ND	10000	ug/kg
11097-69-1	Aroclor 1254	ND	10000	ug/kg
11096-82-5	Aroclor 1260	ND	10000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	33%	10%-103%	
Decachlorobipheny	yl	10%	10%-142%	

Report No: E108E18 Sample No: 14 Sample Description: 914110818-PCB-05B

Date Collected: 08/12/2011 10:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/23/2011 11:30 By: DPR Date Analyzed: 09/09/2011 15:10 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 10 Extract Volume: 2 Lab Data File: 4090911.D QC Batch#: 88323

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	10000	ug/kg
11100-14-4	Aroclor 1268	ND	10000	ug/kg
12674-11-2	Aroclor 1016	ND	10000	ug/kg
11104-28-2	Aroclor 1221	ND	10000	ug/kg
11141-16-5	Aroclor 1232	ND	10000	ug/kg
53469-21-9	Aroclor 1242	ND	10000	ug/kg
12672-29-6	Aroclor 1248	ND	10000	ug/kg
11097-69-1	Aroclor 1254	ND	10000	ug/kg
11096-82-5	Aroclor 1260	ND	10000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0%	10%-103%	
Decachlorobipheny	<i>i</i> l	0%	10%-142%	

Report No: E108E18 Sample No: 15 Sample Description: 914110818-PCB-05C

Date Collected: 08/12/2011 10:40 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 10:17 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

5.4%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 10 Lab Data File: 4091204.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	22%	10%-103%	

Report No: E108E18 Sample No: 16 Sample Description: 914110818-PCB-06A

Date Collected: 08/12/2011 13:00 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 10:47 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

27%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091205.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	78%	10%-103%	, D

Tetrachloro-m-xylene Decachlorobiphenyl 10%-103% 10%-142%

Report No: E108E18 Sample No: 17 Sample Description: 914110818-PCB-06B

Date Collected: 08/12/2011 13:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 11:13 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

30%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091206.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		86%	10%-103%	

Tetrachloro-m-xylene Decachlorobiphenyl

Report No: E108E18 Sample No: 18 Sample Description: 914110818-PCB-07A

Date Collected: 08/18/2011 12:00 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 11:39 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

30%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091207.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		74%	10%-103%	

Report No: E108E18 Sample No: 19 Sample Description: 914110818-PCB-07B

Date Collected: 08/18/2011 12:07 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 12:06 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

36%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091208.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		66%	10%-103%	

Report No: E108E18 Sample No: 20 Sample Description: 914110818-PCB-07C

Date Collected: 08/18/2011 12:10 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 12:32 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

19%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091209.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	5000	ug/kg
11100-14-4	Aroclor 1268	ND	5000	ug/kg
12674-11-2	Aroclor 1016	ND	5000	ug/kg
11104-28-2	Aroclor 1221	ND	5000	ug/kg
11141-16-5	Aroclor 1232	ND	5000	ug/kg
53469-21-9	Aroclor 1242	ND	5000	ug/kg
12672-29-6	Aroclor 1248	ND	5000	ug/kg
11097-69-1	Aroclor 1254	ND	5000	ug/kg
11096-82-5	Aroclor 1260	ND	5000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		76%	10%-103%	

Report No: E108E18 Sample No: 21 Sample Description: 914110818-PCB-08A

Date Collected: 08/18/2011 12:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/24/2011 11:30 By: DPR Date Analyzed: 09/12/2011 12:59 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091210.D QC Batch#: 88407

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1000	ug/kg
11100-14-4	Aroclor 1268	ND	1000	ug/kg
12674-11-2	Aroclor 1016	ND	1000	ug/kg
11104-28-2	Aroclor 1221	ND	1000	ug/kg
11141-16-5	Aroclor 1232	ND	1000	ug/kg
53469-21-9	Aroclor 1242	ND	1000	ug/kg
12672-29-6	Aroclor 1248	ND	1000	ug/kg
11097-69-1	Aroclor 1254	ND	1000	ug/kg
11096-82-5	Aroclor 1260	ND	1000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		50%	10%-103%	
Decachlorobiphenyl		33%	10%-142%	

Report No: E108E18 Sample No: 22 Sample Description: 914110818-PCB-08B

Date Collected: 08/18/2011 12:35 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/12/2011 14:00 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

31%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091212.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		58%	10%-103%	

Report No: E108E18 Sample No: 23 Sample Description: 914110818-PCB-08C

Date Collected: 08/18/2011 12:40 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/12/2011 14:26 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

30%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091213.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		72%	10%-103%	

Tetrachloro-m-xylene Decachlorobiphenyl

10%-142%

Report No: E108E18 Sample No: 24 Sample Description: 914110818-PCB-09A

Date Collected: 08/18/2011 12:50 Date Received: 08/19/2011 15:46 Date Extracted: 08/25/2011 11:00 By: AJM Date Analyzed: 09/12/2011 14:53 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091214.D QC Batch#: 88381

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1000	ug/kg
11100-14-4	Aroclor 1268	ND	1000	ug/kg
12674-11-2	Aroclor 1016	ND	1000	ug/kg
11104-28-2	Aroclor 1221	ND	1000	ug/kg
11141-16-5	Aroclor 1232	ND	1000	ug/kg
53469-21-9	Aroclor 1242	ND	1000	ug/kg
12672-29-6	Aroclor 1248	ND	1000	ug/kg
11097-69-1	Aroclor 1254	ND	1000	ug/kg
11096-82-5	Aroclor 1260	ND	1000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xylene		69%	10%-103%	
Decachlorobiphenyl		22%	10%-142%	

Report No: E108E18 Sample No: 25 Sample Description: 914110818-PCB-09B

Date Collected: 08/18/2011 12:58 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/13/2011 11:56 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091306.D, 4091408.D QC Batch#: 88465

54%

10%-142%

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	4200	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	37%	10%-103%	

Report No: E108E18 Sample No: 26 Sample Description: 914110818-PCB-09C

Date Collected: 08/18/2011 13:10 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/13/2011 12:22 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

27%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.02 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091307.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	3500	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	54%	10%-103%)

Report No: E108E18 Sample No: 27 Sample Description: 914110818-PCB-10A

Date Collected: 08/18/2011 13:20 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/15/2011 10:54 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

0%

10%-142%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.09 Dilution Factor: 20 Extract Volume: 2 Lab Data File: 4091503.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	3800	ug/kg
11100-14-4	Aroclor 1268	ND	3800	ug/kg
12674-11-2	Aroclor 1016	ND	3800	ug/kg
11104-28-2	Aroclor 1221	ND	3800	ug/kg
11141-16-5	Aroclor 1232	ND	3800	ug/kg
53469-21-9	Aroclor 1242	ND	3800	ug/kg
12672-29-6	Aroclor 1248	ND	3800	ug/kg
11097-69-1	Aroclor 1254	ND	3800	ug/kg
11096-82-5	Aroclor 1260	ND	3800	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	

Report No: E108E18 Sample No: 28 Sample Description: 914110818-PCB-10B

Date Collected: 08/18/2011 13:25 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/15/2011 11:40 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.12 Dilution Factor: 10 Extract Volume: 2 Lab Data File: 4091504.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	1900	ug/kg
11100-14-4	Aroclor 1268	ND	1900	ug/kg
12674-11-2	Aroclor 1016	ND	1900	ug/kg
11104-28-2	Aroclor 1221	ND	1900	ug/kg
11141-16-5	Aroclor 1232	ND	1900	ug/kg
53469-21-9	Aroclor 1242	ND	1900	ug/kg
12672-29-6	Aroclor 1248	ND	1900	ug/kg
11097-69-1	Aroclor 1254	ND	1900	ug/kg
11096-82-5	Aroclor 1260	ND	1900	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	
Decachlorobiphen	yl	0%	10%-142%	

Report No: E108E18 Sample No: 29 Sample Description: 914110818-PCB-10C

Date Collected: 08/18/2011 13:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/15/2011 12:06 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

0%

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.05 Dilution Factor: 20 Extract Volume: 2 Lab Data File: 4091505.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	9800	ug/kg
11100-14-4	Aroclor 1268	ND	9800	ug/kg
12674-11-2	Aroclor 1016	ND	9800	ug/kg
11104-28-2	Aroclor 1221	ND	9800	ug/kg
11141-16-5	Aroclor 1232	ND	9800	ug/kg
53469-21-9	Aroclor 1242	ND	9800	ug/kg
12672-29-6	Aroclor 1248	ND	9800	ug/kg
11097-69-1	Aroclor 1254	ND	9800	ug/kg
11096-82-5	Aroclor 1260	ND	9800	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	

Decachlorobiphenyl

10%-142%

Report No: E108E18 Sample No: 30 Sample Description: 914110818-PCB-11A

Date Collected: 08/18/2011 14:00 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/15/2011 12:33 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.16 Dilution Factor: 10 Extract Volume: 2 Lab Data File: 4091506.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	4600	ug/kg
11100-14-4	Aroclor 1268	ND	4600	ug/kg
12674-11-2	Aroclor 1016	ND	4600	ug/kg
11104-28-2	Aroclor 1221	ND	4600	ug/kg
11141-16-5	Aroclor 1232	ND	4600	ug/kg
53469-21-9	Aroclor 1242	ND	4600	ug/kg
12672-29-6	Aroclor 1248	ND	4600 4600	ug/kg
11097-69-1	Aroclor 1254	ND		ug/kg
11096-82-5	Aroclor 1260	ND	4600	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	
Decachlorobipheny	/l	0.00%	10%-142%	

Report No: E108E18 Sample No: 31 Sample Description: 914110818-PCB-11B

Date Collected: 08/18/2011 14:20 Date Received: 08/19/2011 15:46 Date Extracted: 08/29/2011 13:00 By: NSO Date Analyzed: 09/15/2011 13:26 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.12 Dilution Factor: 20 Extract Volume: 2 Lab Data File: 4091508.D QC Batch#: 88465

CAS No.	Parameter	Result	DL	Units	
37324-23-5	Aroclor 1262	ND	3800	ug/kg	
11100-14-4	Aroclor 1268	ND	3800	ug/kg	
12674-11-2	Aroclor 1016	ND	3800	ug/kg	
11104-28-2	Aroclor 1221	ND	3800	ug/kg	
11141-16-5	Aroclor 1232	ND	3800	ug/kg	
53469-21-9	Aroclor 1242	ND	3800	ug/kg	
12672-29-6	Aroclor 1248	ND	3800	ug/kg	
11097-69-1	Aroclor 1254	ND	3800	ug/kg	
11096-82-5	Aroclor 1260	ND	3800	ug/kg	
Sample QC					
Surrogate		Recovery	QC Limits		
Tetrachloro-m-xyle	ene	0%	10%-103%		
Decachlorobiphen		0%	10%-142%		

Report No: E108E18 Sample No: 32 Sample Description: 914110818-PCB-11C

Date Collected: 08/18/2011 14:35 Date Received: 08/19/2011 15:46 Date Extracted: 08/30/2011 10:30 By: DPR Date Analyzed: 09/15/2011 13:52 By: MRB Preparation Method: 3540 Analytical Method: 8082

Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 20 Extract Volume: 2 Lab Data File: 4091509.D QC Batch#: 88482

CAS No.	Parameter	Result	DL	Units	
37324-23-5	Aroclor 1262	ND	10000	ug/kg	
11100-14-4	Aroclor 1268	ND	10000	ug/kg	
12674-11-2	Aroclor 1016	ND	10000	ug/kg	
11104-28-2	Aroclor 1221	ND	10000	ug/kg	
11141-16-5	Aroclor 1232	ND	10000	ug/kg	
53469-21-9	Aroclor 1242	ND	10000	ug/kg	
12672-29-6	Aroclor 1248	ND	10000	ug/kg	
11097-69-1	Aroclor 1254	ND	10000	ug/kg	
11096-82-5	Aroclor 1260	ND	10000	ug/kg	
Sample QC					
Surrogate		Recovery	QC Limits		
Tetrachloro-m-xyle	ene	0.00%	10%-103%		
Decachlorobiphen	yl	0%	10%-142%		

Report No: E108E18 Sample No: 33 Sample Description: 914110818-PCB-12

Date Collected: 08/18/2011 15:30 Date Received: 08/19/2011 15:46 Date Extracted: 08/30/2011 10:30 By: DPR Date Analyzed: 09/14/2011 13:51 By: MRB Preparation Method: 3540 Analytical Method: 8082 Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 1 Extract Volume: 2 Lab Data File: 4091408.D QC Batch#: 88482

CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	200	ug/kg
11100-14-4	Aroclor 1268	ND	200	ug/kg
12674-11-2	Aroclor 1016	ND	200	ug/kg
11104-28-2	Aroclor 1221	ND	200	ug/kg
11141-16-5	Aroclor 1232	ND	200	ug/kg
53469-21-9	Aroclor 1242	ND	200	ug/kg
12672-29-6	Aroclor 1248	ND	200	ug/kg
11097-69-1	Aroclor 1254	ND	200	ug/kg
11096-82-5	Aroclor 1260	ND	200	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	

Surrogate	Recovery	QC Limits	
Tetrachloro-m-xylene Decachlorobiphenyl	78% 107%	10%-103% 10%-142%	

Report No: E108E18 Sample No: 34 Sample Description: 914110818-PCB-13

Date Collected: 08/18/2011 15:31 Date Received: 08/19/2011 15:46 Date Extracted: 08/30/2011 10:30 By: DPR Date Analyzed: 09/15/2011 14:19 By: MRB Preparation Method: 3540 Analytical Method: 8082

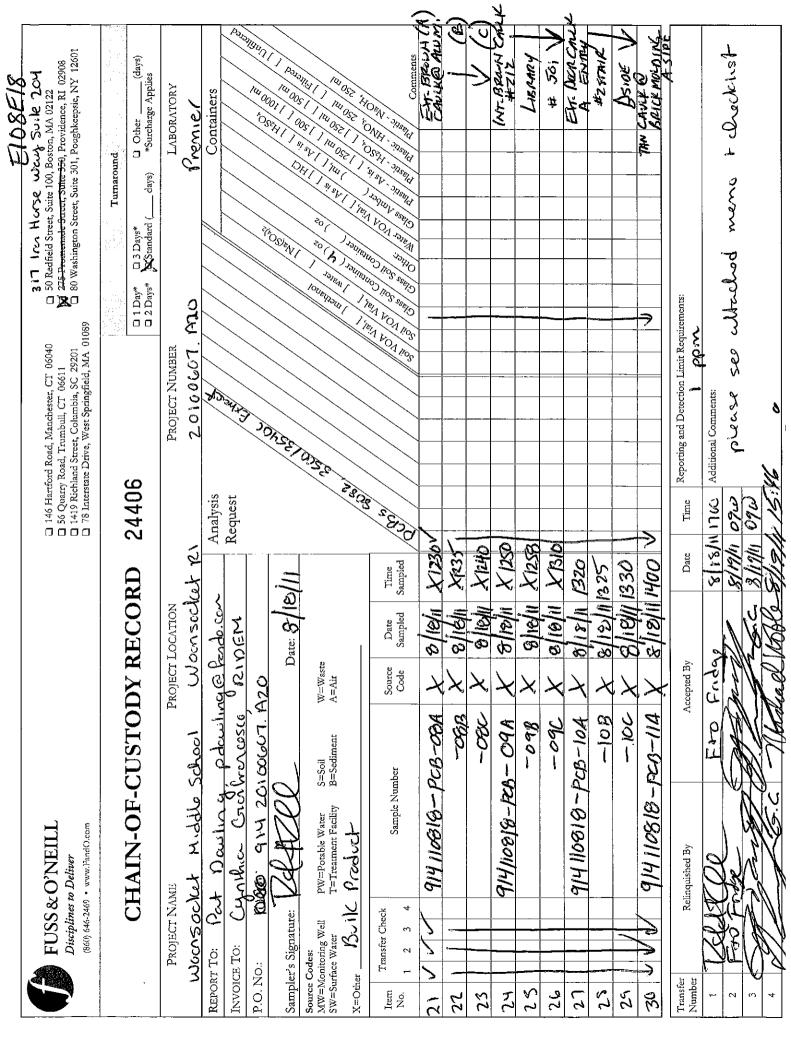
Customer: Fuss & O'Neill Project: 20100607.A20/ Former Middle School

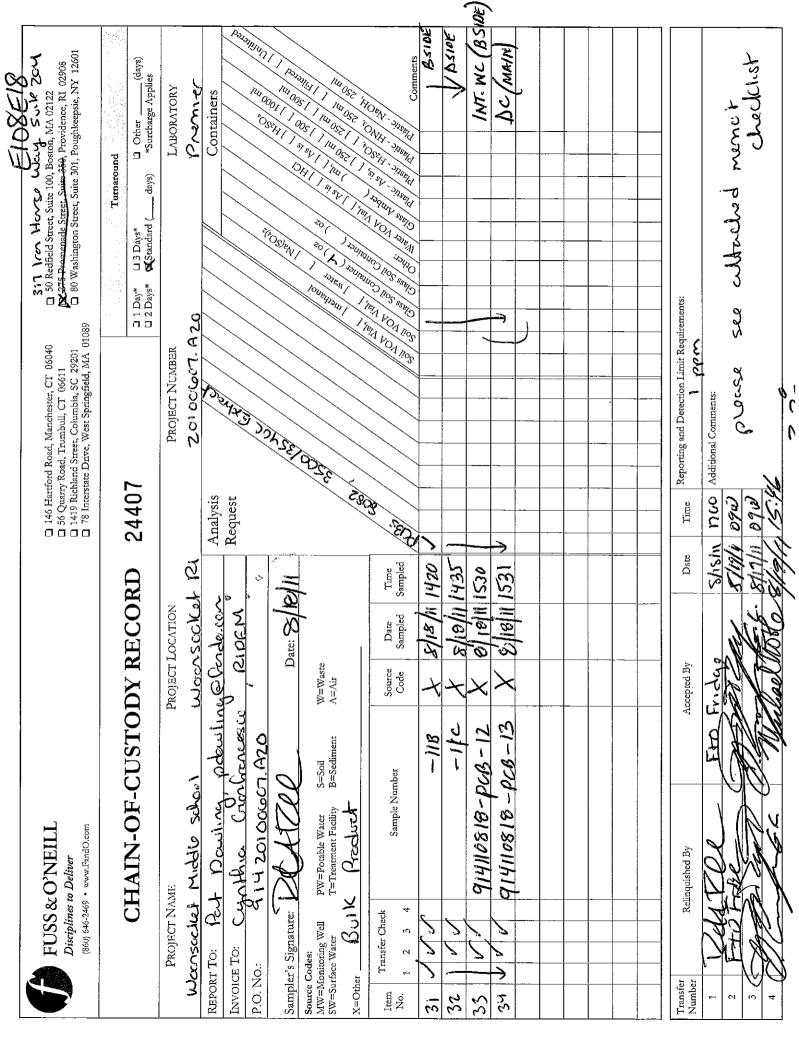
Matrix: Other Percent Moisture: N/A Sample Weight/Volume: 2.00 Dilution Factor: 50 Extract Volume: 2 Lab Data File: 4091510.D QC Batch#: 88482

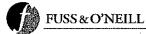
CAS No.	Parameter	Result	DL	Units
37324-23-5	Aroclor 1262	ND	10000	ug/kg
11100-14-4	Aroclor 1268	ND	10000	ug/kg
12674-11-2	Aroclor 1016	ND	10000	ug/kg
11104-28-2	Aroclor 1221	ND	10000	ug/kg
11141-16-5	Aroclor 1232	ND	10000	ug/kg
53469-21-9	Aroclor 1242	ND	10000	ug/kg
12672-29-6	Aroclor 1248	ND	10000	ug/kg
11097-69-1	Aroclor 1254	ND	10000	ug/kg
11096-82-5	Aroclor 1260	ND	10000	ug/kg
Sample QC				
Surrogate		Recovery	QC Limits	
Tetrachloro-m-xyle	ene	0.00%	10%-103%	
Decachlorobiphen		0%	10%-142%	

317 1 row Horse Willy Suile 264 50 Redfield Street, Suite 100, Boston, MA 02122 275 Promende Street, Suite 301, Poughkeepsie, NY 12601 280 Washington Street, Suite 301, Poughkeepsie, NY 12601	Turmaround Cuther (days) days) *Surcharge Applies	LABORATORY Premiel	Containers	100 100 100 100 100 100 100 100 100 100	1 2 2 0 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A DE	OLD GYM Poiry Froop		OLDGYM		>	OUD GYM MARTCEH CONC		BLACK MATTIC		menco t checklist		
	D 1 Days B Standard (PROJECT NUMBER				10/0)	Reporting and Detection Limit Requirements: ppm	see attached	0	3.20
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	CHAIN-OF-CUSTODY RECO	Middle Sheril Warsod	A francesce		S=Soil W=Waste B=Sediment A=Air	Sample Number Code Sampled	914110618-PCB-014 X B/12/	λ	PR-52 V 8/12/	-028 X 8/12/	-oze X Blill	-034 X	-03B X Stati	-04A X 8/12	Accepted By	Fro Frider	C Marinal 100	·A· A· ·······························
FUSS & O'NEILL Disciplines to Deliver (860) 646-2469 • www.FandO.com	CHAIN-OF	PROJECT NAME WECNSOCICE Middle	<u>_</u>	Signature:	Source Codes: MW=Monitoring Well PW=Potable Water SW=Surface Water T=Treatment Facility X=Other Butth Propurt	Transfer Check 2 3 4) J N g/4/10618	2	3 1 011110018-		9	ELA-BIBOILITY	2 2	00 V V 914110810-20	Transfer Number	1 TUNTOL	3 Can 2 2 2 2 2 2 2	

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 146 Hartford Road, Manchester, CT 06040 56 Quarry Road, Trumbull, CT 06611 1419 Richland Street, Columbia, SC 29201 78 Interstate Drive, West Springfield, MA 01089 	0 24	2	Anal	ASE DESE	ne iled eSt			2	Q.	0		2	Date Time Reporting at	8/18/11 1700 Additional Comments: 6/17/49 0713 P. Cocce 8/19/11 050	194 1546	N N
	DY RECORI	PROJECT LOCATION	RIDI	Date: S/IS/I W=Waste A=Air	Source Date Time Code Sampled Sampled	X Statu age	Illalla X	X Blight	X 8/12/11 1040 X 8/12/11 1300	$X e \int a hall h$	X 8/16/11/200 X 8/16/11/207	X Blien	Accepted By	Kridgo 8 2 Eridgo 8	lal Monte 8	`
FUDDO & UNEILL Disciplines to Deliver (861) 646-2469 • www.FandO.com	CHAIN-OF-CUSTODY RECO	MARE 1. A. Michelic Selacal	Deutine Die Credu	PW=Potable Water S=Soil T=Treatment Facility B=Sediment		-04B	914 1108 18 - PCB-05A		-05C	-068	914/10818-PCB-07A	260-	Relinquished By	male Fra	The Cold Muy	•
FU33 (Discipline (861) 646-24	C	PROJECT NAME	REPORT TO: R.J. INVOICE TO: C.J.	Sampler's Signature: Source Codes: MW=Monitoring Well SW=Surface Water	A=Other Item No. 1 2 3 4		13	2	15 16		1	20 J V V	Transfer Number	- 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	4	7







ETOSETS

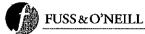
INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECT IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

			<u>YES</u>	<u>NO</u>	COMMENTS
1.		SDG Project Narratives	X		
2.		Traffic Report	Ď		LA-
3.		Volatiles Data			1
	a.	Sample Data			
		Target Compound List (TCL) Results		Ο.	
		Reconstructed total ion chromatograms (RIC) for each same	ple 🗆		
		For each sample:			
		Raw spectra and background-subtracted mass spectra of			1
		target compounds identified			
		Mass spectra of all reported TICs with three best library			
		matches			
		Percent solids calculations		Ο.	
	b.	Standards Data (all instruments) Initial Calibration Data RICs and Quan Reports for all Standards Continuing Calibration RICs and Quan Reports for all Standards Internal Standard Area Summary			
	C.	Raw QC Data			
		Blank Data			
		Matrix Spike Data			
		Matrix Spike Duplicate Data			¥
4.	a.	Semivolatiles Data QC Summary Surrogate Percent Recovery Summary MS/MSD Summary	₩.		MA
		Method Blank Summary	V		-AA-
		Tuning and Mass Calibration	· ~		nA-
		o			

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INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECT IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
b	Sample Data TCL Results	R		
	Tentatively Identified Compounds			MA
	Reconstructed total ion chromatograms (RIC) for each Sample			
	For each sample: Raw spectra and background-subtracted mass			
	spectra of TCL compounds		\Box .	
	Mass spectra of TICs with 3 best library matches			
	GPC chromatograms (if GPC performed)			V
c.				
	Initial Calibration Data	R	\Box .	
	RICs and Quan Reports for all Standards	<u>x</u> x x x	Π.	
	Continuing Calibration	₩.	Π.	
	RICs and Quan Reports for all Standards		Ο.	
	Internal Standard Areas Summary		Π.	
	Internal Standard Areas Summary			MHY
d				nA
	Decafluorotripbenylphosphine (DFTPP)			nA
	Blank Data	X		
	Matrix Spike Data			<u> </u>
	Matrix Spike Duplicate Data			NH
5.	Miscellaneous Data Original preparation and analysis forms or copies of prepara and analysis log book pages	tion		
	Internal sample & sample extract transfer chain-of custody	Ľ,	ш.	
	records			1A
	Screening Records			XA
	All instrument output, including strip charts from screening	Ø.		
	activities (describe or list)	κ,	— .	

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6.

INITIAL DATE: JULY 2007 REVISION DATE: JULY 2007 REVISION: 0.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECT IN RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
	1-of-Custody Records le Log-in Sheet (Lab & DC1)	K L		
	Illaneous Shipping/Receiving Records (describe or list)			
7.	Internal I al Comple Transfer Dara de and Transla			
<i>1</i> .	Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)			
8.	Other Records (describe or list)			
9.	Comments:			

** See laboratory Quality Assurance Plan for limits.

MOX Completed by: (Lab) (Printed Name/Title) (Signature)

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified (by (Printed Name/Title (Lab) (Signature



Modified Tier II Data Validation Narrative

Project: 20100607.A20 Site Investigation/Targeted Brownfields Assessment Former Woonsocket Middle School

ESS Laboratory Project Number:	1206255
Date Samples Received at Laboratory:	June 14, 2012
Date of Review:	November 5, 2012

Sixteen building materials samples, including two duplicate samples, were collected and submitted to ESS Laboratory (ESS) for analysis of polychlorinated biphenyls (PCBs) by United States Environmental Protection Agency (USEPA) Method 8082, with extraction via Soxhlet Method 3540.

A non-dedicated chisel was utilized to sample some of the PCB bulk material samples collected in June 2012, necessitating the collection and analysis of one equipment blank. The chisel was decontaminated with hexane following collection of each sample, in accordance with Fuss & O'Neill Standard Operating Procedures. At the end of the sampling event, a wipe sample was then collected from the chisel as an equipment blank. No PCBs were detected in the equipment blank at concentrations exceeding laboratory reporting limits. Samples were analyzed within the method-specific holding times.

The case narrative included in the analytical report documented non-conformances associated with recovery of surrogate compounds utilized during the analyses. Recovery of one or more surrogates was outside the laboratory-specified quality control range for five samples. For three of these samples, surrogate recoveries were above quality control range, suggesting potential high bias for the corresponding analytical data. PCBs were detected in two of these three samples at concentrations exceeding laboratory reporting limits. However, any potential high bias did not affect the usability of the data because PCBs were detected in the affected samples and additional samples of similar material at concentrations within the regulatory range discussed below. For the remaining two samples, surrogate recoveries were below quality control range, suggesting potential low bias for the corresponding analytical data. No PCBs were reportedly detected in these samples at concentrations exceeding laboratory reporting limits. Therefore, potential low bias is not anticipated to affect the usability of the data. No other non-conformances were noted in this analytical report.

As noted previously, two duplicate samples were collected and analyzed as part of this sample group. PCBs were not detected at concentrations above laboratory reporting limits in either the primary or the duplicate sample for one of the pairings (Samples # 914120611-05B and -06); therefore the relative percent difference (RPD) was not calculated. For the second primary/duplicate pair (Samples # 914120611-01B and -02) the calculated RPD was 20%, which was within an acceptable range.

Analytical results for the building materials samples were compared to regulatory limits established by USEPA under the Toxic Substances Control Act (TSCA). These limits included the regulated limit of 50 parts per million (ppm) and the potentially-regulated limit of 1 ppm. All laboratory reporting limits were low enough to allow direct comparison to these limits.



FUSS&O'NEILL

14

INITIAL DATE: OCTOBER 2011 **REVISION DATE: FEBRUARY 2012 REVISION: 1.0**

1206255

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND MODIFIED TIER I COMPLETENESS CHECKLIST

	<u>YES</u>	NO
1. SAMPLING AND FIELD MEASUREMENTS:		
Field measurement calibration records		DNIA
Groundwater field measurements (if applicable)		.□ \
Soil sampling field measurements (if applicable)		
Sediment sampling field measurements (if applicable)		
Surface water sampling field measurements (if applicable)		
Low-flow sampling field measurements (if applicable)		
Documentation of field activities	X	
Sample numbering and labeling	X	
Chain-of-Custody records	DXI	
Trip blanks		DNIA
Duplicate samples	V	
Equipment blanks	文	
Split samples (if any)		0 NIA
2. LABORATORY MEASUREMENTS:		
Trip blanks		AIU D
Instrument blanks	jox.	
Laboratory control samples	DX.	
Duplicates samples	DX.	
Equipment blanks	DK.	
Matrix spike/matrix spike duplicates		AIN D
Analysis type	X	
Chain-of-Custody records	N	
Surrogate recoveries	- 🕅	
Sample Project Narratives	VX	
Split samples (if any)		ONIA
TOTAL: 13		

PERCENT COMPLETE: _____%



INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

	YES	NO	COMMENTS
1. SAMPLING AND FIELD MEASUREMENTS:			
Field measurement calibration records			- /15
pH - \pm 0.3 pH units			NA
S.C \pm 5% of calibration solution, within?			1
calibration range			
Temperature - ± 0.5 °C			
D.O \pm 5% of calibration solution			
Groundwater field measurements (if applicable)		1000	
Water depth measured to within 0.01 ft.?			
Soil sampling field measurements (if applicable)			
OVM - ±2 ppm			
$OVA - \pm 2 ppm$			
Sediment sampling field measurements (if applicable)			
Descriptive information recorded?			
Surface water sampling field measurements (if applicable)			
Water depth measured to within 0.01 ft.?			
Low-flow sampling field measurements (if applicable)			
S.C ± 10%			
pH - \pm 0.2 pH units			
Temperature - \pm 10%	П		
Turbidity - ± 5 NTU			
Documentation of field activities		Land	and a second sec
Site-specific information documented in field notebook?	X		
Field data sheets completed?	X	П	
Sample numbering and labeling	r d		
Sample numbering conforms to sample I.D. system			
identified in QAPP?	K		
Chain-of-Custody records			
Chain-of-Custody forms completed?	X		



FUSS&O'NEILL

INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND FUSS & O'NEILL MODIFIED TIER II DATA VALIDATION CHECKLIST (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMITS?

Trip blanks N/A Trip blanks submitted, one per day? Image: N/A Any compounds detected in trip blanks? Image: N/A Duplicate samples Image: N/A Field duplicates performed, 1/20 samples? Image: N/A Duplicates performed on 10% of samples screened Image: N/A for explosives? Image: N/A Is percent difference within 30% for all field parameters? Image: N/A	
Any compounds detected in trip blanks?	
Duplicate samples Field duplicates performed, 1/20 samples? Duplicates performed on 10% of samples screened for explosives?	
Field duplicates performed, 1/20 samples? Image: Comparison of the samples is created for explosives? Image: Comparison of the samples is created for explosives? Image: Comparison of the samples is created for explosives?	
Duplicates performed on 10% of samples screened for explosives?	
for explosives?	
Is percent difference within 30% for all field parameters?	
Equipment blanks	
Equipment blanks submitted, one per sampling day?	
Any compounds detected in equipment blank?	
Split samples (if any) Split samples collected?	
Split samples collected? Image: Collected in the system of the syste	
Is percent difference within 50% for split samples:	
2. LABORATORY MEASUREMENTS:	
Trip blanks	
Trip blanks submitted, one per day?	
Any compounds detected in trip blanks? \Box \Box \Box	
Instrument blanks ^{**}	
Laboratory control samples**	
Duplicates samples**	
Equipment blanks**	
Matrix spike/matrix spike duplicates**	
Analysis type 🛛 🖾	
Chain-of-Custody records	
Surrogate recoveries**	as
Sample Project Narratives	
Split samples (if any)**	
Most recent EPA WP-PE sample results**	

 $\label{eq:product} F: \end{tabular} ADEA&R \end{tabular} Basedocs \end{tabular} Rev-1 \end{tabular} Appendix-1-Completeness-Checklist.doc \end{tabular} Appendix-1-Completen$



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Pat Dowling Fuss & O'Neill, Inc. 317 Iron Horse Way, Suite 204 Providence, RI 02908

RE: Former Woonsocket Middle School (20100607.A20) ESS Laboratory Work Order Number: 1206255

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard Laboratory Director

Analytical Summary



The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

ESS Laboratory certifies that the test results meet the requirements of NELAC and A2LA, except where noted within this project narrative.



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

SAMPLE RECEIPT

The following samples were received on June 14, 2012 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	SampleName	Matrix	Analysis
1206255-01	914120611-01A	Solid	8082
1206255-02	914120611-01B	Solid	8082
1206255-03	914120611-01C	Solid	8082
1206255-04	914120611-02	Solid	8082
1206255-05	914120611-03a	Solid	8082
1206255-06	914120611-03b	Solid	8082
1206255-07	914120611-04a	Solid	8082
1206255-08	914120611-04b	Solid	8082
1206255-09	914120611-05a	Solid	8082
1206255-10	914120611-05b	Solid	8082
1206255-11	914120611-06	Solid	8082
1206255-12	914120611-07a	Solid	8082
1206255-13	914120611-07b	Solid	8082
1206255-14	914120611-08a	Solid	8082
1206255-15	914120611-08b	Solid	8082
1206255-16	914120611-09	Wipe	8082



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

PROJECT NARRATIVE

8082 Polychlorinated Biphenyls (PCB)

Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
Decachlorobiphenyl (25% @ 30-150%), Tetrachloro-m-xylene (22% @ 30-150%)
Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
Decachlorobiphenyl (27% @ 30-150%), Tetrachloro-m-xylene (21% @ 30-150%)
Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
Tetrachloro-m-xylene (276% @ 30-150%)
Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
Tetrachloro-m-xylene (327% @ 30-150%)
Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
Tetrachloro-m-xylene (243% @ 30-150%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-01A Date Sampled: 06/11/12 11:30 Percent Solids: N/A Initial Volume: 10 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-01 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

<u>Analyte</u> Aroclor 1016	<u>Results (MRL)</u> ND (0.100)			<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/18/12 12:10	<u>Sequence</u>	<u>Batch</u> CF21526
Aroclor 1221	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1232	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1242	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1248	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1254	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1260	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1262	ND (0.100)				1	06/18/12 12:10		CF21526
Aroclor 1268	ND (0.100)				1	06/18/12 12:10		CF21526
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		63 %		30-150				

Surrogate: Decachlorobiphenyl	63 %	30-150
Surrogate: Decachlorobiphenyl [2C]	68 %	30-150
Surrogate: Tetrachloro-m-xylene	76 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	86 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-01B Date Sampled: 06/11/12 10:30 Percent Solids: N/A Initial Volume: 10 Final Volume: 10 Extraction Method: 3540

Surrogate: Tetrachloro-m-xylene

Surrogate: Tetrachloro-m-xylene [2C]

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-02 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u> Aroclor 1016	<u>Results (MRI</u> ND (0.100)	<u>.)</u>		<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/18/12 12:28	<u>Sequence</u>	<u>Batch</u> CF21526
Aroclor 1221	ND (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1232	ND (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1242	0.257 (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1248	ND (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1254	0.118 (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1260	ND (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1262	ND (0.100)				1	06/18/12 12:28		CF21526
Aroclor 1268	ND (0.100)				1	06/18/12 12:28		CF21526
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		55 %		30-150				
Surrogate: Decachlorobiphenyl [2C]		60 %		30-150				

30-150

30-150

65 %

70 %



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-01C Date Sampled: 06/11/12 09:45 Percent Solids: N/A Initial Volume: 10 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-03 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

<u>Analyte</u> Aroclor 1016	<u>Results (MRL)</u> ND (0.100)		<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/18/12 12:47	<u>Sequence</u>	<u>Batch</u> CF21526
Aroclor 1221	ND (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1232	ND (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1242	1.35 (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1248	ND (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1254	0.446 (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1260	ND (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1262	ND (0.100)			1	06/18/12 12:47		CF21526
Aroclor 1268	ND (0.100)			1	06/18/12 12:47		CF21526
	%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl	74 %		30-150				

Surrogate: Decachlorobiphenyl	74 %	30-150
Surrogate: Decachlorobiphenyl [2C]	83 %	30-150
Surrogate: Tetrachloro-m-xylene	69 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	83 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-02 Date Sampled: 06/11/12 10:40 Percent Solids: N/A Initial Volume: 10.1 Final Volume: 10 Extraction Method: 3540

Surrogate: Tetrachloro-m-xylene [2C]

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-04 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u> Aroclor 1016	<u>Results (MRL</u> ND (0.0990))		<u>Limit</u>	<u>DF</u>	Analyzed 06/18/12 13:06	<u>Sequence</u>	<u>Batch</u> CF21526
Aroclor 1221	ND (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1232	ND (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1242	0.293 (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1248	ND (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1254	0.167 (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1260	ND (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1262	ND (0.0990)				1	06/18/12 13:06		CF21526
Aroclor 1268	ND (0.0990)				1	06/18/12 13:06		CF21526
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		57 %		30-150				
Surrogate: Decachlorobiphenyl [2C]		65 %		30-150				
Surrogate: Tetrachloro-m-xylene		63 %		30-150				

68 %

30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-03a Date Sampled: 06/11/12 11:00 Percent Solids: N/A Initial Volume: 2.65 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-05 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

Analyte	Results (MRL	<u>)</u>		<u>Limit</u>	DF	Analyzed	<u>Sequence</u>	Batch
Aroclor 1016	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1221	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1232	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1242	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1248	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1254	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1260	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1262	ND (0.377)				1	06/25/12 14:04		CF22119
Aroclor 1268	ND (0.377)				1	06/25/12 14:04		CF22119
		%Recovery	Qualifier	Limits				
Commenter Desertionshiphers d			614					

Surrogate: Decachlorobiphenyl	25 %	SM	30-150
Surrogate: Decachlorobiphenyl [2C]	33 %		30-150
Surrogate: Tetrachloro-m-xylene	22 %	SM	30-150
Surrogate: Tetrachloro-m-xylene [2C]	32 %		30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-03b Date Sampled: 06/11/12 11:10 Percent Solids: N/A Initial Volume: 2.5 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-06 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

Analyte	<u>Results (MRL)</u>	<u>Limit</u>	<u>DF</u>	Analyzed	<u>Sequence</u>	<u>Batch</u>
Aroclor 1016	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1221	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1232	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1242	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1248	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1254	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1260	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1262	ND (0.400)		1	06/25/12 14:23		CF22119
Aroclor 1268	ND (0.400)		1	06/25/12 14:23		CF22119
	%Recovery Qualifier	Limits				

Surrogate: Decachlorobiphenyl	27 %	SM	30-150
Surrogate: Decachlorobiphenyl [2C]	33 %		30-150
Surrogate: Tetrachloro-m-xylene	21 %	SM	30-150
Surrogate: Tetrachloro-m-xylene [2C]	33 %		30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-04a Date Sampled: 06/11/12 11:20 Percent Solids: N/A Initial Volume: 5 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-07 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

Analyte	Results (MRL)			Limit	$\frac{\mathbf{DF}}{\mathbf{I}}$	Analyzed	<u>Sequence</u>	Batch
Aroclor 1016	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1221	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1232	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1242	3.61 (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1248	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1254	1.60 (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1260	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1262	ND (0.200)				1	06/18/12 14:02		CF21526
Aroclor 1268	ND (0.200)				1	06/18/12 14:02		CF21526
	%Re	ecovery	Qualifier	Limits				

Surrogate: Decachlorobiphenyl	35 %	30-150
Surrogate: Decachlorobiphenyl [2C]	42 %	30-150
Surrogate: Tetrachloro-m-xylene	61 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	57 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-04b Date Sampled: 06/11/12 11:25 Percent Solids: N/A Initial Volume: 5 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-08 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

<u>Analyte</u> Aroclor 1016	<u>Results (MRL)</u> ND (0.200)			<u>Limit</u>	<u>DF</u>	<u>Analyzed</u> 06/18/12 14:21	<u>Sequence</u>	Batch CF21526
Aroclor 1221	ND (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1232	ND (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1242	2.27 (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1248	ND (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1254	1.03 (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1260	ND (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1262	ND (0.200)				1	06/18/12 14:21		CF21526
Aroclor 1268	ND (0.200)				1	06/18/12 14:21		CF21526
	%	6Recovery	Qualifier	Limits				

Surrogate: Decachlorobiphenyl	38 %	30-150
Surrogate: Decachlorobiphenyl [2C]	45 %	30-150
Surrogate: Tetrachloro-m-xylene	71 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	77 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-05a Date Sampled: 06/11/12 11:45 Percent Solids: N/A Initial Volume: 2.04 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-09 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

Analyte	Results (MRL	<u>)</u>		<u>Limit</u>	<u>DF</u>	Analyzed	<u>Sequence</u>	Batch
Aroclor 1016	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1221	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1232	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1242	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1248	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1254	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1260	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1262	ND (0.490)				1	06/25/12 14:42		CF22119
Aroclor 1268	ND (0.490)				1	06/25/12 14:42		CF22119
		%Recovery	Qualifier	Limits				

Surrogate: Decachlorobiphenyl	42 %	30-150
Surrogate: Decachlorobiphenyl [2C]	65 %	30-150
Surrogate: Tetrachloro-m-xylene	110 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	61 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-05b Date Sampled: 06/11/12 12:00 Percent Solids: N/A Initial Volume: 2.02 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-10 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

<u>Analyte</u>	Results (MRL)	Limit	<u>DF</u>	Analyzed	<u>Sequence</u>	Batch
Aroclor 1016	ND (0.495)		I	06/25/12 15:01		CF22119
Aroclor 1221	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1232	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1242	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1248	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1254	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1260	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1262	ND (0.495)		1	06/25/12 15:01		CF22119
Aroclor 1268	ND (0.495)		1	06/25/12 15:01		CF22119
	%Recovery	Qualifier Limits				

Surrogate: Decachlorobiphenyl	42.0/	20 150
5 , ,	43 %	30-150
Surrogate: Decachlorobiphenyl [2C]	68 %	30-150
Surrogate: Tetrachloro-m-xylene	61 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	80 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-06 Date Sampled: 06/11/12 12:15 Percent Solids: N/A Initial Volume: 2.02 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-11 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

Analyte	<u>Results (MRL)</u>	<u>Limit</u> <u>DF</u>	Analyzed	<u>Sequence</u> <u>Batch</u>
Aroclor 1016	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1221	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1232	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1242	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1248	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1254	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1260	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1262	ND (0.495)	1	06/25/12 15:20	CF22119
Aroclor 1268	ND (0.495)	1	06/25/12 15:20	CF22119
	0/ Decever /	Qualificar Limita		

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	44 %		30-150
Surrogate: Decachlorobiphenyl [2C]	69 %		30-150
Surrogate: Tetrachloro-m-xylene	276 %	SM	30-150
Surrogate: Tetrachloro-m-xylene [2C]	104 %		30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-07a Date Sampled: 06/11/12 14:30 Percent Solids: N/A Initial Volume: 2.03 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-12 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

<u>Analyte</u> Aroclor 1016	<u>Results (MRL)</u> ND (0.493)	<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/25/12 17:12	<u>Sequence</u>	Batch CF22119
Aroclor 1221	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1232	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1242	2.06 (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1248	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1254	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1260	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1262	ND (0.493)		1	06/25/12 17:12		CF22119
Aroclor 1268	ND (0.493)		1	06/25/12 17:12		CF22119
	%Recovery	Qualifier Limits				

	%Recovery	Quaimer	LIIIIIS
Surrogate: Decachlorobiphenyl	38 %		30-150
Surrogate: Decachlorobiphenyl [2C]	58 %		30-150
Surrogate: Tetrachloro-m-xylene	327 %	SM	30-150
Surrogate: Tetrachloro-m-xylene [2C]	77 %		30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-07b Date Sampled: 06/11/12 15:00 Percent Solids: N/A Initial Volume: 2.08 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-13 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/22/12 16:00

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u> Aroclor 1016	<u>Results (MRL)</u> ND (0.481)	<u>Limit</u> <u>DF</u>	<u>Analyzed</u> 06/25/12 18:04	Sequence Batch CF22119
Aroclor 1221	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1232	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1242	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1248	3.82 (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1254	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1260	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1262	ND (0.481)	1	06/25/12 18:04	CF22119
Aroclor 1268	ND (0.481)	1	06/25/12 18:04	CF22119
	%Recovery	Qualifier Limits		

	%Recovery	Quaimer	Liitiits
Surrogate: Decachlorobiphenyl	40 %		30-150
Surrogate: Decachlorobiphenyl [2C]	60 %		30-150
Surrogate: Tetrachloro-m-xylene	243 %	SM	30-150
Surrogate: Tetrachloro-m-xylene [2C]	70 %		30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-08a Date Sampled: 06/11/12 13:30 Percent Solids: N/A Initial Volume: 10.5 Final Volume: 10 Extraction Method: 3540

Surrogate: Tetrachloro-m-xylene

Surrogate: Tetrachloro-m-xylene [2C]

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-14 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

8082 Polychlorinated Biphenyls (PCB)

<u>Analyte</u> Aroclor 1016	<u>Results (MR</u> ND (0.0952)	<u>L)</u>		<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/18/12 16:21	<u>Sequence</u>	<u>Batch</u> CF21526
Aroclor 1221	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1232	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1242	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1248	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1254	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1260	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1262	ND (0.0952)				1	06/18/12 16:21		CF21526
Aroclor 1268	ND (0.0952)				1	06/18/12 16:21		CF21526
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		43 %		30-150				
Surrogate: Decachlorobiphenyl [2C]		46 %		30-150				

30-150

30-150

94 %

81 %



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-08b Date Sampled: 06/11/12 13:45 Percent Solids: N/A Initial Volume: 10.4 Final Volume: 10 Extraction Method: 3540

Surrogate: Tetrachloro-m-xvlene

Surrogate: Tetrachloro-m-xylene [2C]

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-15 Sample Matrix: Solid Units: mg/kg wet Analyst: TAJ Prepared: 6/15/12 17:00

8082 Polychlorinated Biphenyls (PCB)

Analyte	<u>Results (MR</u>	<u>L)</u>		<u>Limit</u>	<u>DF</u>	Analyzed	<u>Sequence</u>	Batch
Aroclor 1016	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1221	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1232	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1242	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1248	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1254	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1260	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1262	ND (0.0962)				1	06/18/12 16:38		CF21526
Aroclor 1268	ND (0.0962)				1	06/18/12 16:38		CF21526
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		41 %		30-150				
Surrogate: Decachlorobiphenyl [2C]		42 %		30-150				

30-150

30-150

59 %

79 %



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School Client Sample ID: 914120611-09 Date Sampled: 06/11/12 15:30 Percent Solids: N/A Initial Volume: 1 Final Volume: 10 Extraction Method: 3540

ESS Laboratory Work Order: 1206255 ESS Laboratory Sample ID: 1206255-16 Sample Matrix: Wipe Units: ug/Wipe Analyst: TAJ Prepared: 6/15/12 17:00

8082 Polychlorinated Biphenyls (PCB)

Analyte Aroclor 1016	<u>Results (MRL)</u> ND (1.0)	<u>)</u>		<u>Limit</u>	<u>DF</u> 1	<u>Analyzed</u> 06/18/12 16:57	<u>Sequence</u>	<u>Batch</u> CF21527
Aroclor 1221	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1232	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1242	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1248	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1254	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1260	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1262	ND (1.0)				1	06/18/12 16:57		CF21527
Aroclor 1268	ND (1.0)				1	06/18/12 16:57		CF21527
		%Recovery	Qualifier	Limits				
Surrogate: Decachlorobiphenyl		48 %		30-150				

Surrogate: Decachlorobiphenyl	48 %	30-150
Surrogate: Decachlorobiphenyl [2C]	52 %	30-150
Surrogate: Tetrachloro-m-xylene	82 %	30-150
Surrogate: Tetrachloro-m-xylene [2C]	90 %	30-150



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc.

Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifie
		8082 Polyc	hlorinated B	iphenyls ((PCB)					
atch CF21526 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
roclor 1232	ND	0.0500	mg/kg wet							
roclor 1242	ND	0.0500	mg/kg wet							
roclor 1248	ND	0.0500	mg/kg wet							
roclor 1254	ND	0.0500	mg/kg wet							
roclor 1260	ND	0.0500	mg/kg wet							
roclor 1262	ND	0.0500	mg/kg wet							
roclor 1268	ND	0.0500	mg/kg wet							
urrogate: Decachlorobiphenyl	0.0169		mg/kg wet	0.02500		67	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.0182		mg/kg wet	0.02500		73	30-150			
Surrogate: Tetrachloro-m-xylene	0.0215		mg/kg wet	0.02500		86	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.0245		mg/kg wet	0.02500		98	30-150			
CS										
roclor 1016	0.516	0.0500	mg/kg wet	0.5000		103	40-140			
roclor 1260	0.442	0.0500	mg/kg wet	0.5000		88	40-140			
	0.1.12			0.0000			10 1 10			
Surrogate: Decachlorobiphenyl	0.0183		mg/kg wet	0.02500		73	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.0200		mg/kg wet	0.02500		80	30-150			
Surrogate: Tetrachloro-m-xylene	0.0241		mg/kg wet	0.02500		96	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.0262		mg/kg wet	0.02500		105	30-150			
CS Dup										
roclor 1016	0.502	0.0500	mg/kg wet	0.5000		100	40-140	3	50	
roclor 1260	0.426	0.0500	mg/kg wet	0.5000		85	40-140	4	50	
Surrogate: Decachlorobiphenyl	0.0175		mg/kg wet	0.02500		70	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.0190		mg/kg wet	0.02500		76	30-150			
Surrogate: Tetrachloro-m-xylene	0.0236		mg/kg wet	0.02500		94	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.0256		mg/kg wet	0.02500		103	30-150			
atch CF21527 - 3540										
lank										
roclor 1016	ND	1.0	ug/Wipe							
roclor 1221	ND	1.0	ug/Wipe							
roclor 1222	ND	1.0	ug/Wipe							
roclor 1242	ND	1.0	ug/Wipe							
roclor 1248	ND	1.0	ug/Wipe							
roclor 1254	ND	1.0	ug/Wipe							
roclor 1260	ND	1.0	ug/Wipe							
roclor 1260	ND	1.0	ug/Wipe							
roclor 1262	ND	1.0	ug/Wipe							
Surrogate: Decachlorobiphenyl	0.337		ug/Wipe	0.5000		67	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.365		ug/Wipe	0.5000		73	30-150			
105 Emanage A	ue Cranston DI 020	10 2211 7	Col. 101 161 71	Q1 E	v: 101 161	1186	http://www	ESSI aba	ratory com	
185 Frances Aven	ue, Cranston, RI 029	10-2211	el: 401-461-71	81 Fa	x: 401-461-	4480	http://www	.ESSLaboi	ratory.com	



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc.

Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifie
		8082 Polyc	hlorinated B	iphenyls	(PCB)					
atch CF21527 - 3540										
Surrogate: Tetrachloro-m-xylene	0.430		ug/Wipe	0.5000		86	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.490		ug/Wipe	0.5000		98	30-150			
LCS										
Aroclor 1016	10.3	1.0	ug/Wipe	10.00		103	40-140			
Aroclor 1260	8.8	1.0	ug/Wipe	10.00		88	40-140			
	0.266		ug/Wipo	0 5000		73	30-150			
Surrogate: Decachlorobiphenyl	0.366		ug/Wipe	0.5000						
Surrogate: Decachlorobiphenyl [2C]	0.399		ug/Wipe	0.5000		<i>80</i>	30-150			
Surrogate: Tetrachloro-m-xylene	<i>0.482</i>		ug/Wipe	0.5000		96 105	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.525		ug/Wipe	0.5000		105	30-150			
LCS Dup										
Aroclor 1016	10.0	1.0	ug/Wipe	10.00		100	40-140	3	50	
Aroclor 1260	8.5	1.0	ug/Wipe	10.00		85	40-140	4	50	
Surrogate: Decachlorobiphenyl	0.351		ug/Wipe	0.5000		70	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.380		ug/Wipe	0.5000		76	30-150			
Surrogate: Tetrachloro-m-xylene	0.472		ug/Wipe	0.5000		94	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.513		ug/Wipe	0.5000		103	30-150			
Batch CF22119 - 3540										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
	0.0176		mg/kg wet	0.02500		70	30-150			
Surrogate: Decachlorobiphenyl	0.0266		mg/kg wet	0.02500		106	30-150 30-150			
Surrogate: Decachlorobiphenyl [2C] Surrogate: Tetrachloro-m-xylene	0.0194		mg/kg wet	0.02500		78	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.0222		mg/kg wet	0.02500		89	<i>30-150</i>			
Aroclor 1016	0.513	0.0500	mg/kg wet	0.5000		103	40-140			
Aroclor 1260	0.504	0.0500	mg/kg wet	0.5000		101	40-140			
Surrogate: Decachlorobiphenyl	0.0182		mg/kg wet	0.02500		73	30-150			
Surrogate: Decachlorobiphenyl Surrogate: Decachlorobiphenyl [2C]	0.0275		mg/kg wet	0.02500		110	30-150			
Surrogate: DecachioroDiphenyi [2C] Surrogate: Tetrachloro-m-xylene	0.0228		mg/kg wet	0.02500		91	30-150 30-150			
Surrogate: Tetrachloro-m-xylene Surrogate: Tetrachloro-m-xylene [2C]	0.0252		mg/kg wet	0.02500		101	30-150			
LCS Dup			5, 5							
Aroclor 1016	0.501	0.0500	mg/kg wet	0.5000		100	40-140	2	50	
	0.301	0.0300	mg/kg wet	0.0000		100	-10-1-10	2	50	
Aroclor 1260	0.506	0.0500	mg/kg wet	0.5000		101	40-140	0.4	50	



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

0.0240

Client Name: Fuss & O'Neill, Inc.

Surrogate: Tetrachloro-m-xylene [2C]

Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

96

30-150

Quality Control Data

Analyte	Result	MRL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
		8082 Polychlorinated	Biphenyls	(PCB)					
Batch CF22119 - 3540									
Surrogate: Decachlorobiphenyl	0.0183	mg/kg wet	0.02500		73	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.0265	mg/kg wet	0.02500		106	30-150			
Surrogate: Tetrachloro-m-xylene	0.0210	mg/kg wet	0.02500		84	30-150			

mg/kg wet

0.02500



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

Notes and Definitions

U	Analyte included in the analysis, but not detected
SM	Surrogate recovery(ies) outside of criteria due to matrix (UCM/coelution/matrix is present) (SM).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report



The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Fuss & O'Neill, Inc. Client Project ID: Former Woonsocket Middle School

ESS Laboratory Work Order: 1206255

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) A2LA Accredited: Testing Cert# 2864.01 http://www.a2la.org/scopepdf/2864-01.pdf

Rhode Island Potable and Non Potable Water: LAI00179 <u>http://www.health.ri.gov/labs/waterlabs-instate.php</u>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750 http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

> Maine Potable and Non Potable Water: R10002 http://www.maine.gov/dep/blwq/topic/vessel/lab_list.pdf

> Massachusetts Potable and Non Potable Water: M-RI002 http://public.dep.state.ma.us/labcert/labcert.aspx

New Hampshire (NELAP accredited) Potable and Non PotableWater, Solid and Hazardous Waste: 2424 http://www4.egov.nh.gov/des/nhelap/namesearch.asp

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313 http://www.wadsworth.org/labcert/elap/comm.html

United States Department of Agriculture Soil Permit: S-54210

Maryland Potable Water: 301 http://www.mde.state.md.us/assets/document/WSP_labs-2009apr20.pdf

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01 Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry) <u>http://www.A2LA.org/dirsearchnew/newsearch.cfm</u>

> CPSC ID# 1141 Lead Paint, Lead in Children's Metals Jewelry http://www.cpsc.gov/cgi-bin/labapplist.aspx

Sample and Cooler Receipt Checklist			SOP 10_
Client: Fuss & O'Neill, Inc. Client Project ID:		ESS Project ID: <u>12060255</u> Date Project Due: <u>6/21/12</u>	
Client Project ID: Shipped/Delivered Via: <u>ESS Courier</u>		Days For Project: 4 Day	
Items to be checked upon receipt:		·	
1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: 5.9		16. Are ESS labels on correct containers?	YesNo
Iced With: Icepacks		17. Were samples received intact?	Ves No
6. Was COC included with samples?	Yes	ESS Sample IDs:	
7. Was COC signed and dated by client?	Yes	Sub Lab:	<u> </u>
8. Does the COC match the sample	Yes	Analysis:	
9. Is COC complete and correct?	Yes		
18 Was there need to call project manage	ier to disci	use status? If was place explain	

18. Was there need to call project manager to discuss status? If yes, please explain.

Who was called?:_____

By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	4 oz Soil Jar	1	NP
2	Yes	4 oz Soil Jar	1	NP
3	Yes	4 oz Soil Jar	1	NP
4	Yes	4 oz Soil Jar	1	NP
5	Yes	4 oz Soil Jar	1	NP
6	Yes	4 oz Soil Jar	1	NP
7	Yes	4 oz Soil Jar	1	NP
8	Yes	4 oz Soil Jar	1	NP
9	Yes	4 oz Soil Jar	1	NP
10	Yes	4 oz Soil Jar	1	NP
11	Yes	4 oz Soil Jar	1	NP
12	Yes	4 oz Soil Jar	1	NP
13	Yes	4 oz Soil Jar	1	NP
14	Yes	4 oz Soil Jar	1	NP
15	Yes	4 oz Soil Jar	1	NP
16	Yes	4 oz Soil Jar	1	NP
Completed By:	JK D	ate/Time: 💧	15/12 1012	l
Reviewed By:	UD D	ate/Time: 🖉 🚺	5712 1055	
		· · · · · · · · · · · · · · · · · · ·		

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FUSS & O'NEILL Disciplines to Deliver (80) 646-2460 • vww.FaadO.com (80) 646-2460 • vww.FaadO.com (80) 646-2460 • vww.FaadO.com PROJECT NAME PROJECT N	1	CHAIN-OF-CUSTODY RECO	Middle Schwal Woonson	Poda Sinal	Cynthia hianfrancesco, REDEM	414 20100607 A20	R- ta Warten Destauced Pate: 6	y B=S			Xa	914120611-01C X 10/11/	10011-02 X 611	۱ ب		N	•				Fri Polles	all he	- Haller Dunde	NA TINUK

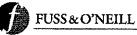
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Nov, MA 02122 Providence, RI 02908 Poughkeepsie, NY 12601	8	LABORATORY ESS	Containers	1000 1000 1000 1000 1000 1000 1000 100	10052 10	Comments	Dar Cault	Connel window		#5 Main dow (D+ (center) Cxter	#SMEN Der (D-3)	chrisel wipe	•			(JEENED		
 50 Redfield Street, Suite 100, Boston, MA 02122 275 Tromenade Street, Suite 369, Providence, RI 02908 80 Washington Street, Suite 301, Poughkeepsie, NY 12601 317 Lunn Hyrle Uau Euret. 2 	Turnaround 1 3 Days*			IT OSENI	1 51 5 V []] [] 20 - 10 U	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2									(etter	NETEMAL EXTRACTER	tist (attucken)	N
1089	U 1 Day*	Project Number 20100607-A20	Less -			Soil LOA Vist	┝───┤								Reporting and Detection Limit Requirements:	~ວັລີຊີ	· Complete De checkist (attacher	COOLER TEMP 5.90
 146 Hartford Road, Manchester, CT 06040 56 Quarry Road, Trumbull, CT 06611 1419 Richland Street, Columbia, SC 29201 78 Interstate Drive, West Springfield, MA 0) 24783		Request	A CONTRACTOR	۔ مو	- SE		>	2		>	8			Date Time Reporting and Det	11/12 1630 Additional C	1501	
SSENOE	DY RECORL	PROJECT LOCATION WWWSOCKEL, PF		aller Date: (6/11/12	silinent W=Waste Z = wipe San Bulk MATERER (CAUK)	Source Date Time Code Sampled Sampled	Y colutra 1215	Y 1 130	ر اح	<u>ک</u>	•	2 1530			Accepted By I	fridge (all	7- have be	in .un
L	CHAIN-OF-CUSTODY RECO	BET NAME Drue Middle School	a ling, folosing a lian frances	Prince Oleo + HAU	car S=Soluty B=Soluty	Sample Number	914 120611 - 06	1 -07a	960-	-089	V -08b	\$0- ∧			×.	and	tall t	いた
FUSS & O'NEILL Disciplines to Deliver (860) 646-2469 • www.FandO.com	CHAIN	PROJECT NAME		znature:	MW=Monitoring Well PW=Potable Water SW=Surface Water T=Treatment Facility X=Other Threatment Facility	Transfer Check 1 2 3 4	1-1- 914	>	× ×	× ×		7			Relinquished By	Of De De	All Card	Tuistar
	, 		REPORT TO: INVOICE TO: P.O. NO.:	Sampler's Sig	MW=Monitoring V SW=Surface Water X=Other	Item T No. 1	1	د بر	<u>ر</u> ر	1	5	ير م		Page	Transfer Number	- ~	3	

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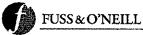
INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

			<u>YES</u>	<u>NO</u>	COMMENTS
1.		SDG Project Narratives	×	Ľ	
2.		Traffic Report	X	L .	BARCODE
3.		Volatiles Data			
	a.	Sample Data			,
		Target Compound List (TCL) Results	\Box	U,	<u>NA</u>
		Reconstructed total ion chromatograms (RIC) for each same	ple⊔	U.	
		For each sample: Raw spectra and background-subtracted mass spectra of			
		target compounds identified		1.1	
		Mass spectra of all reported TICs with three best library		LI .	
		mass spectra of an reported Tres with three best library matches	U	1.1	
		Percent solids calculations		Ц.	
		reitent solids calculations	Ľ	υ.	
	b.	Standards Data (all instruments)			
		Initial Calibration Data		Ш.	
		RICs and Quan Reports for all Standards		Ц	
		Continuing Calibration			
		RICs and Quan Reports for all Standards	L	Ц	
		Internal Standard Area Summary	Ц	ц -	NA
	c.	Raw QC Data			
	ι.	Blank Data			
				Ш.	<u> </u>
		Matrix Spike Data	IJ	U.	V,
		Matrix Spike Duplicate Data	Ц		NA
4.		Semivolatiles Data			
	a.	QC Summary			
		Surrogate Percent Recovery Summary	X	Ш	
		MS/MSD Summary	Ľ	<u>ֿ</u> אַ	WA
		•			
		Method Blank Summary	X		
		Tuning and Mass Calibration	${{\sqcup}}$	¥.	NA
					(, ,

 $F: ad ADEA \& R Basedocs \ Report_Templates \ QAPPs \ Generic-QAPPs \ CT-MA-RI \ Rev-1 \ Appendix -I-Completeness-Checklist. doc \ Appendix -I-Completeness-Checklist. doc \ Appendix -I-Completeness-Checklist. doc \ Appendix -I-Completeness-Checklist. \ Append$



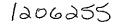
INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

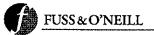
GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

			<u>YES</u>	<u>NO</u>	COMMENTS
	b.	Sample Data			
		TCL Results	X	ĽI.	
		Tentatively Identified Compounds	Ц	M	NA
		Reconstructed total ion chromatograms (RIC) for each			1
		Sample	\Box	X.	N/A
		For each sample:			•
		Raw spectra and background-subtracted mass			1
		spectra of TCL compounds	Ľ	Ø.	N[A
		Mass spectra of TICs with 3 best library matches	\Box	M.	<u>N/A</u>
		GPC chromatograms (if GPC performed)	L	⊠ .	- Ala
	c.	Standards Data (all instruments)			
		Initial Calibration Data	М	Ш.	
		RICs and Quan Reports for all Standards		×.	Ala
		Continuing Calibration	М	LI .	
		RICs and Quan Reports for all Standards	\Box	X.	NA
		Internal Standard Areas Summary	U	Д [°]	NA
		Internal Standard Areas Summary	L	X.	NA
	d.	Raw QC Data			
		Decafluorotripbenylphosphine (DFTPP)		X	DA
		Blank Data	Ā	Г Ц	· • • • • • • • • • • • • • • • • • • •
		Matrix Spike Data		M .	NIA
		Matrix Spike Duplicate Data		×.	NIA
5.		Miscellaneous Data		~	
5.		Original preparation and analysis forms or copies of prepara			
		and analysis log book pages	шол Щ	L	
		Internal sample & sample extract transfer chain-of custody	5	ч.	
		records	X	Ц	
		Screening Records		× ·	NA
		All instrument output, including strip charts from screening	<u> </u>	ц.	
		activities (describe or list)	~	J .	·

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INITIAL DATE: OCTOBER 2011 REVISION DATE: FEBRUARY 2012 REVISION: 1.0

GENERIC QUALITY ASSURANCE PROJECT PLAN FOR PROJECTS IN CONNECTICUT, MASSACHUSETTS AND RHODE ISLAND LABORATORY MODIFIED TIER II DATA VALIDATION CHECKLIST ORGANIC COMPOUNDS (Continued)

PERFORMED AND, WHERE APPLICABLE, WITHIN ACCEPTABLE LIMTS?**

		<u>YES</u>	<u>N0</u>	COMMENTS
Chain-	of-Custody Records	Ä		
Sample	e Log-in Sheet (Lab & DC1)	X	Ľ	
	laneous Shipping/Receiving Records (describe or list)		<u> </u>	
7.	Internal Lab Sample Transfer Records and Tracking Sheets (describe or list) BAESoDE	×		·····
8.	Other Records (describe or list)		K.	
9.	Comments:			

** See laboratory Quality Assurance Plan for limits.

DDDARI Completed by: (Lab) (Printed Name/Title) LAB DIRECTOR

I certify that the above information is true and accurate. I further certify that all laboratory results associated with the above analyses will be made available for review for seven (7) years following certification of this document.

Certified by: (Lab)	(Signature)	(Printed Name/Title)	7/17/12 Date
		HO DIRECTURE	

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Appendix H

Hazardous Materials Abatement Cost Estimate





Hazardous Materials Abatement Cost Estimate

A hazardous materials abatement cost estimate is provided below. Unit costs are based on current industry rates and are inclusive of all contractor costs. They do not include costs for design, monitoring, sampling, and other consultant fees. This estimate only accounts for those materials tested and analyzed as part of this assessment. Previously unidentified, hidden, or otherwise untested materials are not accounted for in the table below, and therefore the potential abatement costs are not quantified. Any untested potential asbestos containing materials should be presumed to be asbestos until proven otherwise. Of particular note, the asbestos assessment documented herein did not include sampling or analysis of roofing system components.

Material	Estimated Quantity	Unit Cost	Total Cost
9x9 / 12x12 Floor Tile (All Layers) & Associated Mastics (Includes Removal of Plywood Underlayment & Flooring Layers)	150,000 SF	\$5/SF	\$750,000
AirCell, Pre-Formed Block Type Insulation & Associated Mudded Fittings (Includes Boiler Tunnels, Boiler Breeching, Classroom Risers, Mechanical Areas, Basement Wings)	10,000 SF	\$15/SF	\$150,000
Caulk at Brick Molding Concealed underneath Aluminum Window Frames	All Windows (Approx. 646 EA)	\$500/EA	\$323,000
Boiler Demolition: Includes Removal of All Interior Boiler Debris, Concealed Interior Friable Components, Interior Door Blocking, Firebrick, Millboard, Rib- Sealant Material, Boiler Foundation, and Associated Gaskets, etc.	4 EA (10′x22′x12′h / Boiler)	Lump Sum	\$50,000
Friable Insulation & Cement Overcoat at Top of Boilers	1,100 SF	\$20/SF	\$22,000
Asbestos Debris on Concrete Floor (Small Boiler Room)	500 SF	\$10/SF	\$5,000
Cement Fiber Board (Transite Panels)	1,550 SF	\$10/SF	\$15,500
Cement Fiber Board Associated with Classroom Chalkboards	10 EA	\$1,000/EA	\$10,000
Sink Undercoating Material at Classrooms	12 EA	\$175/EA	\$2,100
2" Brown Vinyl Baseboard & Associated Mastic at Classrooms	1,500 LF	\$3/LF	\$4,500

Table 12Estimated Cost for Hazardous Materials Abatement



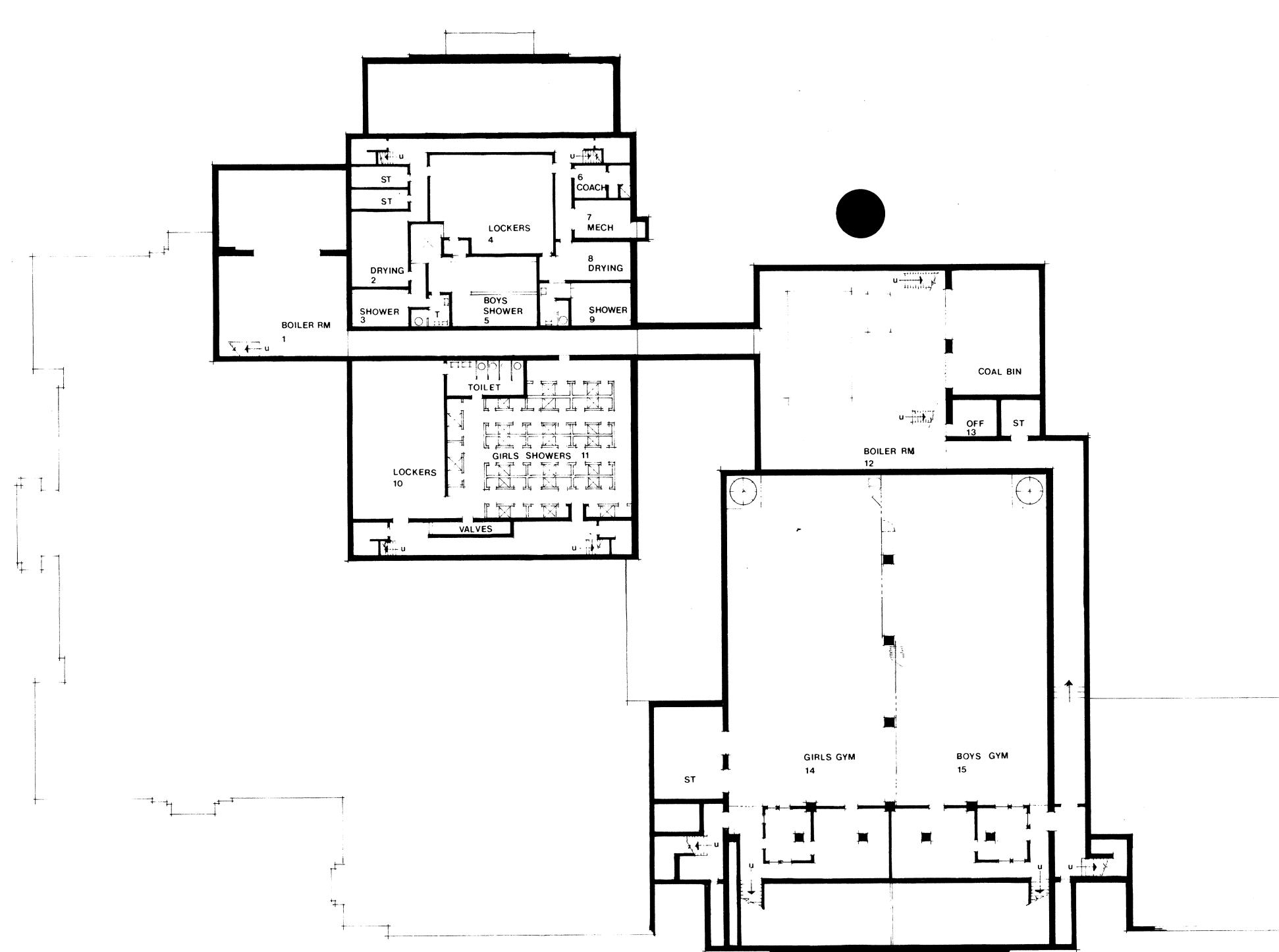
Material	Estimated Quantity	Unit Cost	Total Cost			
4" Reddish-Brown Vinyl Baseboard & Associated Mastic	\$3/LF	\$6,000				
6" (Thick) Black Vinyl Baseboard & Associated Mastic at Classrooms	\$2,100					
Yellow Mastic Associated with Ceramic Floor Tile at Girls Locker Room (Old Gym)	\$5/SF	\$3,750				
Brown Glue Daubs Associated with Luan Wall Paneling at Offices	\$7/SF	\$21,000				
Tan Glue Strips On Wood at Classrooms	\$4/SF	\$8,000				
Window-Glazing Compound Associated with (Interior) Hallway Doors at Classroom Wings	\$3,000					
Allowance for cleaning and disposal o limited loc	\$15,000					
OSHA Lead Compliance during renovation and demolition work Lump Sum						
Potential Disposal of Lead Waste from demolition and disposal of Lump Sum removed components and surfaces						
Hg Disposal for Switches and Thermostats Lump Sum						
Hg Lamps & PCB-Containing Ligh Inventory Co	\$25,000					
		SUBTOTAL	\$1,475,950			
	(~15%) CC	ONTINGENCY	\$221,400			
		TOTAL	\$1,697,350			



Appendix I

Facility Floor Plan





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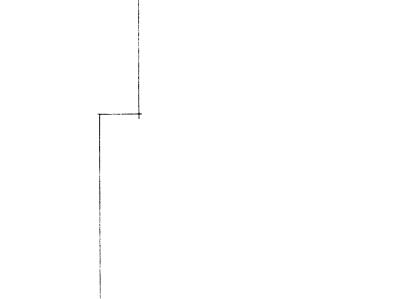
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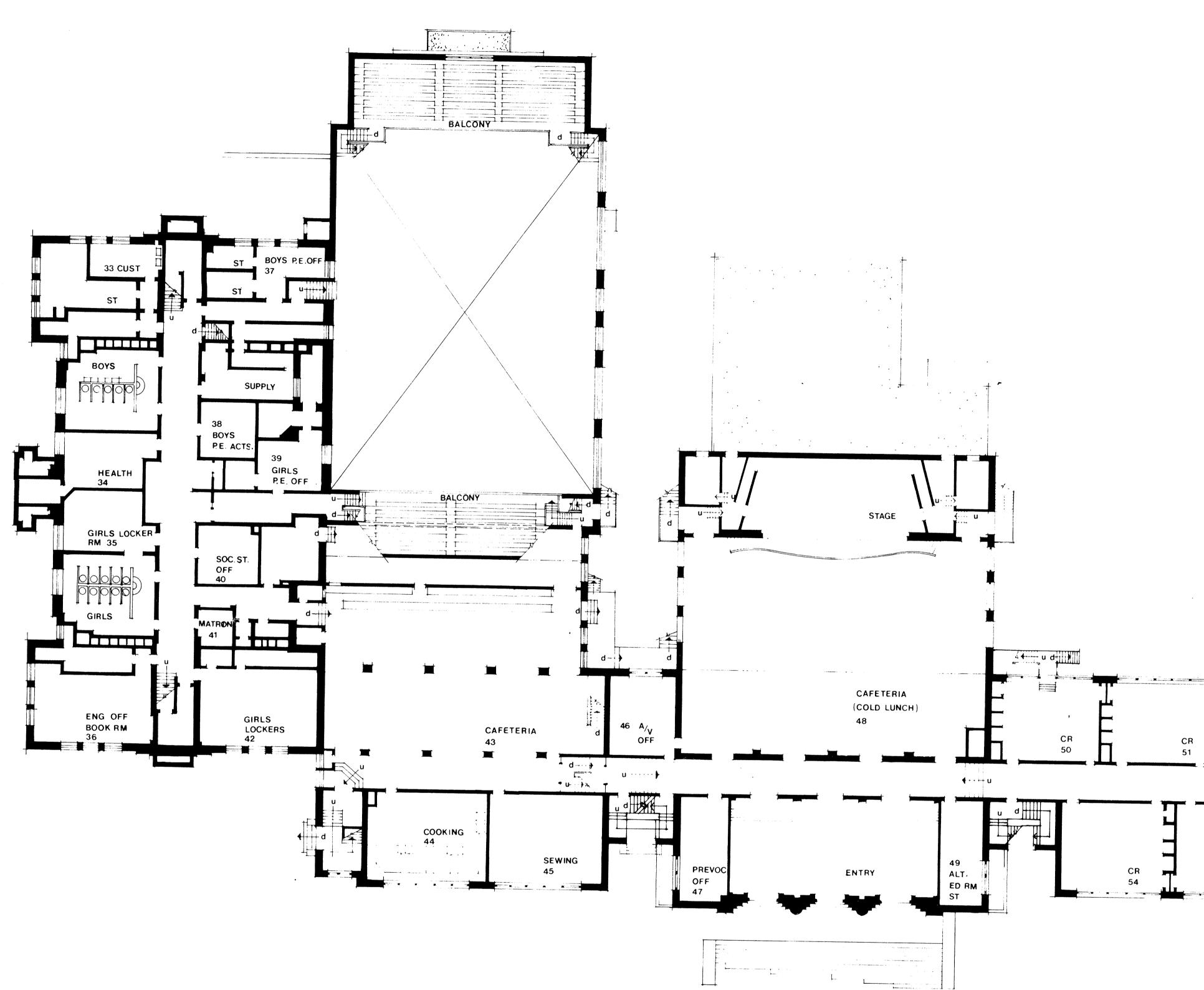






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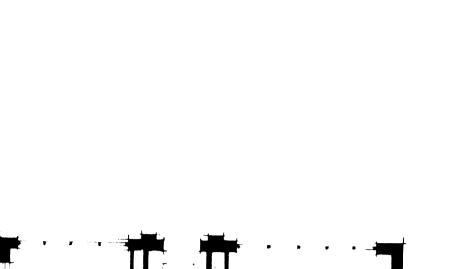
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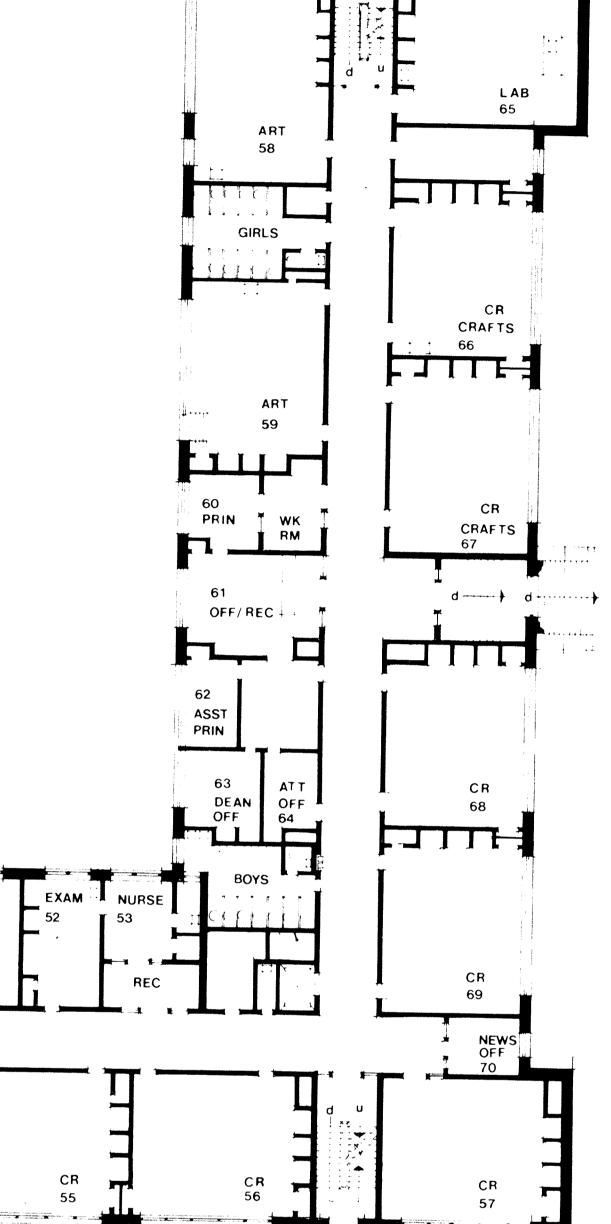
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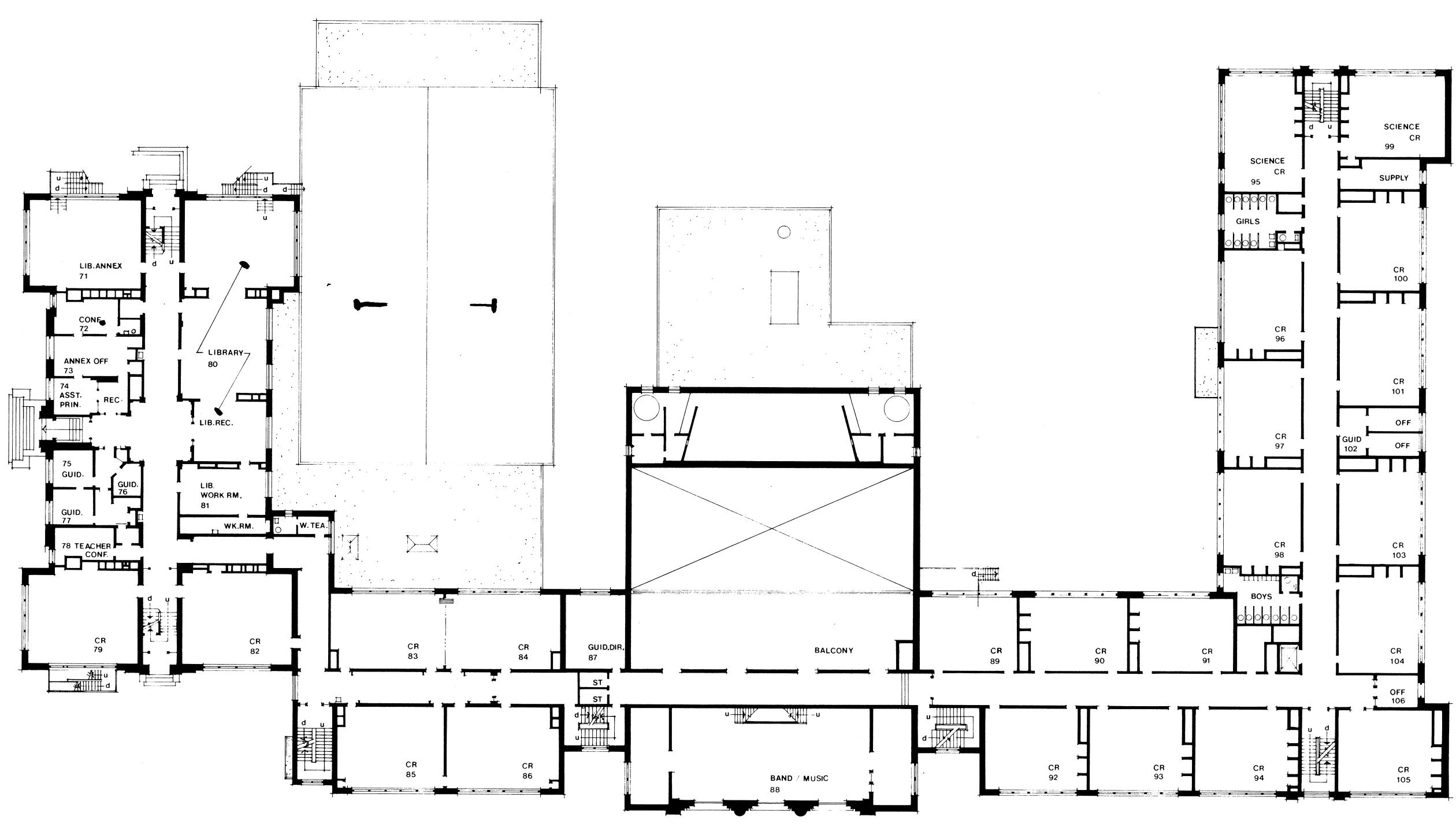
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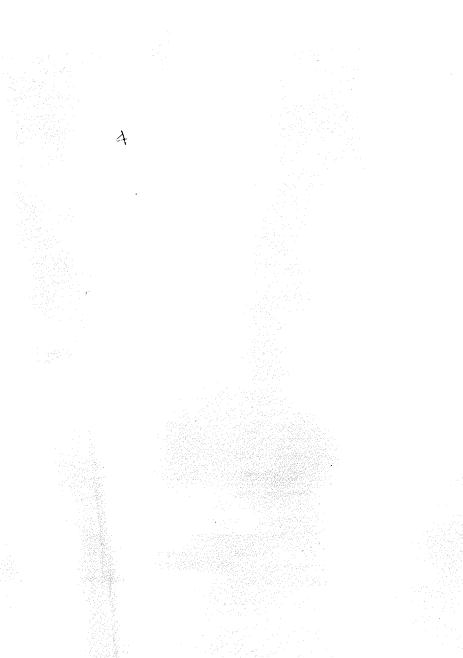
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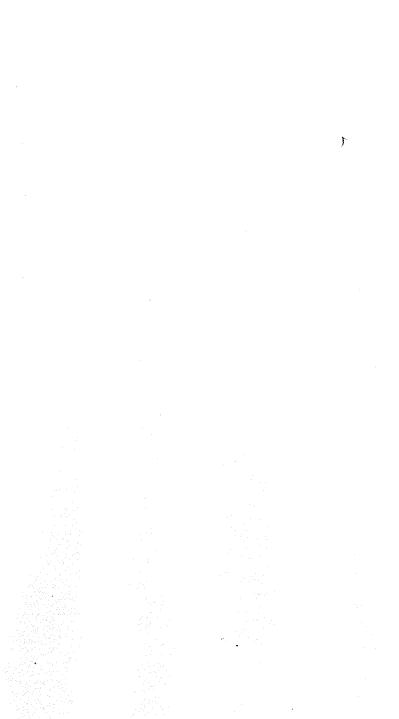


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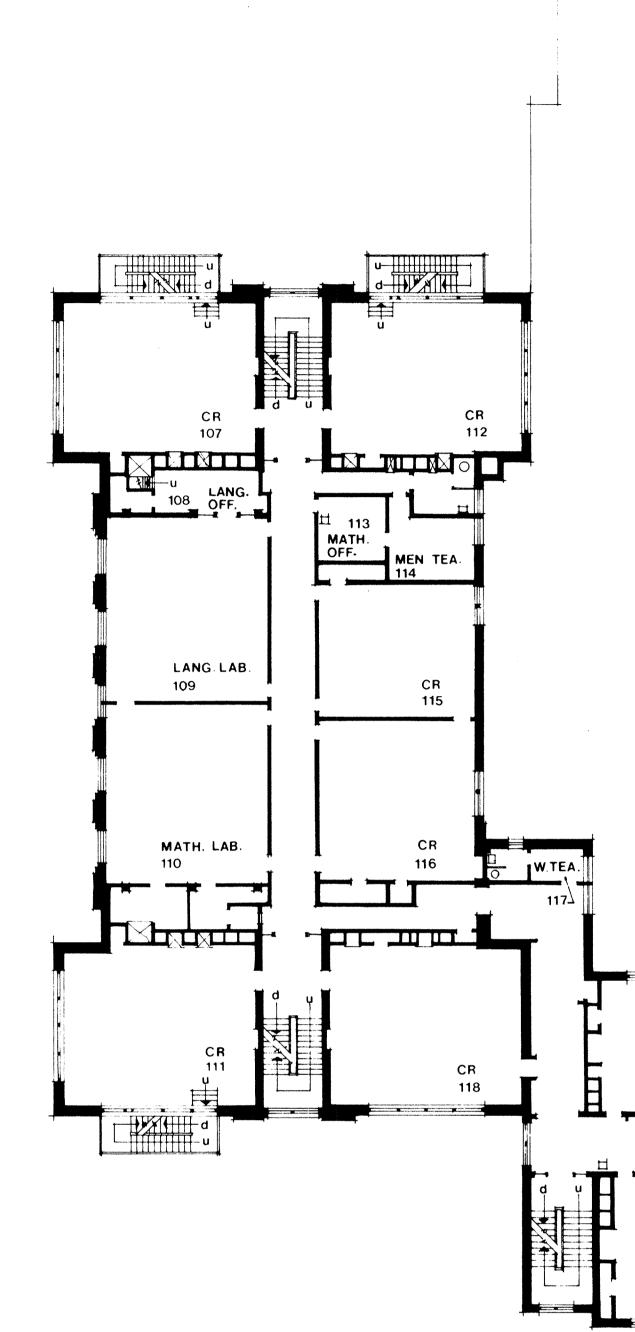
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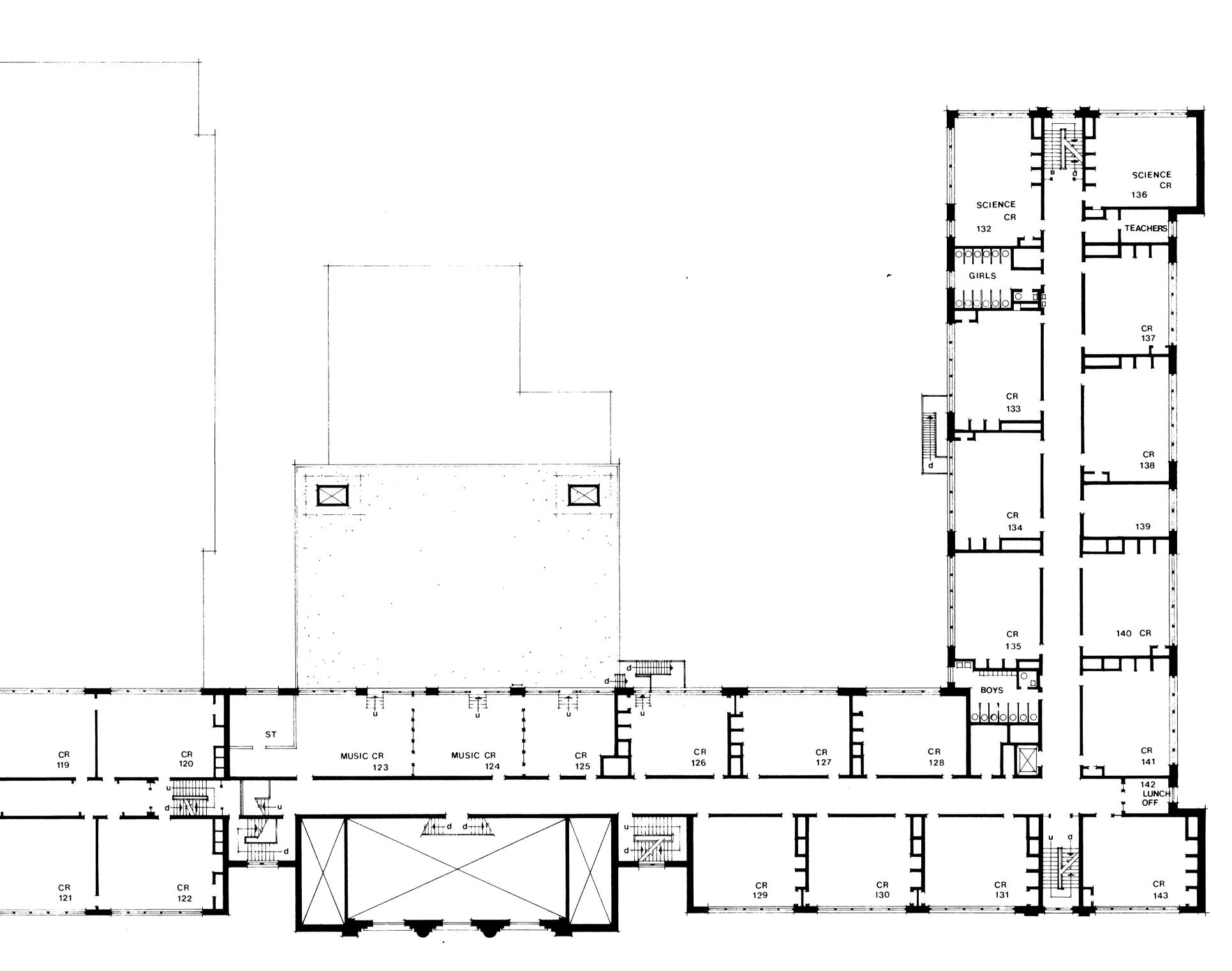
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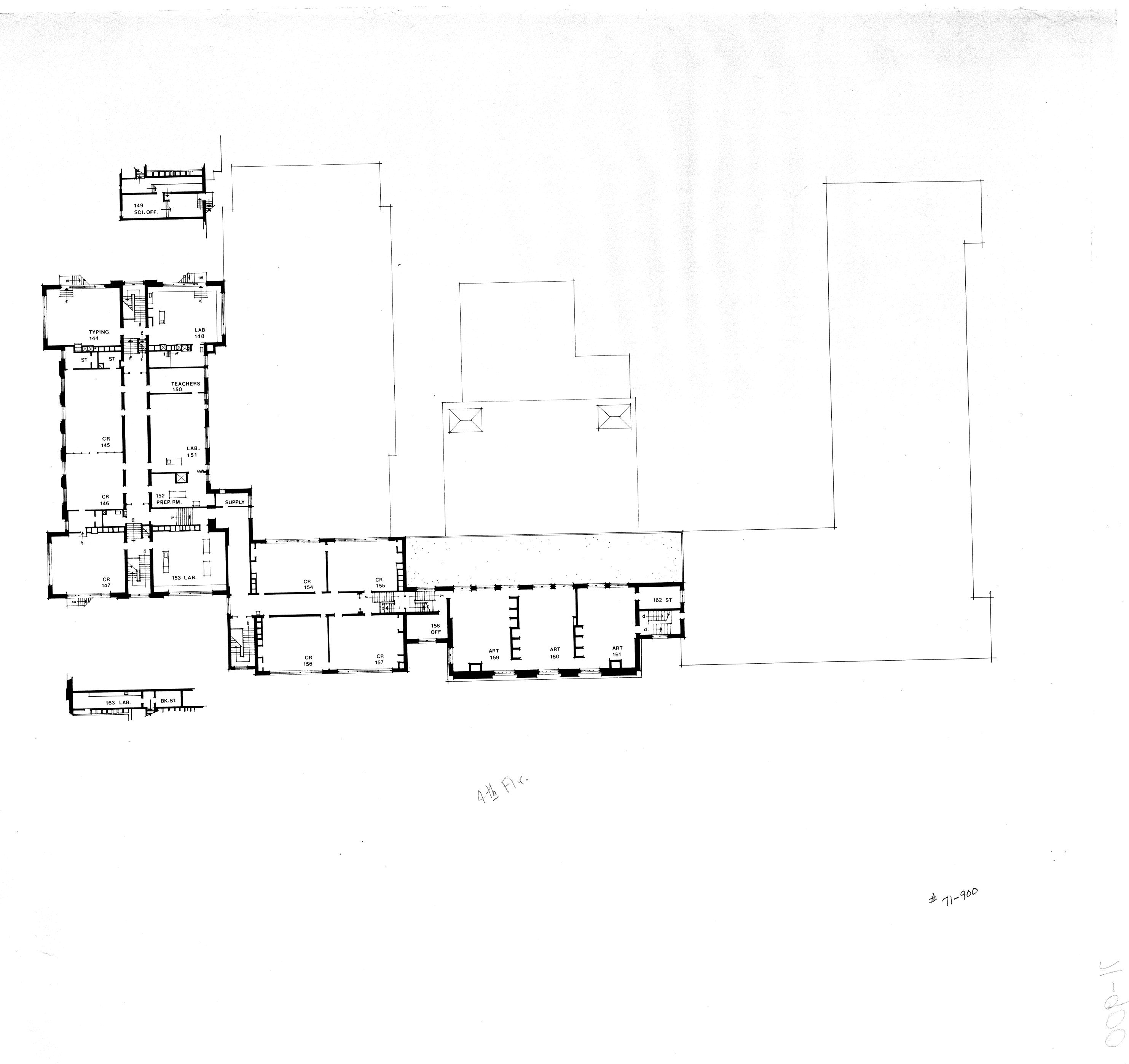
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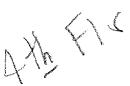


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