Pink House

RPF Environmental
TESTING & CONSULTING SERVICES
Hazardous Materials Inspection & Assessment
Asbestos, Mold, Lead Paint, Radon, PCBs
Air Quality Testing and Investigations
Industrial Hygiene, Safety & Training

December 11, 2014

Mr. Frank Drauszewski
U.S. Fish & Wildlife Services
Parker River NWR
6 Plum Island Turnpike
Newburyport, MA 01950

603-942-5432

Re: Pink House, Plum Island Turnpike
Building Survey Findings
RPF File No. 146353

Dear Mr. Drauzweski:

On November 21, 2014, RPF Environmental, Inc. (RPF) conducted a survey at the Pink House located on the Plum Island Turnpike in Newburyport, Massachusetts. The survey was performed throughout the building as designated by you or your site representative for accessible asbestos and lead paint building material as indicated herein. Below is a summary of findings, discussion of the results and preliminary recommendations for proper management of the identified asbestos and lead paint building material. Attached to this report are the survey data tables, laboratory results, survey methodologies and limitations.

This report is not intended to be used as an abatement specification or work plan. To proceed with abatement work, the following important steps are necessary:

1. A work plan or project design documents must be prepared prior to abatement by a certified abatement project designer.

2. The abatement specification or work plan should then be used to solicit bids from qualified abatement contractors. Only properly licensed contractors should be used for asbestos abatement and disposal.

3. A qualified industrial hygiene/testing consultant should conduct sufficient testing and inspections of the work, independent of the abatement contractor as well as provide for a State licensed project monitor independent of the abatement firm. The consultant should also prepare final abatement reports for the work.

Summary of Findings

The Pink House located on Plum Island Turnpike in Newburyport, Massachusetts is a two story house with an unfinished basement and walk up attic look out area. It is a wood framed building with multiple layers of various asphalt roofing. The building has been unoccupied for several years.

The scope of the survey included accessible asbestos-containing building material in accordance with the initial asbestos inspection requirements prior to renovation or demolition work as stated in the State regulations and applicable federal regulations. In addition, the survey included screening for lead paint (LP).

Asbestos

Several types of suspect asbestos-containing building material (ACBM) were observed by RPF, including friable and nonfriable suspect material. Based on the testing performed by RPF asbestos was detected in the following materials:

- 9" Floor Tile
- Floor Tile Mastic
- Insulating Board
- Ceramic Tile Mastic
- Window Glaze
- Flashing Compound
- Roofing with Silver Paint
- Sink Basin Undercoat

Accessible areas of the exterior roofing locations were included in the survey. However, the upper portions of the main roof, attic roof and chimney were not accessible due to safety concerns. For the purpose of this survey the materials are assumed ACBM. When feasible and prior to demolition or disturbance, the roofing should be tested including representative core samples and analysis of the different suspect materials.

Lead Paint

Based on the year of construction and extent of renovation conducted over the years, it is reasonable to assume that some lead paint (LP) is present. RPF conducted limited spot testing of paint and LP was confirmed to be present on various interior and exterior building components.

Depending on the extent of renovation and final construction plans, proper abatement and/or management of the materials will be required in accordance with applicable State and federal regulations. Renovation and demolition plans should be reviewed by a certified industrial hygienist and a licensed project designer for possible asbestos impact issues. Based on the impact assessment and planned usage, technical specifications should be prepared for abatement, as applicable. A management plan should also be prepared to address any asbestos or other hazardous material scheduled to remain after construction.

Discussion of Findings

Asbestos-Containing Building Material

Asbestos is the name for a group of naturally occurring minerals that separate into strong, very fine fibers. The adverse health effects associated with asbestos exposure have been extensively studied for many years. Results of these studies and epidemiological investigations have

demonstrated that inhalation of asbestos fibers may lead to increased risk of developing one or more diseases. In all cases, extreme care must be used not to disturb asbestos-containing materials or to create fiber release episodes.

In the accessible locations surveyed, RPF identified twenty-two (22) homogeneous groups of accessible suspect asbestos-containing building material. Suspect materials were identified based on current industry standards, EPA, and other guideline listings of potential suspect ACBM.

The following is a summary list of the suspect ACBM identified and sampled during this survey:

Textured Surfacing	Laminate Counter	Asphalt Shingles
Gypsum Board	Ceramic Tile Grout	Roofing with silver paint
9" Floor tile Brown with	Ceramic Tile Mastic	Roofing Paper
Black Flooring Mastic	Homosote Board	Siding Paper
Insulating Board	Sink Basin Undercoat	Roll Roofing
12" Floor tile black and white	Window Glaze	Paper
with clear mastic	Flashing Compound	Wallpaper

A total of sixty-six (66) samples were extracted from the different groups of suspect material in accordance with EPA sampling protocols. Of the samples collected by RPF, asbestos was detected in ten (10) groups of suspect ACBM.

Table 1 of Appendix A includes a list of ACBM and accessible asbestos identified in the building, EPA category listings, and asbestos content. A listing of the different homogenous groups of suspect material identified, samples collected, and analytical results is included in Appendix A.

The ACBM identified during this survey consists of friable and nonfriable material. The ACBM was observed to be in good to fair condition and, left undisturbed and properly managed, is unlikely to cause any major fiber release episodes.

As reviewed with you some suspect material is assumed to be ACBM because sampling was not feasible at the time of the survey. For example, the upper roof attic roof and chimney sampling was not performed. All assumed ACBM should be handled as ACBM unless full testing is performed and the material is found to be non-detect for asbestos.

Lead Paint Screening

Based on the type and age of building construction, it is reasonable to assume that various painted surfaces contain some lead. It is not uncommon in buildings such as this and that have had various renovation and upgrades to have both lead containing paint and non lead containing paint. Lead is a toxic metal that was used for many years in paint and other products found in and around buildings and homes. Exposure to lead may cause a range of health effects, from

behavioral problems and learning disabilities, to seizures and death. Children six years old and under are most at risk; however, adults are also susceptible to the effects of lead over exposure.

For the purposes of this survey, RPF performed screening for lead in paint using a Niton X-Ray Fluorescence (XRF) Meter of various interior and exterior painted surfaces. The results of this lead screening are included at Table 3 of Appendix A. The results of this testing showed lead concentrations in various interior and exterior painted surfaces at ranging from 0.01 to 3.9 milligrams per square centimeter (mg/cm^2).

Based on this limited testing, it should be assumed that other painted surfaces at the site may also contain lead.

Current Commonwealth of Massachusetts Lead Poisoning regulations consider any paint that contains greater than 1.0 mg/cm^2 to be lead-based paint. However, the intent of this survey was for construction purposes only and preliminary demolition waste stream implications, not for compliance with Massachusetts Lead Program, HUD, or any regulatory abatement order.

Any surfaces with lead present should be managed in accordance with current rules and guidelines, including but not limited to OSHA worker safety rules and State and EPA waste handling and disposal regulations. U.S. Occupational Safety and Health Administration (OSHA) construction rules do not specify any "safe" or acceptable levels of lead within paint for the purposes of occupational exposures. Therefore, construction work involving paint found to contain lead must be completed in accordance with OSHA regulations, not limited to the lead standard, 29 CFR 1926.62. Contractors completing work in areas found to contain lead, or where it is reasonable to assume lead may be present, should be notified of the presence (and potential presence) of lead and proper work protocols should be used.

As lead was found to be present in the screening, proper waste testing with TCLP extraction for lead and potentially other toxic materials should also be completed prior to disposal of any waste generated in accordance with current EPA requirements. Often times it is recommended that pre-demolition TCLP testing be completed such that waste can be segregated as required during demolition activity. Construction/demolition waste that is found to contain lead greater or equal to 5.0 milligrams per liter (mg/L) by TCLP analysis must be handled and treated as hazardous waste.

Please also note that construction and renovation work involving lead paint in housing and child-occupied facilities built before 1978 is also regulated under the EPA Renovation, Repair, and Painting (RRP) rule. Any contractors conducting such work must be properly certified and must use lead safe work methods pursuant to the EPA RRP rule. In addition, pursuant to Title X requirements landlords and sellers are required to disclose the results of lead inspections to tenants and purchasers, and to provide the warning notice and pamphlets in accordance with Title X and State requirements.

Conclusions

Based on the survey findings, the building was found to contain ACBM and LP.

In accordance with current regulatory requirements, ACBM that may be impacted or disturbed (such that asbestos fiber release occurs) by renovation, demolition or other such activity must be removed by qualified, licensed firms. Although regulations for removal of nonfriable ACBM are somewhat less stringent than the requirements for friable ACBM, it should be noted that nonfriable ACBM that is subjected to grinding, abrasion, and other forces, could be rendered friable. In this event, the nonfriable ACBM would be re-categorized friable ACBM.

ACBM that will not be impacted by renovation or demolition activity may be left in place if managed properly and if the materials are maintained in good condition. ACBM to remain in the building should be included in an asbestos management plan and operations and maintenance (O&M) program detailing the measures to be used to safely occupy the building until the ACBM is fully removed. An accredited Management Planner should prepare the O&M Program in accordance with the guidelines set forth in 40 CFR Part 763 (AHERA).

Work impacting LP, must be performed in accordance with current State and federal standards, including but not limited safe work practices, engineering controls, proper waste packaging, and proper disposal. Work involving LP may require notification of tenants, if rented or leased space, prior to start of work.

Sufficiently in advance of the start of renovation and/or remediation work, abatement project design should be completed. As part the initial design steps any planned renovation and demolition activity should be reviewed for potential impact on ACBM. Asbestos removal is highly regulated at the State and federal level, and in some cases, at the local level also. Notification to MA DEP is required 10-days prior to the start of interior abatement work and demolition. Only qualified, trained, and licensed firms, as applicable, should be engaged to complete asbestos removal or other abatement activity. Asbestos abatement work must be designed (abatement specifications or work plan prepared) by accredited personnel.

All employees and contractors that may access or otherwise disturb areas with suspect ACBM present should be notified of the presence of ACBM and possible hidden ACBM, and the need to use caution when proceeding with work. Appropriate notifications, labeling and other hazard communications should be completed to all employees, contractors and others in accordance with US OSHA regulations and other applicable requirements (including asbestos labeling in accordance with 29 CFR Part 1926). The scope of RPF services for this survey did not include labeling of ACBM or hazard communications to other employees, building occupants, contractors, or subcontractors.

Documentation of current ACBM conditions and in-depth hazard assessment is beyond the scope-of-work for this initial survey. With the exception of the specific testing and analysis detailed herein, no other samples of materials, oil, water, ground water, air, or other suspect hazardous materials were collected in the course of this inspection that supports or denies these

conclusions. No additional services beyond those explicitly stated herein were performed and none should be inferred or implied. The summary and conclusions are based on reasonably ascertainable information as described in this report. RPF Environmental, Inc. makes no guarantees, warranties, or references regarding this property or the condition of the property after the period of this report.

If you have any questions at this time, or if you would like to discuss the remediation process, please call our office.

Sincerely,
RPF ENVIRONMENTAL, INC.

Kara Forsythe
Sr. EH&S Consultant

Enclosures:
Appendix A: Data and Analytical Tables
Appendix B: Site Sketch and Photographs
Appendix C: Summary of Methodology and Limitations

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APPENDIX A

TABLE 1

Pink House, Plum Island Turnpike
Newburyport, MA

SUMMARY OF ACBM & ASBESTOS IDENTIFIED

Building Material	Location	Approximate Quantity	EPA Category	Asbestos Results
9" Floor tile with flooring mastic	1st floor: living room, kitchen, garage/entrance area 2nd floor: hallways	600 square feet	Category I Nonfriable	4%-8% Chrysotile
Insulating Board	1st floor: kitchen (back side of chimney)	12 square feet	Friable RACM	15% Chrysotile
Sink Basin Undercoat	1st floor: kitchen	2 square feet	Category II Nonfriable	10% Chrysotile
Ceramic Tile Mastic	2nd floor: full bath	52 square feet	Category II Nonfriable	5% Chrysotile
Window Glaze	Throughout building (also some stored in basement)	40 window units including stored	Category II Nonfriable	4% Chrysotile
Flashing Compound	Exterior roof along seams where metal meets asphalt. Also assumed to be around the chimney	100 linear feet	Category I Nonfriable	10% Chrysotile
Roofing with Silver Paint	Exterior lower roof portions, overhangs and garage under asphalt shingles	1,000 square feet	Category I Nonfriable	10% Chrysotile
Roofing	Exterior upper roofing and attic roof	1,500 square feet	Category I Nonfriable	Assumed ACBM

Notes:

- Please note that Category 1 and Category 2 nonfriable ACM are recategorized as friable and/or RACM under certain conditions. Current State asbestos regulations are more strict and comprehensive than the EPA NESHAPs requirements.
- All quantities are approximate only and should be confirmed during abatement project design and abatement bidding.
- It is possible that some concealed or inaccessible ACBM is present. Care should be used when renovating/demolishing inaccessible building space. Further explorative survey work may be necessary during design and/or in conjunction with demolition.

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TABLE 2

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method

Samples Collected: November 21, 2014

Sample ID	Sample Description	Asbestos Content	Other Content
112114 HG 1a – A Surfacing	Textured Surfacing, white, 1st floor, kitchen, ceiling	No Asbestos Detected	100% Non-fibrous
112114 HG 1a – B Gypsum Board	Gypsum Board, 1st floor, kitchen, ceiling	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1b – A Surfacing	Textured Surfacing, white, 1st floor, dining room, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1b – B Gypsum Board	Gypsum Board, 1st floor, dining room, wall	No Asbestos Detected	10% Cellulose 90% Non-fibrous
112114 HG 1c – A Surfacing	Textured Surfacing, white, 1st floor, family room, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1c – B Gypsum Board	Gypsum Board, 1st floor, family room, wall	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1d – A Surfacing	Textured Surfacing, white, 2nd floor, stairwell, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1d – B Gypsum Board	Gypsum Board, white, 2nd floor, stairwell, wall	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1e – A Surfacing	Textured Surfacing, 2nd floor, room 1, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1e – B Gypsum Board	Gypsum Board, 2nd floor, room 1, wall	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1f – A Surfacing	Textured Surfacing, white, 2nd floor, room 2, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1f – B Gypsum Board	Gypsum Board, 2nd floor, room 2, wall	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1g – A Surfacing	Textured Surfacing, 2nd floor, hallway, wall	No Asbestos Detected	100% Non-fibrous
112114 HG 1g – B Gypsum Board	Gypsum Board, 2nd floor, room 2, wall	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 1h – A Surfacing	Textured Surfacing, white, 1st floor, kitchen, ceiling	No Asbestos Detected	100% Non-fibrous
112114 HG 1h – B Gypsum Board	Gypsum Board, 1st floor, kitchen, ceiling	No Asbestos Detected	15% Cellulose 85% Non-fibrous

Notes:

- Trace means less than 1%. SFP Means analysis was terminated because asbestos was detected on a previous homogenous sample during the survey work. Please reference the "HG" group number.
- Please reference the full report for discussions and additional information and limitations pertaining to these results.

TABLE 2 (continued)

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method

Samples Collected: November 21, 2014

Sample ID	Sample Description	Asbestos Content	Other Content
112114 HG 1i – A Surfacing	Textured Surfacing, white, 1st floor, kitchen, ceiling	No Asbestos Detected	100% Non-fibrous
112114 HG 1i – B Gypsum board	Gypsum Board, 1st floor, kitchen, ceiling	No Asbestos Detected	15% Cellulose 85% Non-fibrous
112114 HG 2a – A Tile	9" Floor Tile, brown and gold, 1st floor, living room	8% Chrysotile	92% Vermiculite
112114 HG 2a – B Mastic	9" Floor Tile, 1st floor, living room	8% Chrysotile	92% Non-fibrous
112114 HG 2b – A Tile	9" Floor Tile, brown and gold, 1st floor, living room	*SFP	*SFP
112114 HG 2b – B Mastic	Mastic, 1st floor, living room	*SFP	*SFP
112114 HG 3	Insulating Board, gray, 1st floor, kitchen/dining room, back side of fireplace	15% Chrysotile	40% Cellulose 45% Non-fibrous
112114 HG 3b	Insulating Board, gray, 1st floor, kitchen/dining room, back side of fireplace	*SFP	*SFP
112114 HG 4a – A Tile	12" Floor Tile, white and black, 1st floor, kitchen	No Asbestos Detected	100% Non-fibrous
112114 HG 4a – B Mastic	Mastic, clear, 1st floor, kitchen	No Asbestos Detected	100% Non-fibrous
112114 HG 4b – A Tile	12" Floor Tile, white and black 1st floor, kitchen	No Asbestos Detected	100% Non-fibrous
112114 HG 4b – B Mastic	Mastic, clear, 1st floor, kitchen	No Asbestos Detected	100% Non-fibrous
112114 HG 5	Laminant counter, white, with mastic, 1st floor, kitchen	No Asbestos Detected	70% Cellulose 30% Non-fibrous
112114 HG 6a – A Tile	9" Floor Tile, white and black, with mastic, 2nd floor, hallway	4% Chrysotile	96% Non-fibrous
112114 HG 6a – B Mastic	Mastic, 2nd floor, hallway	8% Chrysotile	92% Non-fibrous
112114 HG 6b – A Tile	9" Floor Tile, white and black, 2nd floor, hallway	*SFP	*SFP

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TABLE 2 (continued)

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method

Samples Collected: November 21, 2014

Sample ID	Sample Description	Asbestos Content	Other Content
112114 HG 6b – B Mastic	Mastic, 2nd floor, hallway	*SFP	*SFP
112114 HG 7a	Linoleum, white and gold, 1st floor, screen porch 2	No Asbestos Detected	15% Cellulose, 5% Fiber Glass 80% Non-fibrous
112114 HG 7b	Linoleum, white and gold, 1st floor, screen porch 2	No Asbestos Detected	15% Cellulose, 5% Fiber Glass 80% Non-fibrous
112114 HG 8a – A Tile	12" Floor Tile black, 1st floor, half bathroom off screen porch #3	No Asbestos Detected	100% Non-fibrous
112114 HG 8a – B Mastic	Mastic, clear, 1st floor, half bathroom off screen porch #3	No Asbestos Detected	100% Non-fibrous
112114 HG 8b – A Tile	12" Floor Tile black, 1st floor, half bathroom off screen porch #3	No Asbestos Detected	100% Non-fibrous
112114 HG 8b – B Mastic	Mastic, clear, 1st floor, half bathroom off screen porch #3	No Asbestos Detected	100% Non-fibrous
112114 HG 9a	Ceramic Tile Grout, white, 1st floor, kitchen, back splash	No Asbestos Detected	100% Non-fibrous
112114 HG 9b	Ceramic Tile Grout, white, 2nd floor, full bathroom, walls	No Asbestos Detected	100% Non-fibrous
112114 HG 10	Ceramic Tile Mastic, tan, 1st floor, kitchen, back splash	No Asbestos Detected	100% Non-fibrous
112114 HG 10b	Ceramic Tile Mastic, tan, 2nd floor, full bathroom, walls	No Asbestos Detected	100% Non-fibrous
112114 HG 11	Ceramic Tile Grout, white, 2nd floor, full bathroom, floor	No Asbestos Detected	100% Non-fibrous
112114 HG 11b	Ceramic Tile Grout, white, 2nd floor, full bathroom, floor	No Asbestos Detected	100% Non-fibrous
112114 HG 12	Ceramic Tile Mastic, gray, 2nd floor, full bathroom, floor	5% Chrysotile	95% Non-fibrous
112114 HG 12b	Ceramic Tile Mastic, gray, 2nd floor, full bathroom, floor	*SFP	*SFP
112114 HG 13a	Homosote Board, gray, 1st floor, screen porch #2	No Asbestos Detected	90% Cellulose 10% Non-fibrous
112114 HG 13b	Homosote Board, gray, 1st floor, screen porch #3	No Asbestos Detected	90% Cellulose 10% Non-fibrous

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TABLE 2 (continued)

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

SUMMARY OF BULK MATERIAL SAMPLING AND RESULTS
Polarized Light Microscopy – EPA 600/R-93/116 Method

Samples Collected: November 21, 2014

Sample ID	Sample Description	Asbestos Content	Other Content
112114 HG 14	Sink Basin Undercoat, black, 1st floor, kitchen	10% Chrysotile	90% Non-fibrous
112114 HG 15	Window Glaze, gray, exterior, west side, windows	No Asbestos Detected	100% Non-fibrous
112114 HG 15b	Window Glaze, gray, exterior, north side, windows	4% Chrysotile	96% Non-fibrous
112114 HG 16	Flashing Compound, black, exterior, east side, along siding and metal roof	10% Chrysotile	10% Cellulose 80% Non-fibrous
112114 HG 16b	Flashing Compound, black, exterior, east side, along siding and metal roof	*SFP	*SFP
112114 HG 17	Asphalt Shingles, black and white, exterior, east side, top layer	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous
112114 HG 17b	Asphalt Shingles, black and white, exterior, east side, top layer	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous
112114 HG 18	Asphalt Shingles, black, exterior, east side, 2nd layer	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous
112114 HG 18b	Asphalt Shingles, black, exterior, east side, 2nd layer	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous
112114 HG 19a	Roofing, black, with silver paint, exterior, east side, bottom layer	10% Chrysotile	10% Cellulose 80% Non-fibrous
112114 HG 19b	Roofing, black, with silver paint, exterior, east side, bottom layer	*SFP	*SFP
112114 HG 20a	Roofing paper, tan, exterior, east side, under HG 19	No Asbestos Detected	95% Cellulose 5% Non-fibrous
112114 HG 20b	Roofing paper, tan, exterior, east side, under HG 19B	No Asbestos Detected	95% Cellulose 5% Non-fibrous
112114 HG 21	Siding Paper, black, exterior, east side, under wood clapboards	No Asbestos Detected	60% Cellulose 40% Non-fibrous
112114 HG 21b	Siding Paper, black, exterior, east side, under wood clapboards	No Asbestos Detected	60% Cellulose 40% Non-fibrous
112114 HG 22	Roll Roofing, black, exterior, over garage	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous
112114 HG 22b	Roll Roofing, black, exterior, over garage	No Asbestos Detected	15% Fiber Glass 85% Non-fibrous

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Notes:

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TABLE 3

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

XRF SURVEY RESULTS

Sample Collected: November 21, 2014

Reading No.	Component	Substrate	Color	Location	Result (mg/cm^2)
Calibration				SRM 2573	1.1
Calibration				SRM 2573	1.1
Calibration				SRM 2573	.9
282	Wall	Gypsum Wall Board	White	1st Floor, Kitchen	1.6
283	Null	---	---	---	---
284	Null	---	---	---	---
285	Cabinet Door	Wood	White	1st Floor, Kitchen	0.18
286	Cabinet Floor	Wood	White	1st Floor, Kitchen	0.03
287	Cabinet Shelf	Wood	Red	1st Floor, Kitchen	0.06
288	Door Casing	Wood	White	1st Floor, Kitchen	0.01
289	Null	---	---	---	---
290	Wall	Gypsum Wall Board	White	1st Floor, Dining Room	0.6
291	Door	Wood	White	1st Floor, Dining Room, Closet	0.06
292	Door Casing	Wood	White	1st Floor, Dining Room, Closet	0.03
293	Closet Shelf	Wood	Pink	1st Floor, Dining Room, Closet	0.05

TABLE 3 (continued)

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

XRF SURVEY RESULTS

Sample Collected: November 21, 2014

Reading No.	Component	Substrate	Color	Location	Result (mg/cm^2)
294	Riser	Wood	White	1st Floor, Living Room, Stairwell	0.20
295	Railing	Wood	White	1st Floor, Living Room, Stairwell	0.09
296	Post	Wood	White	1st Floor, Living Room, Stairwell	0.19
297	Newer Post	Wood	White	1st Floor, Living Room, Stairwell	0.06
298	Tread	Wood	White	1st Floor, Living Room, Stairwell	0.09
299	Baseboard	Wood	White	1st Floor, Living Room, Stairwell	0.30
300	Door	Wood	White	1st Floor, Living Room, to porch	0.10
301	Shelf	Wood	White	1st Floor, Living Room	0.0
302	Window Sill	Wood	White	1st Floor, Living Room	0.25
303	Window Casing	Wood	White	1st Floor, Living Room	0.17
304	Window	Wood	White	1st Floor, Living Room	1.2
305	Door	Wood	White	2nd Floor, Hall closet	0.17
306	Door Case	Wood	White	2nd Floor, Hall closet	0.13
307	Wall	Gypsum Wall Board	White	2nd Floor, Hall closet	0.03
308	Window Sill	Wood	White	2nd Floor, Room 2	0.06

TABLE 3 (continued)

US FISH & WILDLIFE
Pink House, Plum Island Turnpike
Newburyport, MA

XRF SURVEY RESULTS

Sample Collected: November 21, 2014

Reading No.	Component	Substrate	Color	Location	Result (mg/cm^2)
309	Window Case	Wood	White	2nd Floor, Room 2	0.12
310	Window	Wood	White	2nd Floor, Room 2	3.4
311	Threshold	Wood	Gray	2nd Floor, Room 1	1.6
312	Floor	Wood	Gray	2nd Floor, Room 1	0.8
313	Floor	Wood	Pink	2nd Floor, Room 3	2.3
314	Door	Wood	Blue	Front Door Exterior	0.5
315	Siding	Wood	Pink	Exterior Siding	3.9
316	Door Case	Wood	White	Front Door	0.06
317	Null	---	---	---	---
318	Railing	Wood	Stain	Front	0.14
319	Window Trim	Wood	White	Front Porch	0.4
320	Null	---	---	---	---
Calibration				SRM 2573	1.0
Calibration				SRM 2573	1.1
Calibration				SRM 2573	1.2

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Notes:

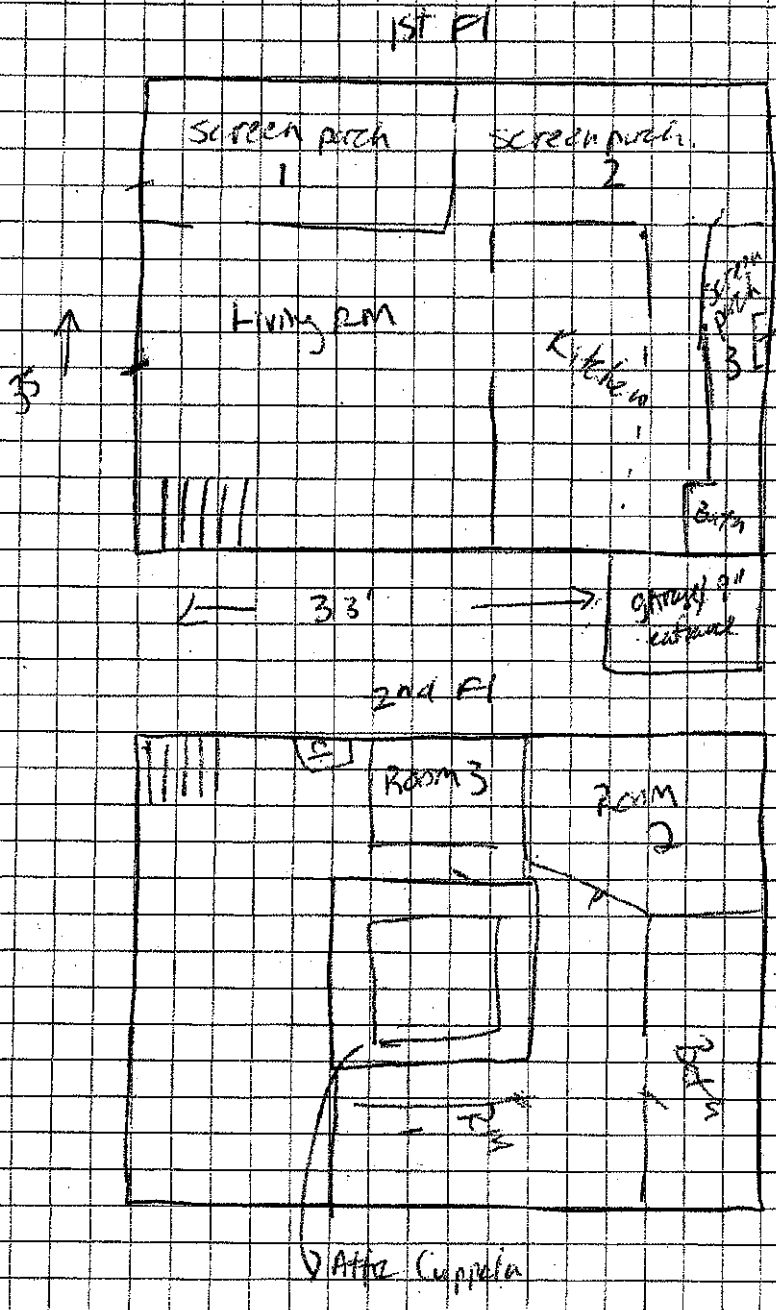
- Lead based paint as defined by current state of NH lead poisoning prevention regulations, is any paint that contains in excess of 1.0 mg/cm^2 of lead.
- OSHA does not currently establish a percent lead for lead paint.
- mg/cm^2 milligrams per centimeter square
- cps means hertz measurement
- Null indicates the XRF analysis was stopped prior to the results.
- Please reference the full report for discussions and additional information and limitations pertaining to these results.

APPENDIX B

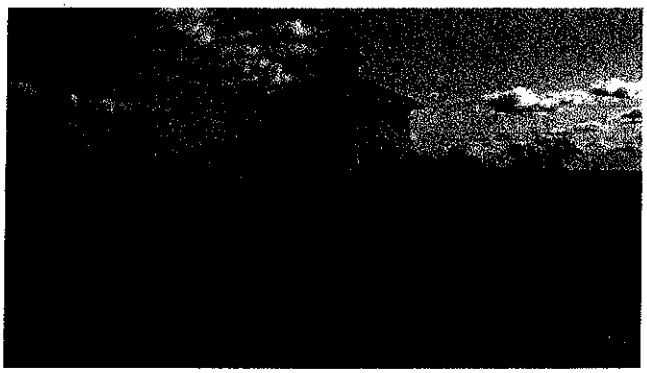
RPF ENVIRONMENTAL, INC.
Environmental Health & Safety

Page No.

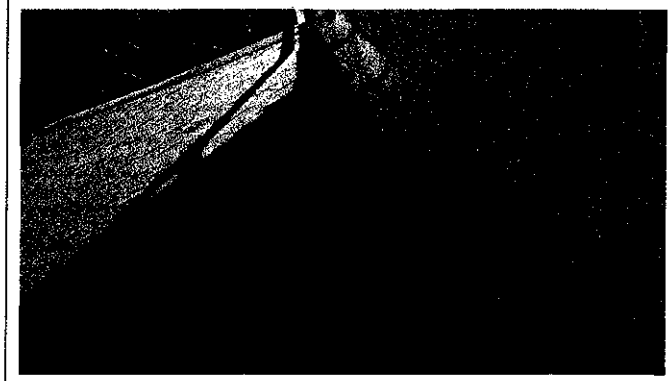
Project: US fish & wildlife
File No. 6353
Location: Pink House Plum Island Turnpike
Date: 11/21/14
By: ICF
Subject:
Checked:
By:
Based on:
Revised:
By:



Living RM 24 x 10
screen porch 1 29x7
screen porch 2 10.8x7
Kitchen 9.6 x 11.8
Dining 11.3 x 15.8
Screen porch 3 7.5x11
Bath 3.1 x 1.6
Hall 14.9 x 3.5 + 10 x 3.3
RM 3 7.10 x 10.3
RM 2 14.4 x 11
Bath 6.1 x 6
RM 1 8.1 x 14.3



1. Exterior view of the pink house. ACBM window glaze, flashing compound and roofing. LP on various exterior components.



2. ACBM flashing compound along the side edges of the roof and metal. ACBM roofing under multiple layers of asphalt shingles.

3. ACBM 9" floor tile and mastic in the garage entrance.

4. ACBM insulating board behind the wood burning stove.

5. View of the kitchen. ACBM sink basin undercoat and 9" floor and mastic underneath flooring.

6. 2nd floor: LP on the floor boards under the throw rugs.

APPENDIX B: SITE PHOTOGRAPHS		RPF Environmental TESTING & CONSULTING SERVICES
Site Address: US Fish and Wildlife		www.airpf.com **603-942-5432**
Pink House, Plum Island Turnpike Newburyport, MA		**Project No. 146353**

APPENDIX C

Summary of Methodology: Asbestos-Containing Building Materials Survey

EPA accredited inspector(s) surveyed accessible space in the building or site areas included within the RPF Scope of Work (SOW) to identify suspect asbestos-containing building material (ACBM). Suspect ACBM was inventoried and categorized into homogeneous groups of materials. To the extent indicated in the report, samples were then extracted from the different groups of homogeneous materials in accordance with applicable State and federal rules and regulations. For surveys in which the SOW included full inspections of the affect space, sampling methodologies were based on the requirements set forth in 40 CFR Part 763 (EPA) and 29 CFR Part 1926.1101 (OSHA). For preliminary or limited surveys, findings apply to only the affected material or space as indicated in the RPF SOW and Report and additional inspection and testing will be required to satisfy regulatory obligations associated with renovation, demolition, maintenance and other occupational safety and health requirements.

Collected samples were individually placed into sealed containers, labeled, and submitted with proper chain of custody forms to the RPF NVLAP-accredited vendor laboratory. Sample containers and tools were cleaned after each sample was collected. Samples were analyzed for asbestos content using polarized light microscopy (PLM). Although PLM is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, PLM may not be sensitive enough to detect all of the asbestos fibers in certain types of materials, such as floor tile and other nonfriable ACBM. In the event that more definitive results are requested in cases of with negative or trace results of asbestos are detected, RPF recommends that confirmation testing be completed using transmission electron microscopy.

For each homogeneous group of suspect material, a "stop at first positive" (SFP) method may have been employed during the analysis. The SFP method is based on current EPA sampling protocols and means that if one sample within a homogeneous group of suspect material is found to contain >1% asbestos, then further analysis of that specific homogenous group samples is terminated and the entire homogeneous group of material is considered to be ACBM regardless of the other sample results. This is based on the potential for inconsistent mix of asbestos in the product yielding varying findings across the different individual samples collected from the same homogeneous group. Unless otherwise noted in the report, sample groups found to have 1% to <10% asbestos content are assumed to be ACBM; to rebut this assumption further analysis with point count methods are required.

Inaccessible and hidden areas, including but not limited to wall/floor/ceiling cavity space, space with obstructed access (such as fiberglass insulation above suspended ceilings), sub floors, interiors of mechanical and process equipment, and similar spaces were not included in the inspection and care should be used when accessing these areas in the future. Unless otherwise noted in the RPF Report, destructive survey techniques were not employed during this survey.

In the event that additional suspect materials are encountered that are not addressed in this report, the materials should be properly tested by an accredited inspector. For example, during renovation and demolition it is likely that additional suspect material will be encountered and such suspect materials should be assumed to be hazardous until proper inspection and testing occurs.

RPF followed applicable industry standards; however, various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspection, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material. Also reference the Limitations document attached to the report.

Summary of Methodology: Lead in Paint Survey

Screening for lead in paint (LP) was performed using bulk sampling of paint or using an X-Ray Fluorescence (XRF) meter for in situ measurements of various painted surfaces. For bulk sampling, samples for determinations were collected by scraping lead paint chips from the substrate. The surveyor attempted to sample layers of paint down to the substrate surface at each sample location. Samples were placed into proper sample containers, the containers were then sealed, labeled and shipped with chain of custody to the RPF AIHA accredited vendor laboratory. The samples were analyzed for total lead content using SW 846 3050B - NIOSH Method 7420. For XRF screening, the device was used and calibrated in accordance with the equipment and industry guidelines applicable for the specific testing performed.

Unless specific TCLP waste characterizations were included in the RPF Scope of Work (SOW), further analysis of waste streams for toxicity characteristics including, but not necessarily limited to lead, may be required prior to disposal of the waste stream. Other toxics may also be present including other heavy metals and PCBs and it may also be necessary to conduct waste characterization for these materials.

Sampling was limited to the specific components as listed in the RPF Report and testing and survey was not completed on every different surface in every room or area in the building. In addition unless otherwise noted in the RPF Report, surface dust, air and soil testing were not conducted during this survey. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing and air monitoring throughout the building, LBP testing of all surfaces in the building, and representative soil testing in the exterior areas should be completed. This type of testing and analysis was beyond the SOW for the initial survey

The intent of this survey is for lead in construction purposes, not for lead abatement, lead inspections, or lead hazard assessments in residential situations. Specific survey and inspection protocols are required for residential lead-based paint inspections that were not included in the RPF SOW.

RPF followed applicable industry standards for construction related identification in nonresidential settings; however, RPF does not warrant or certify that all lead or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to inspect of sample, assumptions regarding the determination of homogenous or like types of paint, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar appearing material. Also reference the Limitations document attached to the report.

LIMITATIONS

1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.

2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.

3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.

4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.

5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm^2 be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

6. Air testing is to be considered a "snap shot" of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.

7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.

8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.

9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.

10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client's Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client's Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.

11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections of the work area to determine completeness of work prior to air clearance testing by RPF.

12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.

13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.

14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.

15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.

16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.

17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.

18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.