(HB)

HUB TESTING LABORATORY, INC.

Environmental Testing Service

95 Beaver Street - Waltham, MA 02453 (781) 893-8330 (781) 893-4414 (fax)

REPORT FOR:

City of Haverhill

4 Summer St.

Haverhill, MA 01830

ATTENTION:

Mr. Jeff Dill

Facilities Manager

A ENTERED

PROJECT:

Emergency Asbestos Removal

Tilton Elementary School

70 Grove Street Haverhill, MA

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SUBMITTED BY:

Frederick T. Boyle

President

DATE:

February 22, 2008

1. INTRODUCTION

Hub Testing Laboratory was contacted to assist in designing an asbestos removal abatement plan in order to repair an emergency plumbing leak in the steam line which provides heat to the school.

Hub contacted several Massachusetts licensed asbestos removal contactors to bid on the project. Mr. Jeff Dill was advised of the lowest bidder and gave the approval to engage a contractor. Hub Testing Laboratory contacted the Commonwealth of Massachusetts Department of Environmental Protection to obtain an emergency waiver.

Hub Testing Laboratories, Inc. was authorized to provide monitoring, laboratory analysis, and technical services to assure a safe work environment during the emergency removal of a short section of pipe insulation. The project occurred at the Tilton Elementary School, located at 70 Grove Street, Haverhill, MA. Asbestos containing materials were removed for repairing purposes. A.C.S of Plaistow, NH, performed the asbestos abatement.

2. SUMMARY REPORT

A.C.S. arrived on-site December 14, 2007 and began set up in the teachers lounge for pipe insulation removal. After a discussion of removal techniques the abatement workers set up a glovebag inside the mini-containment. The workers began by installing one layer of 6 mil polyurethane from the ceiling to the floor in a circle around the section of pipe to be abated. Once the containment was erected the worker then attached the glovebag to the pipe for removal, utilizing a HEPA equipped vacuum for this process. The Project Monitor proceeded to inspect the set-up of the work areas and smoke test the glovebag. When the layout of the work area and glovebag was found to be in compliance with regulations and specification,

A. C. S. was given authorization to commence with the abatement. All materials that were removed were thoroughly wet with amended water, kept sealed in the glovebag, and then placed in a second bag. The A. C. S. worker loaded the waste bags into a lined truck for transport and disposal. After all material was removed the contractor wiped and dried the areas and equipment before removing it from the containments. Once abatement was completed, a final visual inspection was performed to insure the pipes and the containments were visually clean. No deficiencies were found during the inspection.

3. STEPS TAKEN TO PROTECT OCCUPANTS

Building occupants were protected from exposure to asbestos fibers by the following methods.

3.1 BARRIER CONSTRUCTION

Construction of critical barriers separating the work areas from other inhabited areas. The barrier consisted of a mini containment, which was constructed of one layer of 6 mil thickness polyethylene plastic sheeting.

3.2 GLOVEBAG

The insulation was enclosed using a 6 mil polyethylene bag surrounding the area of removal. The bag is used to contain and seal off a limited area of work. Workers seal the area and without exposing themselves to the material they can access and remove the insulation without the asbestos becoming airborne and contaminating the area. Smoke tests are used to ensure glovebag removal was not breached.

3.3 WORKING IN WET CONDITIONS

At all times, amended water was used to wet the asbestos containing materials inside the work area to minimize airborne fiber level concentrations.

3.4 FINAL INSPECTION

The work area was inspected for visible residue after final cleaning of all surfaces. When residue was encountered the contractor re-cleaned until the area was clean and complied with regulatory criteria.

4. STEPS TAKEN TO PROTECT THE ENVIRONMENT

The following steps were taken to prevent the release of airborne asbestos fibers outside the building and to ensure proper disposal of asbestos waste:

Construction of a plastic sheet barrier, reinforced at the door opening. This allowed for removal to be performed without contaminating the environment beyond the barriers.

Removal of asbestos and contaminated items in 6-mil labeled disposable bags double bagged, placed in a waste trailer and removed from the site to an approved landfill.

5. FINAL LEVEL OF ASBESTOS AFTER CLEANING

An inspection was conducted upon completion of the removal process. Wherever visible suspect debris was found, it was removed. At the time of final inspection, no accumulation of visible debris was found in the work area. Air monitoring was conducted throughout the project.

6. WASTE DISPOSAL DOCUMENTATION

The "Waste Shipment Record" must be provided to the Owner by the Contractor within 45 days of the completion of the project as stated in 40 CFR Part 61. The documentation is pending at this time. When it is made available to the Owner by the Contractor it should be maintained with all documentation for this project.

INVOICE

HUB TESTING LABORATORY, INC.

95 Beaver Street Waltham, MA 02453

(781) 893-8330 Fax (781) 893-4414

BILL TO:

MR. JEFF DILL HAVERHILL PUBLIC SCHOOLS 4 SUMMER ST. HAVERHILL, MA 01830 DATE

INVOICE #

3/21/2008

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QUANTITY	DESCRIPTION			RATE	AMOUNT
1	PROJECT: TILTON ELEMENTA MANDAY ASBESTOS DESIGN, CONTAC WAIVER AND SECURING CON	TING DEP FOR		400.00 400.00	400.00 400.00
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				TOTAL	\$800.00