AIR TESTING SERVICES, INC.

ASBESTOS CONSULTANTS & PROJECT MANAGERS

37 Indian Hill Street West Newbury, MA 01985

Office & Fax: (508) 499-0115

Pager: (508) 492-5246 Cellular: (508) 662-7496

ASBESTOS REMOVAL WORK PLAN

PREPARED FOR: City of Haverhill Public Schools

Frank Distefano

4 Summer St., Room 305 Haverhill, MA 01830

DATE: 08-15-96

A.T.S. #: 96264

WORK SITE: Consentino School, 685 Washington St.,

Haverhill, MA

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TO WHOM IT MAY CONCERN:

THIS ASBESTOS REMOVAL WORK PLAN WAS PREPARED TO POINT OUT
UNIQUE TRAITS SPECIFIC TO THIS PARTICULAR BUILDING AND
ABATEMENT CIRCUMSTANCES. IT IS IN NO WAY TO BE INTERPRETED
AS AN ALL ENCOMPASSING PLAN. IT IS TO BE USED IN CONJUNCTION
WITH ALL STATE AND FEDERAL LAWS.

PREPARED FOR: City of Haverhill Public Schools Frank Distefano 4 Summer St., Room 305 Haverhill, MA 01830

DATE: 08-15-96

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DESIGNER: CAESAR ORLANDELLA

MASSACHUSETTS DESIGN CONSULTANT AD - 30355



ASBESTOS REMOVAL WORK PLAN

GENERAL

This Asbestos Removal Work Plan (ARWP) provides a job specific plan of the work procedures to be used by the Asbestos Abatement Contractor for removal of Asbestos Containing Materials (ACM). This AWRP has been prepared in accordance with all current State of Massachusetts and Federal laws.

AWRP Contents:

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Contractor Submittals:

A complete copy of all licenses, certifications, notifications, MSDS's, rules and regulations, project specification if applicable, this ARWP, and emergency phone numbers and contacts will be maintained on site and posted during all operations. Daily logs and sign in sheets will also be kept at the area of the decon entrance.

SUMMARY OF WORK

ACM Removal Work

Scope: Asbestos Abatement: Boiler Room Exhaust Pipe

CONTRACTOR CONTACT: ASAP, Inc Mark Merrick AS 50894

Approximate quantities of ACMs to be removed at the Consentino School Boiler Room

3 Sections - 20 LF, 10 LF, & 10 LF.

TOTALING: 40 Linear Feet ACM Exhaust Pipe Insulation

AIR ANALYSIS

(PCM) Final Air Clearance Samples At Removal Area (totaling less than 260 LF) - 5 Inside Containment PCM Samples Required

General Overview:

All ACM will be removed in accordance to all State and Federal Regulations. Removal and clean-up of the ACM Pipe Insulation will be completed within negative pressure enclosures, including the use of additional primary barriers and wet removal methods. Glove Bag Removal method will be permitted in isolated mini enclosures.

A personnel and equipment decontamination facility will be constructed adjacent to each negative pressure enclosure. All ACM waste will be properly packaged and placed in an asbestos waste container provided by the Contractor. Air testing and inspections will be completed in accordance with State and Federal regulations and the protocols stated herein.

REMOVAL, CLEAN-UP, AND DISPOSAL

Only wet removal of Asbestos Containing Material (Pipe Insulation) will be permitted.

All ACM will be adequately wetted with surfactant (Amended Water) prior to removal and during removal.

All removed ACM will be continuously bagged in 6 mil polyethylene bags as work continues.

The wetting of the ACM will continue until all ACM being removed is sufficiently wetted, removed, and bagged.

At no time will ACM debris be allowed to accumulate or collect on the floor.

The work area will be cleaned at the end of each workday to the extent that no Friable Dry or Wet ACM Debris remains on the floor.

All surfaces inside the work area will be cleaned to the degree that no visible ACM material is seen.

When the work area is completely clean, spray encapsulant will be applied to the entire work area.

All ACM will be disposed by the Contractor in accordance with all Local, State, and Federal laws.

DECONTAMINATION FACILITIES

A decontamination unit will be provided by the contractor adjacent to the negative pressure work areas. The decontamination unit will be the only means of ingress or egress for the negative pressure work areas. The decontamination unit will consist of a serial arrangement of connected rooms or spaces: the changing (clean) room, the shower room, and the equipment (dirty) room.

WORK AREA PREPARATION AND WORK PRACTICES

The contractor shall do the following as the minimal level of facility protection:

Walls covered with 2 layers of 6 mil poly sheeting. Floors covered with 2 layers of 6 mil poly sheeting. HVAC locked out and penetrations sealed.

Non-movable items protected.

Make use of Negative Pressure HEPA Micro Traps vented to the outside establishing negative pressure inside the work area.

Make use of HEPA vacuums.

Post ACM Hazard warning signs.

Label all ACM Waste bags.

Make use of wetting agents and encapsulants.

Workers Entering the Work Area

Each time the work area is entered, workers will remove all street clothing in the changing (clean) room of the decontamination unit and put on new disposable coveralls, new head covers, and clean respirators.

Workers will then proceed through the shower to the equipment (dirty) room and put on work boots.

Workers In the Work Area

Workers in the work area will not eat, drink, smoke, chew tobacco or gum in the work area.

Decontamination Procedures

All workers will use the decontamination shower every time they exit from the work area.

TRAINING AND WORKER PROTECTION

Competent Person

The contractor shall provide a Massachusetts State Licensed Site Supervisor be on-site during all abatement operations.

Worker Training

All workers are to be trained, certified, and accredited as required by the State of Massachusetts.

Medical Examinations

Medical examinations will be provided for all workers to be engaged in abatement work. The medical exams, at a minimum, will meet OSHA requirements as set forth in 29 CFR 1926-58.

Protective Clothing

All workers will don disposable full-body coveralls (Tyvek or equivalent) and disposable head covers prior to and during all work in the abatement area. The contractor will provide eye protection (goggles) and gloves as required by OSHA during work activities.

Respiratory Protection

Respiratory protection (respirators) are required by all workers entering the work area containment. Half-face negative pressure respirators, equipped with high efficiency filters (HEPA Type) will be used as a minimal level respiratory protection. All workers will be trained in the Contractors Respiratory Program as outlined by OSHA.

STOP WORK

A stop work order may be issued at any time by the owner, the owners representative, the asbestos consultant, and or any State or Federal regulatory agency that determines the contractor has failed to conduct work in accordance with all laws and regulations, or safety and health issues are not properly complied with.

In the event that a stop work order is issued, work will not proceed until corrective measures are reviewed and approved by the issuing party and then implemented by the contractor.

AIR MONITORING AND INSPECTIONS

Air Testing Services, Inc., will provide an on-site Project Monitor after Abatement, Final Visual Inspection and Final Air Clearance (PCM) sampling in accordance with applicable State and Federal Regulations in addition to the protocol in this AWRP. All Phase Contrast Microscopy (PCM) will be conducted on site by: Air Testing Services, Inc., West Newbury, MA. The contractor will assume the responsibility of all OSHA required Personnel Monitoring.

GLOVE BAGS

Glove Bags may be utilized when deemed appropriate by the Contractor's Supervisor under the following conditions:

- Glove Bags may be used for Asbestos Abatement in a
 Mini Containment & Full Containment area only.
 Entire Glove Bag use does not exempt the area from a
 (PCM) Final Clearance (5 Samples).
- 2. All critical openings must be sealed completely and all non movable equipment must be covered with 6 mil Poly Sheeting, to ensure no contamination of an outside area in the event of a Glove Bag failure.
- 3. The Supervisor shall make use of Wetting Agents, HEPA Vacuums, Tyvek Suits & Respirators, and the Smoke Testing of each Glove Bag per U.S. Federal Regulations Part 1926-58.

SEQUENCE OF ABATEMENT WORK

Individual abatement operations will be completed in the following sequence:

- 1. Back Ground PCM Samples will be taken by the Project Monitor.
- 2. Work area will be demarcated with proper warning and caution signs.
- 3. Preparation work including establishment of decontamination units, installation of critical and primary barriers as required, and installation, start-up, and testing of pressure differential and air filtration systems will be completed.
- 4. A visual inspection of the work area may be conducted to determine if preparation work is complete in accordance with the specification and AWRP requirements.
- 5. Gross wet removal and packaging of ACM will be completed. Debris and final surface clean-up, in addition to decontamination of the contractors equipment and removal of nonessential abatement equipment from the work area will then be completed.
- 6. Waste will be properly packaged and removed to the storage site provided by the contractor and approved by the facility owner / project monitor.
- 7. A visual inspection of the work area will be preformed to determine that the surfaces and substrate have been adequately cleaned. Re-clean the work area as required.
- 8. Apply lock-down to the substrate and containment surfaces. Allow time for the substrate to dry sufficiently.
- 9. Conduct air clearance monitoring to determine if the work area meets clearance criteria set forth by U.S. E.P.A. / Massachusetts Department of Labor and Industries for asbestos removal using 0.01 F/CC (PCM) with a minimum of 5 PCM samples per work area.
- 10. Once the clearance criteria has been met, disassemble containment barriers and demobilize any remaining abatement equipment.

SPECIAL CONDITIONS

This Asbestos Removal Project must start by: Start Date - Wednesday August 28, 1996

Abatement Complete & Final Visual Clearance by: Friday, August 30, 1996 no later than 12 Noon

PCM Final Air Clearance will run on Friday, August 30, 1996 no later than 4:00 PM.

Completion Date & Final Tear Down will be by: Friday, August 30, 1996 6:00 PM, no later.

Liquidated Damages may be charged for each day the project is past its completion date by the owner at a fine equal to the losses uncured plus attorneys fees relative to said delay.

Boiler Room area is to be one full containment, 1 PCM Clearance Area, by isolating the pipes in a 2 layer poly Full Containment or tunnels under negative air pressure.

Contractor will minimize damage to painted surfaces.

Contractor is to be fully responsible for all ACM contamination and will list the owner on his insurance certificate prior to start date.

Contractor will pay for an additional PCM Final clearance(s) as necessary if the first set fails, PCM fee is \$250.00 per set.

PLM Wipe Samples may be taken by the owner to verify no ACM dust is found at project completion.

AIR TESTING SERVICES, INC.

ASBESTOS CONSULTANTS & PROJECT MANAGERS

37 Indian Hill Street West Newbury, MA 01985

Office & Fax: (508) 499-0115
Pager: (508) 492-5246 Cellular: (508) 662-7496

Dear Frank,

This Asbestos Removal Work Plan is required by Federal AHERA Regulations. It is to become part of your Consentino School Asbestos Management Plan and is to be given to your Designated School Asbestos Manager.

PREPARED FOR: City of Haverhill Public Schools Frank Distefano 4 Summer St., Room 305 Haverhill, MA 01830

DATE: 08-15-96

A.T.S. #: 96264

WORK SITE: Consentino School, 685 Washington St., Haverhill, MA

DESIGNER: CAESAR ORLANDELLA

MASSACHUSETTS DESIGN CONSULTANT AD - 30355

Analysis Methods Per EPA-600/M4-82-020, EPA-600/R-93-116, & NYDOH-ELAP 198.1 NAD - No Asbestos Detected No Asbestos Detected : ASAP - City of Haverhill, MA Comments : 7/34/1998 : 8/3/1998 : 10180 : 03956 Client/ Project Title Laboratory Batch Project Number Date Reported Date Received Asbestos Type(s) Detected | Non-Asbestos Materials lanatsM suoidiä-noN % Analyst % Other Fibrous Mineral Wool % Fiper Glass S % Cellulose Laboratory Bulk Asbestos % Other Analysis Results % Crocidolite efizomA % % Chrysotile Client ID # Description Wali Material, Room 208 Fax #: (603) 893-6240 Tel #: (603) 893-0616 Salem, NH 03079 5 Industrial Way Dames & Moore

Harold Sach annyal

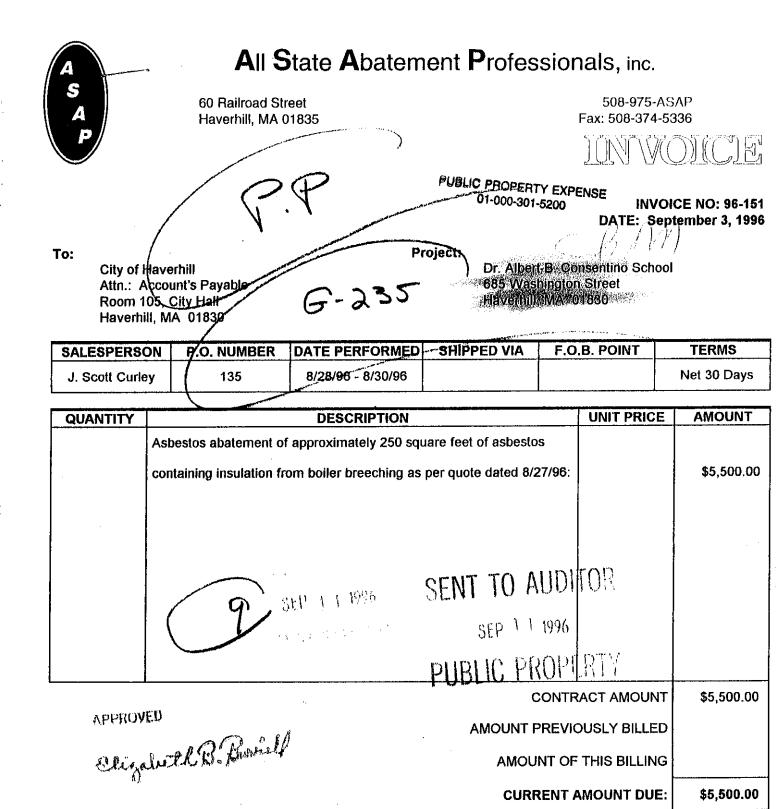
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Consentino School
Stage Curtain

Page 1 of



Make all checks payable to: All State Abatement Professionals, Inc., 60 Railroad Street, Haverhill, MA 01835 If you have any questions concerning this invoice please call the office at (508) 975-ASAP.

THANK YOU FOR YOUR BUSINESS!

ASBESTOS CONSULTANTS & PROJECT MANAGERS 01-000-301-5200

37 Indian Hill Street West Newbury, MA 01985

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INVOICE

CLIENT: City of Haverhill Public Schools

Frank Distefano

4 Summer St., Room 305 Haverhill, MA 01830

DATE: 08-30-96 A.T.S. #: 96264

JOB SITE: Consentino School, 685 Washington St., Haverhill, MA. PROJECT SCOPE: Asbestos Abatement: Boiler Room Exhaust Pipe 3

Sections - 20 LF, 10 LF, & 10 LF.

CLIENT P.O.#: Frank Distefano - #660

TYPE OF SAMPLE: Air Clearance P.C.M. Onsite Analysis (5 Samples)

CONTRACTOR CONTACT: ASAP, Inc Mark Merrick AS 50894

SAMPLE DATE: 08-30-96 Friday

ON-SITE PCM AIR CLEARANCE \$ 250.00

ADDITIONAL ASBESTOS REMOVAL WORK PLAN \$ 150.00

Required by Federal AHERA Regulations

TOTAL BALANCE DUE \$ 400.00

NET 10 DAYS

SENT TO AUDITO

SEP 1 8 1996

PUBLIC PROPERT

Haverhill Public Schools



HAVERHILL HIGH SCHOOL 137 MONUMENT STREET, HAVERHILL, MASSACHUSETTS 01832-2597 TEL: (978) 374-5725 • FAX: (978) 374-3479

William R. Johnson

April 29, 1998

Edward Dufresne, L.E.A. Coordinator Dept. of Health & Inspection City Hall, 4 Summer Street Haverhill, MA 01830

RE:

Consentino School Stage Curtain

Dear Ed.

Enclosed is a piece of the stage curtain outer fabric and inner lining. This curtain is in poor condition and Harold Sachs, the school principal, is concerned whether or not it may contain asbestos.

If you have any information regarding this curtain please forward it to me. If not, would you please test it for asbestos. If asbestos is found would you please schedule the removal of the curtain.

Thank you for your assistance.

Respectfully yours,

William R. Johnson Director of Maintenance

WRJ/avm

cc:

Harold Sachs, Principal

Mm Augher medy Bouchen (1617 436 3710)
3726873 8740111

5 Industrial Way Fax #: (603) 893-6240 Tel #: (603) 893-0616 Salem, NH 03079 Dames & Moure

> Laboratory Bulk Asbestos Analysis Results

> > Client/ Project Title : ASAP - City of Haverhill, MA

Project Number

Laboratory Batch

: 10180 : 03956

: 7/3H/1998

Analyst Date Reported Date Received :CIS : 8/3/1998

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Page 1 of 1											No Asbestos Defected	NAD - No Ashestos Detected	Analysis Methods Per EPA-600/M4-82-020. EPA-600/R-93-116, & NYDOH-ELAP 198.1	Comments	