SUMMARY REPORT: BULK ASBESTOS AND LEAD-BASED PAINT SURVEY 205-209 BRUSH STREET OAKLAND, CALIFORNIA

PREPARED FOR:

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ENVIRONMENTAL HEALTH & SAFETY COMPLIANCE
ENVIRONMENTAL SERVICES DIVISION
530 WATER STREET, 2ND FLOOR
OAKLAND, CA 94607

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SCA PROJECT NO.: B-4965

SEPTEMBER 19, 2001
REVISED: OCTOBER 6, 2001

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List of Common Acronyms and Abbreviations

AAA	= Assumed Asbestos-Containing Materials
ACM	= Asbestos-Containing Materials
AHERA	= Asbestos Hazard Emergency Response Act
BAAQMD	= the Bay Area Air Quality Management District
BK	= black paints
BL	= blue paints
BR	= brown paints
CAC	= Certified Asbestos Consultant
Cal/OSHA	= the California Division of Industrial Safety and Health
Cal/EPA	= the California Environmental Protection Agency
CAULK	= window and door perimeter caulking
CCR	= California Code of Regulations
CERCLA	= Comprehensive Environmental Response, Compensation, and Liability Act
CFR	= Code of Federal Regulations
CHMM	= Certified Hazardous Materials Manager
CIH	= Certified Industrial Hygienist
CPSC	= Consumer Product Safety Commission
CR	= cream-colored paints
CSST	= Certified Site Surveillance Technician
DOHS	= the California Department of Health Services
DS/PLM	= Polarized Light Microscopy with Dispersion Staining
EPA	= the U.S. Environmental Protection Agency
EPRI	= Electric Power Research Institute
EXPJNT	= expansion joint
FIFRA	= Federal Insecticide, Fungicide, and Rodenticide Act
FLVCS	= linoleum flooring
FLVCT	= vinyl composite floor tiles
ft^2	= square feet
GN	= green paints
GROUT	= ceramic tile and concrete grouts
GY	= gray paints
HUD	= the U.S. Department of Housing and Urban Development
LBP	= Lead-Based Paints
LF	= linear feet
$\mu g/cm^2$	= micrograms per centimeter squared
$\mu g/g$	= microgram per gram or equivalent to parts per million
$\mu g/m^3$	= micrograms per cubic meter
μm	= microns
mg/cm^2	= milligrams per squared centimeter
mg/kg	= milligrams per kilogram
MR	= maroon paints
OL	= olive paints
OR	= orange paints
OSHA	= the federal Occupational Safety and Health Administration
OW	= off white paints
PCB	= Polychlorinated Biphenyl
PEL	= Permissible Exposure Level
Penta	= Pentachlorophenol

List of Common Acronyms and Abbreviations Cont.

PISTM	= steam thermal system pipe insulation
PK	= pink paints
ppm	= parts per million
PUTTY	= window pane putty
QA/QC	= Quality Assurance/Quality Control
RCRA	= Resource Conservation Recovery Act
RCW	= Regulated Controlled Waste
RD	= red paints
REA	= Registered Environmental Assessor
RFAG	= built-up tar and gravel roofing
RFPTCH	= roof patching compounds
RFROLL	= rolled roofing
RWQCB	= the Regional Water Quality Control Board
SF	= square feet
TN	= tan paints
TSI	= Thermal System Insulation
WAC	= Washington Administrative Code
WH	= white paints
WLCER	= ceramic wall tiles
WLPL	= wall plaster
YW	= yellow paints

1.0 Executive Summary

SCA Environmental, Inc. (SCA) conducted a partial survey for lead-based paints, asbestos-containing construction materials, and associated environmental hazards at the 205-209 Brush Street in Oakland, CA (hereafter referred to as "the Building") on Tuesday-Thursday, September 11-13, 2001. This survey supplements a previous survey by ACC Environmental conducted in 1996. The results of both surveys are incorporated into the summary below.

Prior to any renovations or demolition, the National Emission Standard for Hazardous Air Pollutants (NESHAP) mandated by the Environmental Protection Agency (EPA) and locally enforced by the Bay Area Air Quality Management District (BAAQMD) require that all buildings be inspected for asbestos-containing materials (ACM) and materials subject to damage or which will be made friable, be removed.

Sampling by SCA in September 2001 and ACC in 1996 found the following ACM:

Building E-412

- Duct taping on rooftop HVAC systems and Mezzanine Level, totaling about 300 LF [ACC Sample I.D. E412-2 with 90 to 95% Chrysotile].
- Whitish-beige insulation on top of the wall-mounted flues on the north side of Room #1, totaling about 20 SF [SCA Sample I.D. INSUL-106-1 with 20 to 30% Chrysotile].
- 9-inch square light brown vinyl floor tiles with white specks and black and gold mastics over concrete and leveling compounds, sampled in Rooms #2, 3 and 9, totaling about 1,797 SF [SCA Sample I.D. FLVCT-107-1 thru 3 with 1-5% Chrysotile in the tan tiles and 5-10% Chrysotile in the black mastics].
- 12-inch square yellow and brown patterned vinyl floor tiles with gold mastics over leveling compounds and concrete substrate, sampled in Room #2, totaling about 66 SF [SCA Sample I.D. FLVCT-108-1 with 1-5% Chrysotile in the tan tiles only].
- 12-inch square dark brown vinyl floor tiles with white and black mastics over concrete substrate, sampled in Room #2, totaling about 10 SF [SCA Sample I.D. FLVCT-110-1 thru 3 with 1-5% Chrysotile in the tiles and <1% Chrysotile in the mastics].
- 12-inch square tannish vinyl floor tiles with white streaks and black mastics over concrete substrate, sampled in Rooms #5 & 6, totaling 100 SF [SCA Sample I.D. FLVCT-112-1 with 1-5% Chrysotile in the mastics only].
- Tannish-brown glues located behind wood paneling over sheetrock wallboard throughout the building, sampled in Room #2, totaling about 3,540 SF [SCA Sample I.D. WLGL-113-1 with 1-5% Chrysotile in the glues].
- 9-inch square brown and yellow vinyl floor tiles with brown mastics over concrete substrates under carpeting in some areas with non-asbestos yellow mastics, sampled in Room #10, totaling about 990 SF [SCA Sample I.D. FLVCT-114-1 with 5-10% Chrysotile in the tiles only].
- Green and white ceramic wall tiles with related grouts located in the Men's & Women's Toilets (Rooms #15 & 16), totaling about 390 SF [SCA Sample I.D. WLCER-116-1 & 3 with 1-5% Chrysotile in the tan glues].
- 9-inch square maroon vinyl floor tiles and mastics under carpeting, sampled in Rooms #7, 12 & 12a, totaling about 1,740 SF [ACC Sample I.D. E-412-7, 8 & 9 with 1-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].
- 9-inch square maroon vinyl floor tiles sampled in the 2nd Floor Front Cabinet in the Hallway, totaling about 64 SF [ACC Sample I.D. E-412-12 with 5-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].

Building E-413

- Roof patching compounds, totaling about 120 SF [ACC Sample I.D. E-413-2 with 10-15% Chrysotile].

Building E-414:

- White skylight glazing putties, totaling about 40 LF [SCA Sample I.D. PUTTY-124-1 with 1-5% Chrysotile].

- 12-inch square tannish vinyl floor tiles with dark tan streaks and black mastics over concrete substrate in Rooms #44 and 66-69, totaling about 160 SF [SCA Sample I.D. FLVCT-125-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the black mastics].
- 12-inch square tan vinyl floor tiles with brown streaks and black mastics over concrete substrate, sampled in Room #52, totaling about 120 SF [SCA Sample I.D. FLVCT-129-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the mastics].
- 12-inch square gray vinyl floor tiles and mastics sampled on the Mezzanine Level, totaling about 825 SF [ACC Sample I.D. E-414-4 with 1-5% Chrysotile in the tiles and 15-20% Chrysotile in the mastics].
- Tar and felt roofing throughout the southeast section, totaling about 6,000 SF [ACC Sample I.D. E-414-9 with 5-10% Chrysotile].
- Roof patching compounds, sampled on the eastern section, totaling about 120 SF [ACC Sample I.D. E-414-10 with 5-10% Chrysotile in the mastics].
- Roof patching compounds, sampled on the southern section, totaling about 210 SF [ACC Sample I.D. E-414-11 & 12 with 1-10% Chrysotile in the mastics].
- White interior window glazing putties, sampled in the Archives (234 Market Street, Room #56), averaging about 24 LF per window, typical of >5 assemblies [SCA Sample I.D. PUTTY-131-1 with 1-5% Chrysotile].

"Trace" asbestos-containing materials (<1% asbestos by weight) sampled by SCA include:

Building E-412

- Sheetrock wallboard and joint compounds, sampled in Room #16 behind the Stairwell, totaling about 400 SF [ACC Sample I.D. E-412-1 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Mezzanine Area, totaling about 760 SF [ACC Sample I.D. E-412-3 & E-412-4 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Men's Toilet near the Electrical Closet [ACC Sample I.D. E-412-14 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite]. [Sheetrock quantities throughout Building E-412 are estimated at about 20,600 SF].

Building E-413:

- Sheetrock ceiling board and joint compounds, totaling about 1,225 SF [SCA Sample I.D. CLSH-123-1 with 1-5% Chrysotile in the Joint Compounds and trace (<1%) Chrysotile composite].

Suspect asbestos-containing materials that were not tested include:

Building E-412:

- Fire doors throughout, totaling about 5 units [SCA Sample I.D. DOOR-AAA, assumed ACM].

Building E-414:

- Transite flue to the roof, totaling about 30 LF [SCA Sample I.D. TRANS-AAA, assumed ACM].

Non-asbestos materials sampled by SCA in September 2001 and ACC in 1996 include:

Building E-412

- Silver-black rolled roofing with black tars over a whitish-brown wood substrate and insulation, totaling about 8,000 SF [SCA Sample I.D. RFROLL-101-1 thru 3].
- Dark gray-black roofing penetration tars and mastics located throughout the roof, totaling about 160 LF [SCA Sample I.D. RFPEN-102-1 thru 3].
- White skylight glazing putties, totaling about 288 LF [SCA Sample I.D. PUTTY-103-1 thru 3].
- Tannish flexible duct connectors located on the rooftop HVAC units, totaling about 20 LF [SCA Sample I.D. HFLEX-105-1 thru 3].
- 6-inch high black and brown vinyl baseboards with related brown mastics over wood and sheetrock substrates, sampled in Room #2, totaling about 470 LF [SCA Sample I.D. BBMAS-109-1 thru 3].

- 4-inch high brown vinyl baseboards with yellow mastics over various substrates, sampled in Room #6, totaling about 54 LF [SCA Sample I.D. BBMAS-111-1 thru 3].
- Gray, white and green terrazzo flooring in the Men's Toilet (Rooms #15 & 16), totaling about 165 SF [SCA Sample I.D. FLTERR-115-1 thru 3].
- 12-inch square tannish vinyl floor tiles with gray streaks and yellow mastics over wood substrate over concrete, sampled in Room #21 [SCA Sample I.D. FLVCT-117-1 thru 3].
- White window glazing putties located on the eastern façade of the building, sampled in Room #2 [SCA Sample I.D. PUTTY-118-1 thru 3].
- Perimeter window caulking at frame to brick substrate, sample in Room #2 [SCA Sample I.D. CAULK-119-1 thru 3].
- Yellow wallpaper glue over sheetrock wallboard within the 2nd Floor Computer Room and Rooms #30-33, totaling about 500 SF [SCA Sample I.D. WLGL-120-1 thru 3].
- 4-inch high blue and gray vinyl baseboards with brown mastics throughout Rooms 30-33 and Room 39 [SCA Sample I.D. BBMAS-121-1 thru 3].
- Stucco exterior plasters on top of brick structure on the eastern façade with tan and brown paints, totaling about 350 SF [SCA Sample I.D. STUCCO-122-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the front Office (Room #12) [ACC Sample I.D. E-412-5].
- 12-inch square off-white acoustical ceiling tiles sampled in Room #12 [ACC Sample I.D. E-412-6].
- 4-inch square patterned yellow linoleum flooring with brown spots, sampled in Bathroom #12b [ACC Sample I.D. E-412-10].
- Tar and felt roofing, sampled on the northeast, west and middle sections of the roof [ACC Sample I.D. E-412-15, 16, 17, 18, 19 & 20].
- 12-inch square off-white acoustical ceiling tiles sampled in the 2nd Floor Computer Room [ACC Sample I.D. E-412-11].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the 2nd Floor eastern Offices [ACC Sample I.D. E-412-13].

Building E-413:

- Tar and felt roofing throughout [ACC Sample I.D. E-413-1].

Building E-414:

- 12-inch square bluish-white vinyl floor tiles with gray streaks and yellow mastics over concrete substrate in the Room #53 Toilets, totaling about 200 SF [SCA Sample I.D. FLVCT-126-1 thru 3].
- White and teal ceramic wall tiles and grouts over sheetrock wallboard throughout Room #53, totaling about 3009 SF [SCA Sample I.D. GROUT-127-1 thru 3].
- 4-inch high brown and gray vinyl baseboards with brown mastics over sheetrock wallboard throughout Rooms #51-53, 55 and other areas, totaling about 240 LF [SCA Sample I.D. BBMAS-128-1 thru 3].
- Yellow carpet mastics sampled in Room #51 and throughout, totaling about 3,400 SF [SCA Sample I.D. CPMAS-130-1 thru 3].
- Duct tape, sampled on the Mezzanine Level [ACC Sample I.D. E-414-3].
- Sheetrock wallboard and joint compounds sampled at the Entrance to the Building in front of the Men's Room and the Entrance to the Diver's Storage Room [ACC Sample I.D. E-414-1 & 2].
- Sheetrock wallboard and joint compounds sampled in the Diver's Storage Room, the Front Entrance on Market Street and the Entrance to the Room [ACC Sample I.D. E-414-5 & 6].
- Tar and felt roofing throughout the northeast and middle sections [ACC Sample I.D. E-414-7 & 8].
- Yellow carpet mastics at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CPMAS-130-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles with sprinkled hole pattern throughout the offices at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CLLI-132-1 thru 3].

Lead-based paints (LBP), as defined by U.S. Department of Housing and Urban Development (HUD), were identified in the building, including but not necessarily limited to the following:

- Green ceramic tile glazing in Building E-412 Toilets [SCA Sample I.D. GR-06-1 with >5.0 mg/cm^2 of lead].
- Beige exterior stucco paints at Building E-412 throughout [SCA Sample I.D. BE-11-1 with 1.1 mg/cm^2].

- Brown exterior stucco paints at Building E-412 [SCA Sample I.D. BR-12-1 with 1.10 mg/cm^2].
- Pink paints on the exterior metal walls of the Garden Shed near E-412 [SCA Sample I.D. PK-15-1 & 2 with 2.6 to 3.10 mg/cm^2].

All other tested paints have a lead content below the HUD definition for LBPs. All site paints shall be treated as having a lead content greater than 600 ppm requiring demolition dust controls and personal protective procedures in compliance with Cal/OSHA's Construction Lead Standard, 8 CCR 1532.1.

In general, some of the interior paints were found to be peeling and chipping requiring stabilization or scraping prior to the proposed demolition. All intact painted substrates may be removed and disposed of as non-hazardous waste.

Many fluorescent fixtures were noted within the buildings that are suspected to contain PCB ballasts and mercury-containing fluorescent lamps. Cal/EPA regulates the disposal of both materials as potential hazardous wastes.

Mercury thermostatic switches for the HVAC system will also require recycling.

2.0 Introduction

This report summarizes the results of the pre-demolition survey conducted at the 205-209 Brush Street in Oakland, California, in September, 2001. The purpose of the survey was to determine the presence of regulated and/or potentially hazardous building materials in the building, which is slated demolition. Materials addressed in the survey include:

- Asbestos-containing materials (ACM);
- Lead-based paints (LBP);
- Other environmental hazards as noted.

Individuals involved in the survey, and their technical certifications, include:

City's Staff	Role	Certifications
Odili Ojukwu, PE	Environmental Services Division Project Manager	Not Applicable
SCA Staff	**Role**	**Certifications**
Glenn R. Cass, PE, CIH, CAC	Senior Consultant	• Certified Asbestos Consultant (CAC #92-0092); • Certified Industrial Hygienist (CIH #A4847); • California Dept. of Health Services' Certified Lead Inspector/Assessor, Project Designer & Project Monitor (DHS #I/D/M-717); • Professional (Mechanical) Engineer (PE #M18976), since 1978; • OSHA 40-hr. HAZWOPER Training per 29 CFR 191.120; • Registered Environmental Assessor (REA-06164); and • Radiation Safety Specialist (Scitec & Niton XRF's).
Dawn Crater, CAC	Project Manager II	• Cal/OSHA Certified Asbestos Consultant (CAC #99-2560), renew 3/10/01. • California Dept. of Health Services' Certified Lead Inspector/Assessor, #I-6386, renew 11/22/01. • OSHA 40-hr. HAZWOPER Training per 29 CFR 1910.120(e), since May 1999. • NIOSH 582 Equivalent - Phase Contrast Microscopy, 1998. • 40-hour DHS Lead-Based Paint Inspector/Assessor Training, U.C. Berkeley, 1999. • Radiation Safety Specialist (Niton XRF), March 27, 1998
Jennifer Muehlhaus	Industrial Hygiene Technician	• AHERA Asbestos Inspector, M&C Environmental, Sept. 2001. • AHERA Asbestos Contractor/Supervisor, M&C Environmental, Sept. 2001. • NIOSH 582 Equivalent - Phase Contrast Microscopy, 2001.

The contract laboratory that provided analytical services for the project is as follows:

Laboratory	Analysis Type	Accreditation
Asbestos TEM Laboratories, Inc., Berkeley, CA	Polarized Light Microscopy (PLM) Bulk Asbestos Analyses	• National Voluntary Laboratory Accreditation Program (NVLAP); • California Environmental Laboratory Accreditation Program (ELAP); and • American Industrial Hygiene Association (AIHA)

Building E-412 is a 2-story storage and office structure, consisting of miscellaneous offices on both floors. Construction consists of rolled tar and felt roofing with sheetrock and wood interior partitions, and stucco, wood, masonry and metal exterior. Flooring consists of a mix of concrete, vinyl floor tile and terrazzo flooring, with some areas concealed by carpeting. Second floor areas comprise only a portion of the 1st Floor footprint, with many areas open to the roof structure. Room numbers utilized by SCA are indicated on the drawings in Attachment 4 hereto. Domestic hot water lines viewed within the Attic area included fiberglass insulation only. No exterior window caulking or putties were observed for Building E-412. Black non-suspect silicon caulking is located above non-ACM skylight putties.

A small metal Gardener's Shed is located immediately outside Building E-412. This building was constructed in 1995 and is not suspected to be asbestos-containing.

Building E-413 consists of a small 1-story structure, measuring about 1,225 SF. Construction of this building is generally concrete with sheetrock interior ceilings. The majority of the concrete block in this building is unpainted. No suspect window or door caulking were observed for this building. Approximately 25 4-foot, 2-tube fluorescent lighting fixtures were observed within this building. No fire doors were observed in Building E-413.

Building E-414 also consists of a 1-story structure with various offices, measuring about 6,270 SF, with a partial Mezzanine above Rooms #51-53. Services formerly supplied through this building with various addresses include an Archives Room (at 234 Market Street – Room #56), a Fire Shop (at 775 3rd Street – Room #57), a Dive Shop (Rooms #50-54) and various offices at 773 3rd Street (Rooms 58-65). Construction consists of metal, masonry and wood exteriors. Flooring consists of a mix of concrete floor and various vinyl floor tiles with carpeting in many areas. Approximately 82 4-foot fluorescent lighting fixtures were observed for this structure with suspect PCB ballasts. No suspect interior window or door caulking or putties were observed within the Dive Shop. No suspect pipe insulation was observed within the building.

3.0 Methodology

3.1 Asbestos Containing Materials

Asbestos sampling was performed in a fashion designed to minimize exposure of the surveyor or others to airborne asbestos fibers. Samples were typically removed from the substrate utilizing a knife or hollow drill bit bored through a wet sponge; the sample material was then placed into an airtight plastic vial. The vial's exterior was decontaminated with a wet sponge, and a unique sample I.D. written on the vial. The vial was then stored in a plastic bag. Sample substrates were patched with a high-temperature caulking compound, where required.

Samples of suspect materials were collected using triplicate sampling procedures. Under these procedures, the first sample is analyzed. If it tests positive for asbestos (>1%), the analysis is suspended for further samples of that material. If the first sample tests only trace positive (between 0.1 to 1%), or negative, then the second and third samples are analyzed sequentially, in order to determine the possible presence of asbestos. If all three samples test negative, the material is considered as non-asbestos. If one or more samples test "trace" positive (<1%), the material is considered to be trace positive. If one or more samples are positive for asbestos, the material is considered positive.

Certain materials, such as plasters and gypboard or sheetrock systems, are frequently non-homogeneous in content. For such materials, multiple samples were gathered at various points in the building, with all samples analyzed to determine the possible presence of asbestos.

All asbestos samples collected were submitted to Asbestos TEM Laboratories for analysis by polarized light microscopy with dispersion staining (DS/PLM). The Bay Area Air Quality Management District's (BAAQMD), the Federal Environmental Protection Agency's (EPA), and California Environmental Protection Agency's (Cal/EPA) regulations all specify the DS/PLM method.

3.2 Lead-Based Paints

Construction records or drawings concerning paints in the buildings were not available. Survey sketches were used to record locations of samples and positive, lead-containing materials. Paint samples from different exterior surfaces were analyzed *in-situ* to identify the presence and extent of lead-containing paints. This included samples from exterior finishes throughout the building. Samples were analyzed using a Niton XL-309 X-Ray Fluorescence (XRF) spectrum analyzer. The XRF analyzer can measure lead contents of several layers of paint without disturbing the surfaces, thus giving immediate feedback on lead contents of paint without destructive testing. The XRF is sensitive to 0.1 milligrams per square centimeter (mg/cm^2) of lead, or well below HUD guideline levels of 1.0 mg/cm^2 of lead in paints.

XRF analysis data are reported as L-shell values. The L-shell value is the lower energy fluorescence showing the level of the surface layer that is readily disturbed and potentially made airborne, thereby posing a potential construction health hazard.

Please note that although LBP were defined against the HUD standard, Cal/OSHA's Construction Lead Standard, 8 CCR 1532.1, applies to all paints with any measured lead content, requiring dust control measures to reduce airborne and ingestion lead dust hazards.

3.3 Polychlorinated Biphenyls

PCB-containing ballasts in fluorescent light fixtures can be identified by visually examining the ballasts in a representative number of light fixtures in the building. The ballast manufacturing industry has taken the active step of labeling new non-PCB containing ballasts, so that any ballast not labeled as non-PCB can reasonably be assumed to contain PCB. For the purposes of cost estimates, SCA anticipated the change-out rate of the ballasts to calculate how many PCB ballasts remain in the building, and verified the calculation by spot-checking several ballasts.

3.4 Fluorescent Lamps

Fluorescent lamps, which contain mercury vapors, were visually observed by SCA during the survey of the buildings in several areas. Mercury is a neurotoxin and a hazardous waste, and Cal/EPA currently regulates its disposal. Disposal quantities exceeding 25 lamps per day may necessitate recycling of the fluorescent lamps.

4.0 Applicable Standards

4.1 Asbestos-Containing Materials

ACM is defined by EPA regulations as those substances containing greater than 1% asbestos. The BAAQMD and the Cal/EPA provide local enforcement of these regulations. Friable ACM with greater than 1% asbestos needs to be disposed of as asbestos waste.

Prior to demolition of a building, the BAAQMD requires abatement of friable ACM, as well as non-friable ACM that may become friable during demolition (practically, this means all non-friable ACM).

Federal Occupational Safety and Health Administrations (OSHA) regulations, locally enforced by CAL/OSHA, defines ACM as substances that contain greater than 1% asbestos. Cal/OSHA also mandates special training, medical exams, personal protective equipment and record keeping for employees working with ACM. If a material contains less than 1% asbestos but more than 0.1% asbestos, the material may be disposed of as non-ACM, but the Cal/OSHA requirements would still have to be followed regarding workers' protection and Contractor licensing.

"Trace" materials are currently regulated in California and require the following:

- Removal using wet methods;
- Prohibition of removal using abrasive saws or methods which would aerosolize the material;
- Prompt clean-up of the impacted zone, using HEPA-filtered vacuums, as applicable;
- Employer registration by Cal/OSHA for removal quantities exceeding 100 sq. ft. per year; and
- Cal/OSHA Carcinogen Registration by the Demolition or Abatement Contractor impacting such materials.

4.2 Lead-Based Paints

Since elemental lead is a suspect carcinogen and known teratogen and neurotoxic in high doses, lead-containing materials need to be identified prior to the on-set of demolition activities. Using combinations of engineering controls and personal protective equipment, lead-containing materials can be remediated safely. Several sources of applicable standards are listed as follows:

1. Lead exposures in the workplace are regulated by Cal/OSHA, which has certain regulatory requirements for identifying and controlling potential lead exposures. Currently applicable regulations for the construction industry have been adopted by Cal/OSHA (8 CCR 1532.1) from the Federal OSHA regulations. The current OSHA 8-hour Permissible Exposure Level (PEL) for lead is 50 $\mu g/m^3$.

2. Current EPA and Cal/EPA regulations do not require LBP to be removed prior to demolition, unless loose and peeling. Provided that the paints are securely adhered to the substrates (i.e., non-flaking or non-peeling), disposal of intact demolition debris can generally be handled in California as non-hazardous and non-RCRA waste.

   In California, loose and peeling LBP or other wastes require characterization and testing for leachability. Disposal requirements are as follows:

   a. If the Total Threshold Level Concentration (TTLC) is <50 ppm, it is considered non-RCRA, non-hazardous waste since it is impossible to exceed the WET test limit of 5 mg/l using the 10 to 1 ratio.
   b. If the TTLC is <350 ppm and the WET test is <5 mg/l then the waste has low leachability and is classified non-RCRA non-hazardous waste.

c. If the TTLC is >350 ppm and the WET test is <5 mg/l then it again has low leachability and is classified as non-RCRA, non-hazardous waste.

d. If the TTLC is >350 ppm and the WET test results are >5 mg/l, then the TCLP must be run. Then if the TCLP is >5 mg/l the waste must be stabilized and if <5-mg/l stabilization is not required. Whether stabilized or not, both conditions are classified as RCRA hazardous waste.

3. The major definitions of LBP or lead-coated surfaces are listed as follows:

   a. HUD defines LBP as paint that contains either $\geq$0.5% by weight of lead, or $\geq$1 mg/cm^2.

   b. Consumer Product Safety Commission (CPSC) prohibits the manufacturing of paint that contains more than 600 ppm (0.06%) of lead.

   Given the myriad of confusing definitions and regulations, this report uses the HUD's definition for the purpose of identifications, but compliance to Cal/OSHA's Construction Lead Standard is required for all paints with any measurable lead content.

4. Lead is on the "Proposition 65" list, given its toxic potential in causing reproductive hazards.

5. The California Department of Health Services (DHS) requires the use of Certified Lead Workers and Supervisors for lead abatement projects at public buildings with a greater than 20 years expected life or whenever work is completed specifically to abate lead-based paints as defined by HUD. The DHS certification requirements do not apply to industrial sites; however, dust controls and personnel protection are still required under 17 CCR Section 35001 through 36100.

4.3 PCB Ballasts and Mercury Lamps

Cal/EPA regulates disposal of both materials. To reduce liability concerns, many building owners opt to have PCB ballasts incinerated, with a record of destruction generated. A slightly less expensive approach involves recycling of the components (and incineration of the small amount of PCB's separately). However, this method may pose liability concerns for building owners.

Mercury lamps are best treated by bundling and recycling. Limited disposal is allowed by Cal/EPA, but not in the quantities typically generated during a major renovation or demolition project.

5.0 Results and Conclusions

5.1 Asbestos

A total of 93 bulk samples of suspect ACM were collected with 112 materials analyzed due to multiple layers of various materials. The detailed results are shown in the Laboratory Report in Attachment 1. Positive materials and all sample locations are shown on the drawings included as Attachment 4. Previous sampling results by ACC Environmental have been incorporated into the summary below with supporting data included in Attachment 3.

Sampling by SCA in September 2001 and ACC in 1996 found the following ACM:

Building E-412

- Duct taping on rooftop HVAC systems and Mezzanine Level, totaling about 300 LF [ACC Sample I.D. E412-2 with 90 to 95% Chrysotile].
- Whitish-beige insulation on top of the wall-mounted flues on the north side of Room #1, totaling about 20 SF [SCA Sample I.D. INSUL-106-1 with 20 to 30% Chrysotile].
- 9-inch square light brown vinyl floor tiles with white specks and black and gold mastics over concrete and leveling compounds, sampled in Rooms #2, 3 and 9, totaling about 1,797 SF [SCA Sample I.D. FLVCT-107-1 thru 3 with 1-5% Chrysotile in the tan tiles and 5-10% Chrysotile in the black mastics].
- 12-inch square yellow and brown patterned vinyl floor tiles with gold mastics over leveling compounds and concrete substrate, sampled in Room #2, totaling about 66 SF [SCA Sample I.D. FLVCT-108-1 with 1-5% Chrysotile in the tan tiles only].
- 12-inch square dark brown vinyl floor tiles with white and black mastics over concrete substrate, sampled in Room #2, totaling about 10 SF [SCA Sample I.D. FLVCT-110-1 thru 3 with 1-5% Chrysotile in the tiles and <1% Chrysotile in the mastics].
- 12-inch square tannish vinyl floor tiles with white streaks and black mastics over concrete substrate, sampled in Rooms #5 & 6, totaling 100 SF [SCA Sample I.D. FLVCT-112-1 with 1-5% Chrysotile in the mastics only].
- Tannish-brown glues located behind wood paneling over sheetrock wallboard throughout the building, sampled in Room #2, totaling about 3,540 SF [SCA Sample I.D. WLGL-113-1 with 1-5% Chrysotile in the glues].
- 9-inch square brown and yellow vinyl floor tiles with brown mastics over concrete substrates under carpeting in some areas with non-asbestos yellow mastics, sampled in Room #10, totaling about 990 SF [SCA Sample I.D. FLVCT-114-1 with 5-10% Chrysotile in the tiles only].
- Green and white ceramic wall tiles with related grouts located in the Men's & Women's Toilets (Rooms #15 & 16), totaling about 390 SF [SCA Sample I.D. WLCER-116-1 & 3 with 1-5% Chrysotile in the tan glues].
- 9-inch square maroon vinyl floor tiles and mastics under carpeting, sampled in Rooms #7, 12 & 12a, totaling about 1,740 SF [ACC Sample I.D. E-412-7, 8 & 9 with 1-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].
- 9-inch square maroon vinyl floor tiles sampled in the 2nd Floor Front Cabinet in the Hallway, totaling about 64 SF [ACC Sample I.D. E-412-12 with 5-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].

Building E-413

- Roof patching compounds, totaling about 120 SF [ACC Sample I.D. E-413-2 with 10-15% Chrysotile].

Building E-414:

- White skylight glazing putties, totaling about 40 LF [SCA Sample I.D. PUTTY-124-1 with 1-5% Chrysotile].
- 12-inch square tannish vinyl floor tiles with dark tan streaks and black mastics over concrete substrate in Rooms #44 and 66-69, totaling about 160 SF [SCA Sample I.D. FLVCT-125-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the black mastics].

- 12-inch square tan vinyl floor tiles with brown streaks and black mastics over concrete substrate, sampled in Room #52, totaling about 120 SF [SCA Sample I.D. FLVCT-129-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the mastics].
- 12-inch square gray vinyl floor tiles and mastics sampled on the Mezzanine Level, totaling about 825 SF [ACC Sample I.D. E-414-4 with 1-5% Chrysotile in the tiles and 15-20% Chrysotile in the mastics].
- Tar and felt roofing throughout the southeast section, totaling about 6,000 SF [ACC Sample I.D. E-414-9 with 5-10% Chrysotile].
- Roof patching compounds, sampled on the eastern section, totaling about 120 SF [ACC Sample I.D. E-414-10 with 5-10% Chrysotile in the mastics].
- Roof patching compounds, sampled on the southern section, totaling about 210 SF [ACC Sample I.D. E-414-11 & 12 with 1-10% Chrysotile in the mastics].
- White interior window glazing putties, sampled in the Archives (234 Market Street, Room #56), averaging about 24 LF per window, typical of >5 assemblies [SCA Sample I.D. PUTTY-131-1 with 1-5% Chrysotile].

"Trace" asbestos-containing materials (<1% asbestos by weight) sampled by SCA include:

Building E-412

- Sheetrock wallboard and joint compounds, sampled in Room #16 behind the Stairwell, totaling about 400 SF [ACC Sample I.D. E-412-1 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Mezzanine Area, totaling about 760 SF [ACC Sample I.D. E-412-3 & E-412-4 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Men's Toilet near the Electrical Closet [ACC Sample I.D. E-412-14 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].

Building E-413:

- Sheetrock ceiling board and joint compounds, totaling about 1,225 SF [SCA Sample I.D. CLSH-123-1 with 1-5% Chrysotile in the Joint Compounds and trace (<1%) Chrysotile composite].

Suspect asbestos-containing materials that were not tested include:

Building E-412:

- Fire doors throughout, totaling about 5 units [SCA Sample I.D. DOOR-AAA, assumed ACM].

Building E-414:

- Transite flue to the roof, totaling about 30 LF [SCA Sample I.D. TRANS-AAA, assumed ACM].
- Fire doors throughout, totaling about 5 units [SCA Sample I.D. DOOR-AAA, assumed ACM].

5.2 Non-Asbestos Materials (non-ACM)

Non-asbestos materials sampled by SCA in September 2001 and ACC in 1996 include:

Building E-412

- Silver-black rolled roofing with black tars over a whitish-brown wood substrate and insulation, totaling about 8,000 SF [SCA Sample I.D. RFROLL-101-1 thru 3].
- Dark gray-black roofing penetration tars and mastics located throughout the roof, totaling about 160 LF [SCA Sample I.D. RFPEN-102-1 thru 3].
- White skylight glazing putties, totaling about 288 LF [SCA Sample I.D. PUTTY-103-1 thru 3].
- Tannish flexible duct connectors located on the rooftop HVAC units, totaling about 20 LF [SCA Sample I.D. HFLEX-105-1 thru 3].
- 6-inch high black and brown vinyl baseboards with related brown mastics over wood and sheetrock substrates, sampled in Room #2, totaling about 470 LF [SCA Sample I.D. BBMAS-109-1 thru 3].

- 4-inch high brown vinyl baseboards with yellow mastics over various substrates, sampled in Room #6, totaling about 54 LF [SCA Sample I.D. BBMAS-111-1 thru 3].
- Gray, white and green terrazzo flooring in the Men's Toilet (Rooms #15 & 16), totaling about 165 SF [SCA Sample I.D. FLTERR-115-1 thru 3].
- 12-inch square tannish vinyl floor tiles with gray streaks and yellow mastics over wood substrate over concrete, sampled in Room #21 [SCA Sample I.D. FLVCT-117-1 thru 3].
- White window glazing putties located on the eastern façade of the building, sampled in Room #2 [SCA Sample I.D. PUTTY-118-1 thru 3].
- Perimeter window caulking at frame to brick substrate, sample in Room #2 [SCA Sample I.D. CAULK-119-1 thru 3].
- Yellow wallpaper glue over sheetrock wallboard within the 2nd Floor Computer Room and Rooms #30-33, totaling about 500 SF [SCA Sample I.D. WLGL-120-1 thru 3].
- 4-inch high blue and gray vinyl baseboards with brown mastics throughout Rooms 30-33 and Room 39 [SCA Sample I.D. BBMAS-121-1 thru 3].
- Stucco exterior plasters on top of brick structure on the eastern façade with tan and brown paints, totaling about 350 SF [SCA Sample I.D. STUCCO-122-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the front Office (Room #12) [ACC Sample I.D. E-412-5].
- 12-inch square off-white acoustical ceiling tiles sampled in Room #12 [ACC Sample I.D. E-412-6].
- 4-inch square patterned yellow linoleum flooring with brown spots, sampled in Bathroom #12b [ACC Sample I.D. E-412-10].
- Tar and felt roofing, sampled on the northeast, west and middle sections of the roof [ACC Sample I.D. E-412-15, 16, 17, 18, 19 & 20].
- 12-inch square off-white acoustical ceiling tiles sampled in the 2nd Floor Computer Room [ACC Sample I.D. E-412-11].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the 2nd Floor eastern Offices [ACC Sample I.D. E-412-13].

Building E-413:

- Tar and felt roofing throughout [ACC Sample I.D. E-413-1].

Building E-414:

- 12-inch square bluish-white vinyl floor tiles with gray streaks and yellow mastics over concrete substrate in the Room #53 Toilets, totaling about 200 SF [SCA Sample I.D. FLVCT-126-1 thru 3].
- White and teal ceramic wall tiles and grouts over sheetrock wallboard throughout Room #53, totaling about 3009 SF [SCA Sample I.D. GROUT-127-1 thru 3].
- 4-inch high brown and gray vinyl baseboards with brown mastics over sheetrock wallboard throughout Rooms #51-53, 55 and other areas, totaling about 240 LF [SCA Sample I.D. BBMAS-128-1 thru 3].
- Yellow carpet mastics sampled in Room #51 and throughout, totaling about 3,400 SF [SCA Sample I.D. CPMAS-130-1 thru 3].
- Duct tape, sampled on the Mezzanine Level [ACC Sample I.D. E-414-3].
- Sheetrock wallboard and joint compounds sampled at the Entrance to the Building in front of the Men's Room and the Entrance to the Diver's Storage Room [ACC Sample I.D. E-414-1 & 2].
- Sheetrock wallboard and joint compounds sampled in the Diver's Storage Room, the Front Entrance on Market Street and the Entrance to the Room [ACC Sample I.D. E-414-5 & 6].
- Tar and felt roofing throughout the northeast and middle sections [ACC Sample I.D. E-414-7 & 8].
- Yellow carpet mastics at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CPMAS-130-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles with sprinkled hole pattern throughout the offices at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CLLI-132-1 thru 3].

5.3 Lead-Based Paints

Representative paints with a lead content exceeding the HUD definition for "lead-based paints" includes:

- Green ceramic tile glazing in Building E-412 Toilets [SCA Sample I.D. GR-06-1 with >5.0 mg/cm^2 of lead].
- Beige exterior stucco paints at Building E-412 throughout [SCA Sample I.D. BE-11-1 with 1.1 mg/cm^2].
- Brown exterior stucco paints at Building E-412 [SCA Sample I.D. BR-12-1 with 1.10 mg/cm^2].
- Pink paints on the exterior metal walls of the Garden Shed near E-412 [SCA Sample I.D. PK-15-1 & 2 with 2.6 to 3.10 mg/cm^2].

Most of the site's paints were found to be below the HUD LBP criteria, although dust control procedures are required throughout the demolition of painted elements to comply with the Cal/OSHA regulations under 8 CCR 1532.1. All site paints shall be treated as having a lead content greater than 600 ppm requiring dust control procedures in compliance with 8 CCR 1532.1.

Loose and peeling paints should be removed under controlled procedures prior to any demolition of the structure. None of the applicable regulations require removal of LBP prior to demolition or renovation if the paints are securely adhered to the substrates (i.e., non-flaking or non-peeling). Disposal of the demolition debris in this case can be handled as non-hazardous and non-RCRA waste after the loose and flaking paints have been removed, as long as demolition practices do not compromise worker safety.

Conventional demolition techniques should be employed for all painted surfaces with the Contractor complying with applicable OSHA and Cal/OSHA statutes regarding:

- Worker awareness training;
- Exposure monitoring, as needed;
- Medical examinations, including blood lead level testing; and
- Establishing a written respiratory protection program.

5.4 Polychlorinated Biphenyls

All fluorescent fixtures within rooms should be treated as having suspect PCB ballasts, which will require disposal as a hazardous waste. SCA noted numerous fixtures throughout the buildings.

5.5 Fluorescent Lamps

Mercury-containing fluorescent lamps may be present on-site in limited quantities, associated with any discovered fluorescent fixtures. CAL/EPA allows disposal as regular waste of up to 25 lamps per day per facility, although recycling vendors for reclaiming the mercury vapor are commonly available for services at approximately $0.15 per lineal foot. Note that costs for fluorescent tube disposal do not tend to be significant compared to overall abatement costs; furthermore, given the limited size of this facility, it is probable that the Contractor will dispose of all lamps over a period of several days and be within the Cal/EPA standard for mercury-containing lamp disposal.

Mercury vapor lamps around the building's exterior all appear to be broken; intact units, if identified, should be included in the recycled materials as well as mercury thermostatic switches for the HVAC system.

6.0 Limitations and Exclusions

SCA warrants that this survey was performed using due care and state of the art techniques. Beyond this, SCA does not warrant or guarantee the survey. Despite the care exercised, some materials may not have been identified, or may have been incompletely identified. This condition may occur due to renovations or original construction practices that concealed older materials, and/or visually similar materials with different compositions.

This document is not a stand-alone document; abatement of materials is recommended to be completed under the oversight and design of an AHERA-accredited Project Designer and Certified Asbestos Consultant. Although due care is exercised in the course of the survey, concealed materials may be found in the course of performing the abatement or demolition; a contingency budget should be included in any cost estimates to cover unexpected conditions.

Attachment 1

Laboratory Results - Asbestos

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
RFROLL-101-1. Lab ID # 704-990-001A	None Detected	1) 5-10% Fiberglass 2) 90-95% Tar, Bndr, Calc, Qtz 3) 4) Sep-14-01	Roofing Felt/Tar-Black
RFROLL-101-1. Lab ID # 704-990-001B	None Detected	1) 2-10% Cellulose, Fiberglass 2) 90-98% Gyp, Calc, Mica, Other m.p. 3) 4) Sep-14-01	Sheetrock-Off-White
RFROLL-101-2. Lab ID # 704-990-002A	None Detected	1) 5-10% Fiberglass 2) 90-95% Tar, Bndr, Calc, Qtz 3) 4) Sep-14-01	Roofing Felt/Tar-Black
RFROLL-101-2. Lab ID # 704-990-002B	None Detected	1) 90-95% Cellulose 2) 5-10% Glue, Opq 3) 4) Sep-14-01	Insulation-Brown
RFROLL-101-3. Lab ID # 704-990-003	None Detected	1) 5-10% Fiberglass 2) 90-95% Tar, Bndr, Calc, Qtz 3) 4) Sep-14-01	Roofing Felt/Tar-Black
RFPEN-102-1. Lab ID # 704-990-004	None Detected	1) 5-10% Cellulose 2) 90-95% Tar, Bndr, Calc, Opq 3) 4) Sep-14-01	Roofing Felt/Tar-Black/Silver
RFPEN-102-2. Lab ID # 704-990-005	None Detected	1) 5-10% Cellulose 2) 90-95% Tar, Bndr, Calc, Opq 3) 4) Sep-14-01	Roofing Felt/Tar-Black/Silver
RFPEN-102-3. Lab ID # 704-990-006	None Detected	1) 5-10% Cellulose 2) 90-95% Tar, Bndr, Calc, Opq 3) 4) Sep-14-01	Roofing Felt/Tar-Black/Silver
PUTTY-103-1. Lab ID # 704-990-007	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-14-01	Putty-Beige
PUTTY-103-2. Lab ID # 704-990-008	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-14-01	Putty-Beige

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

ASBESTOS TEM LABORATORIES, INC. 1409 FIFTH STREET, BERKELEY, CA 94710 (510) 528-0108
With Branch Offices Located At: 952 GREG STREET, SPARKS, NV 89431

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PUTTY-103-3.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-14-01		Putty-Beige
Lab ID # 704-990-009					
HFLEX-105-1.		None Detected	1) 90-95% Fiberglass 2) 5-10% GlassFrags, Opq 3) 4) Sep-14-01		Insulation-White
Lab ID # 704-990-010A					
HFLEX-105-1.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-14-01		Paint-Beige
Lab ID # 704-990-010B					
HFLEX-105-2.		None Detected	1) 90-95% Fiberglass 2) 5-10% GlassFrags, Opq 3) 4) Sep-14-01		Insulation-White
Lab ID # 704-990-011A					
HFLEX-105-2.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-14-01		Paint-Beige
Lab ID # 704-990-011B					
HFLEX-105-3.		None Detected	1) 90-95% Fiberglass 2) 5-10% GlassFrags, Opq 3) 4) Sep-14-01		Insulation-White
Lab ID # 704-990-012A					
HFLEX-105-3.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-14-01		Paint-Beige
Lab ID # 704-990-012B					
INSUL-106-1.	20-30%	Chrysotile	1) 20-30% Cellulose 2) 40-60% Opq, Bndr, Calc, Other m.p. 3) 4) Sep-14-01		Insulation-Off-White
Lab ID # 704-990-013					
INSUL-106-2.		Not Analyzed	1) 2) 3) 4) Sep-14-01		
Lab ID # 704-990-014					
INSUL-106-3.		Not Analyzed	1) 2) 3) 4) Sep-14-01		
Lab ID # 704-990-015					

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

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ANALYTICAL REPORT

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FLVCT-107-1. Lab ID # 704-990-016A	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-14-01	Floor Tile-Tan
FLVCT-107-1. Lab ID # 704-990-016B		None Detected	1) None Detected 2) 99-100% Glue, Other m.p. 3) 4) Sep-14-01	Glue-Tan
FLVCT-107-2. Lab ID # 704-990-017		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-14-01	Glue-Tan
FLVCT-107-3. Lab ID # 704-990-018	5-10%	Chrysotile	1) None Detected 2) 90-95% Tar, Bndr, Calc, Other m.p. 3) 4) Sep-14-01	Mastic-Black
FLVCT-108-1. Lab ID # 704-990-019A	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-14-01	Floor Tile-Tan
FLVCT-108-1. Lab ID # 704-990-019B		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-14-01	Glue-Tan
FLVCT-108-2. Lab ID # 704-990-020		None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-14-01	Glue-Yellow
FLVCT-108-3. Lab ID # 704-990-021		None Detected	1) 1-5% Cellulose 2) 95-99% Glue, Opq, Calc, Other m.p. 3) 4) Sep-14-01	Glue-Yellow
BBMAS-109-1. Lab ID # 704-990-022		None Detected	1) 1-5% Talc 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-14-01	Glue-Brown
BBMAS-109-2. Lab ID #. 704-990-023		None Detected	1) 1-5% Talc 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-14-01	Glue-Brown

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

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BBMAS-109-3. Lab ID # 704-990-024		None Detected	1) 1-5% Talc 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-14-01	 Glue-Brown
FLVCT-110-1. Lab ID # 704-990-025A	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	 Floor Tile-Black
FLVCT-110-1. Lab ID # 704-990-025B		None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-17-01	 Glue-Beige
FLVCT-110-2. Lab ID # 704-990-026		None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-17-01	 Glue-Beige
FLVCT-110-3. Lab ID # 704-990-027	<1%	Chrysotile	1) None Detected 2) 100-100% Glue, Tar, Bndr, Calc, Qtz 3) 4) Sep-17-01	 Glue/Mastic-Beige/Black
BBMAS-111-1. Lab ID # 704-990-028A		None Detected	1) 1-5% Cellulose 2) 95-99% Glue, Opq, Calc, Other m.p. 3) 4) Sep-17-01	 Glue-Beige
BBMAS-111-1. Lab ID # 704-990-028B		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	 Baseboard-Brown
BBMAS-111-2. Lab ID # 704-990-029A		None Detected	1) 1-5% Cellulose 2) 95-99% Glue, Opq, Calc, Other m.p. 3) 4) Sep-17-01	 Glue-Beige
BBMAS-111-2. Lab ID # 704-990-029B		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	 Baseboard-Brown
BBMAS-111-3. Lab ID # 704-990-030A		None Detected	1) 1-5% Cellulose 2) 95-99% Glue, Opq, Calc, Other m.p. 3) 4) Sep-17-01	 Glue-Beige

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

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ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

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BBMAS-111-3. Lab ID # 704-990-030B		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Baseboard-Brown
FLVCT-112-1. Lab ID # 704-990-031A		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Beige
FLVCT-112-1. Lab ID # 704-990-031B	1-5%	Chrysotile	1) None Detected 2) 95-99% Tar, Bndr, Calc, Glue, Opq 3) 4) Sep-17-01	Mastic/Glue-Black/Beige
FLVCT-112-2. Lab ID # 704-990-032		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Beige
FLVCT-112-3. Lab ID # 704-990-033		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Beige
WLGL-113-1. Lab ID # 704-990-034	1-5%	Chrysotile	1) None Detected 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Glue-Brown
WLGL-113-2. Lab ID # 704-990-035		Not Analyzed	1) 2) 3) 4) Sep-17-01	
WLGL-113-3. Lab ID # 704-990-036		Not Analyzed	1) 2) 3) 4) Sep-17-01	
FLVCT-114-1. Lab ID # 704-990-037A	5-10%	Chrysotile	1) None Detected 2) 90-95% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Tan
FLVCT-114-1. Lab ID # 704-990-037B		None Detected	1) None Detected 2) 99-100% Tar, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Mastic-Black

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD	DESCRIPTION LAB
FLVCT-114-2. Lab ID # 704-990-038		None Detected	1) None Detected 2) 99-100% Tar, Opq, Qtz, Other m.p. 3) 4) Sep-17-01		Mastic-Black
FLVCT-114-3. Lab ID # 704-990-039		None Detected	1) None Detected 2) 99-100% Tar, Opq, Qtz, Other m.p. 3) 4) Sep-17-01		Mastic-Black
FLTERR-115-1. Lab ID # 704-990-040		None Detected	1) None Detected 2) 99-100% Qtz, Opq, Other m.p. 3) 4) Sep-17-01		CerTile-Off-White
FLTERR-115-2. Lab ID # 704-990-041		None Detected	1) None Detected 2) 99-100% Qtz, Opq, Other m.p. 3) 4) Sep-17-01		CerTile-Off-White
FLTERR-115-3. Lab ID # 704-990-042		None Detected	1) None Detected 2) 99-100% Qtz, Opq, Other m.p. 3) 4) Sep-17-01		CerTile-Off-White
WLCER-116-1. Lab ID # 704-990-043A		None Detected	1) None Detected 2) 99-100% Qtz, Opq, Other m.p. 3) 4) Sep-17-01		CerTile-White
WLCER-116-1. Lab ID # 704-990-043B		None Detected	1) None Detected 2) 99-100% Cal, Bndr, Other m.p. 3) 4) Sep-17-01		Grout-White
WLCER-116-1. Lab ID # 704-990-043C	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Glue-Tan
WLCER-116-2. Lab ID # 704-990-044A		None Detected	1) None Detected 2) 99-100% Qtz, Opq, Other m.p. 3) 4) Sep-17-01		CerTile-White
WLCER-116-2. Lab ID # 704-990-044B		None Detected	1) None Detected 2) 99-100% Cal, Bndr, Other m.p. 3) 4) Sep-17-01		Grout-White

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
WLCER-116-3.		None Detected	1) None Detected 2) 99-100% Cal, Bndr, Other m.p. 3) 4) Sep-17-01	Grout-White
Lab ID # 704-990-045A				
WLCER-116-3.	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Glue-Tan
Lab ID # 704-990-045B				
FLVCT-117-1.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Tan
Lab ID # 704-990-046A				
FLVCT-117-1.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Beige
Lab ID # 704-990-046B				
FLVCT-117-2.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Tan
Lab ID # 704-990-047A				
FLVCT-117-2.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Beige
Lab ID # 704-990-047B				
FLVCT-117-3.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Tan
Lab ID # 704-990-048A				
FLVCT-117-3.		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Beige
Lab ID # 704-990-048B				
PUTTY-118-1.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-Grey
Lab ID # 704-990-049A				
PUTTY-118-1.		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-White
Lab ID # 704-990-049B				

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
PUTTY-118-2. Lab ID # 704-990-050A	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-Grey
PUTTY-118-2. Lab ID # 704-990-050B	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-White
PUTTY-118-3. Lab ID # 704-990-051	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-White
CAULK-119-1. Lab ID # 704-990-052	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Caulk-White
CAULK-119-2. Lab ID # 704-990-053	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Caulk-White
CAULK-119-3. Lab ID # 704-990-054	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Caulk-White
WLGL-120-1. Lab ID # 704-990-055	None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Off-White
WLGL-120-2. Lab ID # 704-990-056	None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Off-White
WLGL-120-3. Lab ID # 704-990-057	None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Off-White
BBMAS-121-1. Lab ID # 704-990-058	None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Glue-Brown

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD	DESCRIPTION LAB
BBMAS-121-2.		None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01		Glue-Brown
Lab ID # 704-990-059					
BBMAS-121-3.		None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01		Glue-Brown
Lab ID # 704-990-060					
STUCCO-122-1.		None Detected	1) 1-5% Cellulose 2) 95-99% Qtz, Calc, Bndr, Mica, Opq 3) 4) Sep-17-01		Stucco-Grey
Lab ID # 704-990-061					
STUCCO-122-2.		None Detected	1) 1-5% Cellulose 2) 95-99% Qtz, Calc, Bndr, Mica, Opq 3) 4) Sep-17-01		Stucco-Grey
Lab ID # 704-990-062					
STUCCO-122-3.		None Detected	1) 1-5% Cellulose 2) 95-99% Qtz, Calc, Bndr, Mica, Opq 3) 4) Sep-17-01		Stucco-Grey
Lab ID # 704-990-063					
CLSH-123-1.	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Mica, Other m.p. 3) 4) Sep-17-01		Mud-Beige
Lab ID # 704-990-064					
CLSH-123-2.		Not Analyzed	1) 2) 3) 4) Sep-17-01		
Lab ID # 704-990-065					
CLSH-123-3.		Not Analyzed	1) 2) 3) 4) Sep-17-01		
Lab ID # 704-990-066					
PUTTY-124-1.	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Putty-Off-White
Lab ID # 704-990-067					
PUTTY-124-2.		Not Analyzed	1) 2) 3) 4) Sep-17-01		
Lab ID # 704-990-068					

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD	DESCRIPTION LAB
PUTTY-124-3. Lab ID # 704-990-069		Not Analyzed	1) 2) 3) 4) Sep-17-01		
FLVCT-125-1. Lab ID # 704-990-070A	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Floor Tile-Off-White
FLVCT-125-1. Lab ID # 704-990-070B	5-10%	Chrysotile	1) None Detected 2) 90-95% Tar, Bndr, Calc, Other m.p. 3) 4) Sep-17-01		Mastic-Black
FLVCT-125-2. Lab ID # 704-990-071		Not Analyzed	1) 2) 3) 4) Sep-17-01		
FLVCT-125-3. Lab ID # 704-990-072		Not Analyzed	1) 2) 3) 4) Sep-17-01		
FLVCT-126-1. Lab ID # 704-990-073A		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Floor Tile-Grey
FLVCT-126-1. Lab ID # 704-990-073B		None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-17-01		Glue-Yellow
FLVCT-126-2. Lab ID # 704-990-074A		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Floor Tile-Grey
FLVCT-126-2. Lab ID # 704-990-074B		None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-17-01		Glue-Yellow
FLVCT-126-3. Lab ID # 704-990-075A		None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01		Floor Tile-Grey

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ **Analyst** _____

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
FLVCT-126-3. Lab ID # 704-990-075B	None Detected	1) None Detected 2) 99-100% Glue, Opq, Calc, Qtz 3) 4) Sep-17-01	Glue-Yellow
GROUT-127-1. Lab ID # 704-990-076	None Detected	1) None Detected 2) 99-100% Qtz, Calc, Opq, Other m.p. 3) 4) Sep-17-01	Grout-Off-White
GROUT-127-2. Lab ID # 704-990-077	None Detected	1) None Detected 2) 99-100% Qtz, Calc, Opq, Other m.p. 3) 4) Sep-17-01	Grout-Off-White
GROUT-127-3. Lab ID # 704-990-078	None Detected	1) None Detected 2) 99-100% Qtz, Calc, Opq, Other m.p. 3) 4) Sep-17-01	Grout-Off-White
BBMAS-128-1. Lab ID # 704-990-079A	None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Glue-Brown
BBMAS-128-1. Lab ID # 704-990-079B	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Baseboard-Brown
BBMAS-128-2. Lab ID # 704-990-080A	None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Glue-Brown
BBMAS-128-2. Lab ID # 704-990-080B	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Baseboard-Brown
BBMAS-128-3. Lab ID # 704-990-081A	None Detected	1) 1-5% Wollastonite 2) 95-99% Glue, Opq, Qtz, Other m.p. 3) 4) Sep-17-01	Glue-Brown
BBMAS-128-3. Lab ID # 704-990-081B	None Detected	1) None Detected 2) 99-100% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Baseboard-Brown

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

Address: SCA Environmental Inc
80 Grand Ave 4th Floor
Oakland, CA 94612

Samples Indicated: 93
Reg. Samples Analyzed: 81
Split Layers Analyzed: 31

Report No. 28830
Date Submitted: Sep-14-01
Date Reported: Sep-17-01

Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA (1) Non-Asbestos Fibers (2) Matrix Materials (3) Date/Time Collected (4) Date Analyzed	DESCRIPTION FIELD / LAB
FLVCT-129-1. Lab ID # 704-990-082A	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Floor Tile-Off-White
FLVCT-129-1. Lab ID # 704-990-082B	5-10%	Chrysotile	1) None Detected 2) 90-95% Tar, Bndr, Calc, Other m.p. 3) 4) Sep-17-01	Mastic-Black
FLVCT-129-2. Lab ID # 704-990-083		Not Analyzed	1) 2) 3) 4) Sep-17-01	
FLVCT-129-3. Lab ID # 704-990-084		Not Analyzed	1) 2) 3) 4) Sep-17-01	
CPMAS-130-1. Lab ID # 704-990-085A		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Yellow
CPMAS-130-1. Lab ID # 704-990-085B		None Detected	1) 1-5% Cellulose 2) 95-99% Gyp, Other m.p. 3) 4) Sep-17-01	LevelCompound-Off-White
CPMAS-130-2. Lab ID # 704-990-086A		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Yellow
CPMAS-130-2. Lab ID # 704-990-086B		None Detected	1) 1-5% Cellulose 2) 95-99% Gyp, Other m.p. 3) 4) Sep-17-01	LevelCompound-Off-White
CPMAS-130-3. Lab ID # 704-990-087A		None Detected	1) None Detected 2) 99-100% Glue, Qtz, Opq, Other m.p. 3) 4) Sep-17-01	Glue-Yellow
CPMAS-130-3. Lab ID # 704-990-087B		None Detected	1) 1-5% Cellulose 2) 95-99% Gyp, Other m.p. 3) 4) Sep-17-01	LevelCompound-Off-White

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

POLARIZED LIGHT MICROSCOPY
ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: D. Crater

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Oakland, CA 94612

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Job Site / No. Port of Oakland 205 - 209 Brush Survey
B-4965

SAMPLE ID	ASBESTOS %	ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
PUTTY-131-1. Lab ID # 704-990-088	1-5%	Chrysotile	1) None Detected 2) 95-99% Calc, Bndr, Other m.p. 3) 4) Sep-17-01	Putty-Off-White
PUTTY-131-2. Lab ID # 704-990-089		Not Analyzed	1) 2) 3) 4) Sep-17-01	
PUTTY-131-3. Lab ID # 704-990-090		Not Analyzed	1) 2) 3) 4) Sep-17-01	
CLLI-132-1. Lab ID # 704-990-091		None Detected	1) 40-60% FiberGlass, Cellulose 2) 40-60% GlassFrags, GlassFoam, Bndr 3) 4) Sep-17-01	Ceiling Tile-Grey
CLLI-132-2. Lab ID # 704-990-092		None Detected	1) 40-60% FiberGlass, Cellulose 2) 40-60% GlassFrags, GlassFoam, Bndr 3) 4) Sep-17-01	Ceiling Tile-Grey
CLLI-132-3. Lab ID # 704-990-093		None Detected	1) 40-60% FiberGlass, Cellulose 2) 40-60% GlassFrags, GlassFoam, Bndr 3) 4) Sep-17-01	Ceiling Tile-Grey
Lab ID #			1) 2) 3) 4)	
Lab ID #			1) 2) 3) 4)	
Lab ID #			1) 2) 3) 4)	
Lab ID #			1) 2) 3) 4)	

Detection Limit of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Lab Manager _____ Analyst _____

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BLDG NAME: ≤25 characters: Port - 205-209 Brush (Bldg. E-412)

BLDG NO:

DEPT CODE: B4965

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS yellow

Date Inspected: 9/11/01

Inspected by: SCA DLC/JEM

Consultant Code Surveyors' Initials

Page 1 of 6 MSDS for this bldg

1. Aircell Type 2. Block Type 3. Board Type 4. Paper Wrap 5. Loose Fill 6. trowelled On 7. mud Type 8. sprayed-On 9. chunks/Powdery 10. beneath non-ACM 11. multiple layers 12. wool felt

Sample Identification (incld Bldg No.)						Sample Location Data											
Predominance Group Codes Allowed: blank,						Functional Space			Coordinates								
HOMOGENEOUS MATERIAL ID	A to Z	Linked Mat'l No.	B D	Sample Type Sub-No.		Space / Room Type	Floor Level	Room or Space Number	Ht ft	Distance to wall or column line N / S	from Column Line #	ft	Distance to wall or column line E / W	from Column Line #	ft	DWG ID	Material Comments (building-wide)
RFROLL		101	B	01		ROOF-BLDG. 412				N S			E W				silver-black rolled roofing
				02						N S			E W				w/ black tars over a white or brown insulating material
				03						N S			E W				over a wood substrate, totaling ≈(100 x 80) ft
RFPEN		102	B	01		ROOF-BLDG. 412				N S			E W				Dark grey/black roofing
				02						N S			E W				penetration mastics located
				03						N S			E W				throughout, totaling 160 LF
PUTTY		103	B	01		ROOF-BLDG-412				N S			E W				White skylight putties located
				02						N S			E W				throughout skylights on roof,
				03						N S			E W				totaling ≈(36x8) LF
HDUCT		104	(ACC sample)			ROOF-BLDG-412				N S			E W				Duct taping on rooftop HVAC system
										N S			E W				previously sampled-AEC(+) ≈ 300 LF
HFLEX		105	B	01		ROOF-BLDG-412				N S			E W				Tannish flex connector located
				02						N S			E W				on rooftop HVAC Units, totaling
				03						N S			E W				≈ 20 LF
INSUL		106	B	01		ROOM 1 - BLDG-412				N S			E W				Whitish/beige insulation atop
				02						N S			E W				wall mounted flue on north
				03						N S			E W				side of room, 20 ft
										N S			E W				

64

BLDG NAME: ≤25 characters: Port-205/209 Brush (Bldg. E-412)

BLDG NO:

DEPT CODE: B4965

Date Inspected: 9/12/91

Inspected by: SCA DLC/JEM

Consultant Code Surveyors' Initials

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS yellow

Page 2 of 6 MSDS for this bldg

Sample Identification (incld Bldg No.)

Predominance Group Codes Allowed: blank, HOMOGENEOUS MATERIAL ID | A to Z | Linked Mat'l No. | Sample Type B D | Sub-No.

Sample Location Data

Functional Space: Space / Room Type | Floor Level | Room or Space Number

Coordinates: Ht ft | Distance to wall or column line: N / S from Column Line # | ft | E / W from Column Line # | ft

DWG ID

1. Aircell Type 2. Block Type 3. Board Type 4. Paper Wrap 5. Loose Fill 6. troweled On 7. mud Type 8. sprayed-On 9. chunks/Powdery 10. beneath non-ACM 11. multiple layers 12. wool felt

HOMOGENEOUS MATERIAL ID	A to Z	Linked Mat'l No.	Sample Type B D	Sub-No.	Space / Room Type	Floor Level	Room or Space Number	Ht ft	N/S from Column Line #	N/S ft	E/W from Column Line #	E/W ft	DWG ID	Material Comments (building-wide)	
FLUCT		107	B	01	ROOM	2	BLDG. 412							9-inch sq. light brown w/ white	918
				02	ROOM	3	BLDG. 412							Specks VAT w/ black and gold	300
				03	ROOM	9	BLDG. 412							mastics over concrete & leveling compound	315 144
FLUCT		108	B	01	ROOM	2	BLDG 412							12-inch sq. yellow/brown patterned	120
				02	"									VAT w/ gold glues over leveling	
				03	"									compound & concrete ≈ Code #5	
BBMAS		109	B	01	ROOM	2	BLDG 412							6-inch black or brown vinyl baseboard w/	100
				02	"									related brown glues over wood or	250
				03	"									wall substrates	120
FLUCT		110	B	01	ROOM	2	BLDG. 412							12-inch sq. dark brown VAT w/	
				02										white or black mastics over a	
				03										concrete substrate, 10 yr	
BBMAS		111	B	01	ROOM	6	BLDG. 412							4-inch brown vinyl baseboard w/	54
				02										yellow glues over various substrates	
				03											
FLVCT		112	B	01	ROOM	6	BLDG. 412							12-inch sq. tannish w/ white streaks	100
				02	ROOM	5	BLDG. 412							VAT w/ black mastics over concrete	
				03	"									substrate	

I/d: Form MSDS Form COC

match line

Record Control (initial/date after task is finished):
1. Paper QA/QC done by: _____ 2. Changes made by: _____
3. Ready for DP: yes / no 4. Data entered by: ____ 5. Matching v. Printouts by: _____

Form Code: MSDS

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS yellow

BLDG NAME: (≤25 characters) PCA - 205/209 Brush (Bldg. E-412

BLDG NO:

DEPT CODE: B4965

Date Inspected: 9/12/01

Inspected by: SCA DLC/JEM

Consultant Code Surveyors' Initials

Page 3 of 6 MSDS for this bldg

1. Aircell Type 7. mud Type
2. Block Type 8. sprayed-On
3. Board Type 9. chunks/Powdery
4. Paper Wrap 10. beneath non-ACM
5. Loose Fill 11. multiple layers
6. trowelled On 12. wool felt

HOMOGENEOUS MATERIAL ID	Predominance Group Codes (Allowed: blank, A to Z)	Linked Mat'l No.	Sample Type B D	Sub-No.	Space / Room Type	Floor Level	Room or Space Number	Ht ft	N/S from Column Line #	ft	E/W from Column Line #	ft	DWG ID	Material Comments (building-wide)	
WLGL		113	B	01	ROOM		2-BLDG. 412		N/S		E/W			Tannish/brown glues located	800
↓				02	↓				N/S		E/W			behind wood paneling over	750
				03					N/S		E/W			WLSH throughout building	1000
FLUCT		114	B	01	ROOM		10-BLDG. 412		N/S		E/W			9-inch sq. brown & yellow	400
↓				02	↓				N/S		E/W			VAT w/brown mastic over a	540
				03					N/S		E/W			concrete substrate (under carpeting w/ yellow mastics)	
FLTERR		115	B	01	ROOM		15-BLDG. 412		N/S		E/W			gray/white/green terrazo flooring	
↓				02	ROOM		16-BLDG. 412		N/S		E/W			in mens Toilet area - Room 15&16	
				03			" "		N/S		E/W			165 ft²	
WLCER		116	B	01	ROOM		15-BLDG. 412		N/S		E/W			green & white ceramic wall tile	
↓				02	ROOM		16-BLDG. 412		N/S		E/W			w/ related grout located in mens	
				03			" "		N/S		E/W			& womens RR, totaling ≈ 390 ft²	
FLUCT		117	B	01	ROOM		21-BLDG. 412		N/S		E/W			12-inch sq. tannish w/gray streaks	
↓				02			" "		N/S		E/W			VAT w/ yellow & white glues over a	
				03			" "		N/S		E/W			wood substrate over concrete	
PUTTY		118	B	01	ROOM		2-BLDG. 412		N/S		E/W			White window glazing putties	
				02			↓		N/S		E/W			located on the east side of bldg.	
				03					N/S		E/W			150 LF X TM	

 f/d: Form MSDS Form COC

match line

Record Control (initial/date after task is finished):
1. Paper QA/QC done by: ______ 2. Changes made by: ______
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Form Code: MSDS

64

BLDG NAME: ≤25 characters: PCA - 205-209 Brush Survey

BLDG NO:

DEPT CODE: B4965

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS yellow

Date Inspected: 9/12/01

Inspected by: S C A D L C

Consultant Code Surveyors' Initials

Page 4 of 6 MSDS for this bldg

1. Aircell Type 7. mud Type
2. Block Type 8. sprayed-On
3. Board Type 9. chunks/Powdery
4. Paper Wrap 10. beneath non-ACM
5. Loose Fill 11. multiple layers
6. trowelled On 12. wool felt

Sample Identification (incld Bldg No.)					Sample Location Data						DWG ID	Material Comments (building-wide)
HOMOGENEOUS MATERIAL ID	Predominance Group Codes Allowed: blank, A to Z	Linked Mat'l No.	Sample Type B D	Sub-No.	Space / Room Type	Floor Level	Room or Space Number	Ht ft	N/S from Column Line # ft	E/W from Column Line # ft		
CAULK		119	B	01	ROOM 2-BLDG. 412				N/S	E/W		Interior white window caulking
↓				02	"				N/S	E/W		from metal window frame to
				03	"				N/S	E/W		brick substrate, 20 LF x 1HL
WLGL		120	B	01	ROOM 30-BLDG. 412				N/S	E/W		yellow wallpaper glues over
↓				02	↓				N/S	E/W		WSH on 2nd floor computer
				03					N/S	E/W		section Rms 30-33, 500 ft²
BBMAS		121	B	01	ROOM -30- BLDG. 412				N/S	E/W		Brown baseboard mastics
↓				02	↓				N/S	E/W		beneath blue (grey or) 4-inch baseboard
				03					N/S	E/W		throughout Rms 30-33 (+Rm. 39), 100 LF
STUCCO		122	B	01	EXT - EAST				N/S	E/W		Exterior stuccos atop brick
↓				02	↓				N/S	E/W		structure on east side of bldg.
				03					N/S	E/W		only w/ tan x brown paints, 350 ft²
CLSH		123	B	01	INTER-BLDG. 413				N/S	E/W		Ceiling sheetrock w/ related joint
↓				02	"				N/S	E/W		compounds throughout ceiling only of
				03	"				N/S	E/W		Bldg. 413
PUTTY		124	B	01	ROOF-BLDG. 414				N/S	E/W		White skylight putties located on
↓				02	"				N/S	E/W		roof, totaling ≈ 40 LF
				03	"				N/S	E/W		

Bldg. E-412   450

Bldg. E-413

Bldg. E-414

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Record Control (initial/date after task is finished):
1. Paper QA/QC done by: ______ 2. Changes made by: ______
3. Ready for DP: yes / no 4. Data entered by: ______ 5. Matching v. Printouts by: ______

Form Code: MSDS

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS

BLDG NAME: (≤25 characters) Port-205/209 Brush Survey (E-414)

BLDG NO:

DEPT CODE:

PROJECT NO.: B4945

Date Inspected: 9/13/01

Inspected by: SCA DLC

Consultant Code Surveyors' Initials

Page 5 of 6 MSDS for this bldg

1. Aircell Type
2. Block Type
3. Board Type
4. Paper Wrap
5. Loose Fill
6. trowelled On
7. mud Type
8. sprayed-On
9. chunks/Powdery
10. beneath non-ACM
11. multiple layers
12. wool felt

HOMOGENEOUS MATERIAL ID	Predominance Group Codes Allowed: blank, A to Z	Linked Mat'l No.	Sample Type B D	Sub-No.	Space / Room Type	Floor Level	Room or Space Number	Ht ft	N/S from Column Line #	ft	E/W from Column Line #	ft	DWG ID	Material Comments (building-wide)
FLVCT		125	B	01			BLDG. 414 - RM. 55		N/S		E/W			12-inch tannish VAT w/ dark tan +120 ⊄ Rms 66-69
				02			"		N/S		E/W			streaks and black mastic over a
				03			"		N/S		E/W			concrete substrate in Rm. 55 ≈ 40 ⊄
TRANS		AAA					ROOF - BLDG. 414		N/S		E/W			transite - flue ≈ 30 LF
FLVCT		126	B	01			BLDG. 414 - RM. 53		N/S		E/W			12-inch sq. bluish-white VAT w/ gray 200
				02					N/S		E/W			streaks and yellow mastic over a
				03					N/S		E/W			concrete substrate in Rm. 53 Toilets
GROUT		127	B	01			BLDG. 414 - RM. 53		N/S		E/W			White & teal ceramic tile grout
				02					N/S		E/W			over a WGB substrate throughout
				03					N/S		E/W			Rm. 53 ≈ 300 ⊄
BBMAS		128	B	01			BLDG. 414 - RM-51		N/S		E/W			Brown mastics located beneath (Fire Shop +80 +200 Offices)
				02			" - RM-52		N/S		E/W			brown or gray 4-inch vinyl baseboard
				03			" - RM.55		N/S		E/W			over WGB throughout Rms. 51-53 & 55 270 LF
FLVCT		129	B	01			BLDG. 414 - RM. 52		N/S		E/W			12-inch sq. tan VAT w/ brown streaks
				02					N/S		E/W			and black mastics over a concrete
				03					N/S		E/W			substrate ≈ 120 ⊄
CPMAS		130	B	01			BLDG. 414 - RM. 51		N/S		E/W			Yellow carpet mastics located in
				02					N/S		E/W			Rm. 51 ≈ 400 ⊄ + 7000 ⊄ 773 sq ft.
				03										

BLDG. 414

BLDG NAME: ≤25 characters: Port of Oak - 205/209 Brush St. Surrey

BLDG NO:

DEPT CODE:

PROJECT NO.: B 4 9 6 5

SCA MATERIAL/SAMPLING DATA SHEET

Form Code: MSDS

Date Inspected: 9/13/01

Inspected by: S C A D L C (Consultant Code Surveyors' Initials)

Page 6 of 6 MSDS for this bldg

1. Aircell Type 2. Block Type 3. Board Type 4. Paper Wrap 5. Loose Fill 6. trowelled On 7. mud Type 8. sprayed-On 9. chunks/Powdery 10. beneath non-ACM 11. multiple layers 12. wool felt

Sample Identification (incld Bldg No.)				Sample Location Data								
Predominance Group Codes Allowed: blank, A to Z	HOMOGENEOUS MATERIAL ID	Linked Mat'l No.	Sample Type B/D	Sub-No.	Functional Space: Space / Room Type	Floor Level	Room or Space Number	Coordinates: Ht ft	Distance to wall or column line N/S: from Column Line #	N/S ft	Distance to wall or column line E/W: from Column Line #	E/W ft	DWG ID	Material Comments (building-wide)
	PUTTY	131	B	01	INT-		ARCHIVES		N/S		E/W			White interior window putty
	↓			02	↓		↓		N/S		E/W			24 LF per window x TYP.
	↓			03	↓		↓		N/S		E/W			
	CLCI	132	B	01	INT-		773 3rd		N/S		E/W			2-foot x 4-foot laid-in white
	↓			02					N/S		E/W			ceiling panels w/ sprinkled hole
Bldg. 2-41	↓			03	↓		↓		N/S		E/W			pattern throughout offices of 773 3rd St.
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
									N/S		E/W			
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									N/S		E/W			
									N/S		E/W			
									N/S		E/W			

 f/d: SCA-Form MSDS/COC

match line

Record Control (initial/date after task is finished):
1. Paper QA/QC done by: _____ 2. Changes made by: _____
3. Ready for DP: yes / no 4. Data entered by: ____ ____ 5. Matching v. Printouts by: _____

Form Code: MSDS

Structures

1 Gardner Shed (south of E-412)

E-412 = 205-209 Brush St.
E-414 = 773-775 3rd St. (offices + fire shop) and 234 Market St. (Archives) - Dive shop has no separate address
E-413 = Included in 205-209 Brush St. address according to the Port

SCA ASBESTOS SURVEY

COMMENTS FORM

ABBREV.	For
SP	space
OB	observation
SA	sample
MA	material
DB	debris

Reminders to Surveyors

1. Limit your comments to UNIQUE info only.
2. Be brief, use the abbreviations.
3. These comments will be entered into the database and linked to the corresponding records on the FSDS and MSDS.

Reminder to Data Processor:

1. Do Not use the abbreviations for data entry.

Dept Code:	Port - 205-209 Brush Street
Bldg. Name:	B-4965
Bldg. No:	
Bldg. Type:	
Sheet No.:	pg 1 of 4
Date:	9-11-01
Surveyed by:	DLC/JEM

BLDG. E-412

Comments # on FSDS/MSDS	Comments
~~1.~~	~~Concealed MA, assumed to be present based on systems understanding.~~
~~20.~~ 1.	Black-rubber-like non-suspect silicon caulking on skylights atop PUTTY-103
2.	4-foot fixtures w/4 tubes = 24 + 23 + 12 + 9 + 4 + 10 + 20 + ~~10~~ + 10 + 2
	Fire Doors = ~~||||~~ (~~2100 ft~~) (See plans for WSH quantification)
3.	Room 1; concrete floor; brick walls on south + east; WSH walls on north + west;
	open ceiling to wood substrate
4.	Room 2, 3, 5, 6, 7, 8, 9 = previously sampled 2x4 ceiling tile + 12x12 ceiling tile (negative)
	+ Room 10, 11, 12. Rooms 13-17 WSH ceiling (previously sampled)
5.	9x9 - ACC maroon tile = 220 ft +
6.	WSH throughout 1st floor offices + ceilings (except where otherwise noted on this comment sheet) (see plans for quantification)
7.	yellow lino - ACC (negative in Room 12 bathroom) 60 ft
8.	Room 18 - north, west, south walls brick - east WSH, no ceiling (open to wood substrate, concrete floor
9.	Room 19 - north wall brick. South, east, west WSH, open ceiling to wood substrate, concrete floor; non-suspect fiberglass wall insulation on western wall
10.	Room 20 - north + west walls brick, east wall wood, south wall nailed wood paneling over concrete
	block; concrete floor

SCA ASBESTOS SURVEY

COMMENTS FORM

205-209

ABBREV.	For
SP	space
OB	observation
SA	sample
MA	material
DB	debris

Reminders to Surveyors

1. Limit your comments to UNIQUE info only.
2. Be brief, use the abbreviations.
3. These comments will be entered into the database and linked to the corresponding records on the FSDS and MSDS.

Reminder to Data Processor:

1. Do Not use the abbreviations for data entry.

Dept Code:	Post-Brush Survey
Bldg. Name:	B-4965
Bldg. No:	
Bldg. Type:	
Sheet No.:	pg 2 of 4
Date:	9.12.01
Surveyed by:	DLC/JEM

Comments # on FSDS/MSDS	Comments
~~1.~~	~~Concealed MA, assumed to be present based on systems understanding.~~
~~20.~~ 11.	Rooms 22 & 23; brick walls on south & west; WLSH wall on north & east; open to wood ceiling substrate; concrete floor, no interior caulkings
12.	Second Floor Rooms 24-33, previously sampled negative ceiling tiles (ACC) WLGL-113 (1000 ft²), FLVCT-114 (540 ft²), ceiling tiles over beams (no ceiling sheetrock)
13.	Domestic hot water lines observed in open loft (Rm. 34) area; fiberglass runs, no elbows or tees noted - hot water heater present.
14.	Additional 180 LF of duct taping sampled by ACC present (HDUCT-104)
15.	Rooms 35-37 FLVCT-107 (315 ft²) (F.141 ft²) Under carpet WLSH walls & ceiling, except east wall (brick) + WLGL-113 in Room 38 (400 ft²) over WLSH + BBMAS-109 (120 LF)
16.	Windows located on east side of bldg. only w/ exception of 3 small window on the west. Building = brick exterior w/ wood substrate roof. Small amount of ext. stucco on east side of bldg. (STUCCO-122). No exterior paints present w/ exception of various painted substrates on the eastern side of the bldg. No exterior window or door caulking or putties. Flues on roof - metal or aluminum (no transite flues)

17. Room 39 (1st Floor) FLVCT-107 (120 ft²), WLSH walls & ceilings, BBMAS 121 (50 LF)

18. Shed (Gardener's) south of Bldg. E-412 - two metal containers (20x20) w/ roof built atop (new 1995 per Bill Edwards - Post Eng.) non-suspect. No other suspect ext. materials present. Paints present (see lead MSDS)

) by ACC
wetrock total
bldg. 412 =
?,600 ft²
(includes WLSH + CLSH)

↑ Bldg. E-412

Scheduled for demo also

SCA ASBESTOS SURVEY

COMMENTS FORM

ABBREV.	For
SP	space
OB	observation
SA	sample
MA	material
DB	debris

Reminders to Surveyors

1. Limit your comments to UNIQUE info only.
2. Be brief, use the abbreviations.
3. These comments will be entered into the database and linked to the corresponding records on the FSDS and MSDS.

Reminder to Data Processor:

1. Do Not use the abbreviations for data entry.

Dept Code:	Port - 205-209 Brush Survey
Bldg. Name:	B-4965
Bldg. No:	9.13.01
Bldg. Type:	
Sheet No.:	pg 3 of 4
Date:	
Surveyed by:	DLC

Comments # on FSDS/MSDS	Comments
~~1.~~	~~Concealed MA, assumed to be present based on systems understanding.~~
~~20.~~ 19.	Light fixtures within Bldg. 413: 4 foot w/ 2 tubes = 25
20.	~~Bldg 413~~ - ~~brick~~ concrete block structure, no int. window or door caulkings or
	putties. Concrete floor, concrete block walls; CLSH-123 on ceiling only. No other
	suspect interior materials. Majority of concrete block unpainted (interior & exterior). No
	ext. window or door caulkings. Hot water heater present w/ metal flues no insulated piping.
21.	Roof - previously sampled rolled roofing (-) + previously sampled roof patching (+) = 75 ft²
22.	Roofing previously sampled (silver-painted rolled roofing) (+) + previously sampled → 6600 ft²
	roof patching (+) (100 LF) + 1 transite flue - (TRANS-AAA ≈ 30 LF) + Skylight putty
	PUTY-124 (40 LF)
23.	4-foot light fixtures w/ four lighting tubes: 10 + 10 + 20 + 8 + 34
24.	12x12 gray - ACC sampled - in Mezzanine Area (+) = 600 ft² over a wood substrate
25.	Duct taping on HVAC system in Mezzanine = previously sampled (-)
26.	Dive Shop - Rooms 50-55: Open wood ceiling above rooms w/ exception of CLSH ceiling throughout Rooms
	51-53 [previously sampled (-)] Brick interior walls on south & east sides, west walls on interior

offices & toilets Rooms 51-53, 54 [previously sampled (-)]

No interior window or door caulkings or putties noted within Dive Shop.

Margin notes: √ E-413; (Sheetrock total positive) for Bldg. 413 = ft²; ← CLSH only; √ E-414; Sheetrock negative - Bldg. 414 (& ACC) total generated; No fire doors observed E-413

SCA ASBESTOS SURVEY

COMMENTS FORM

ABBREV.	For
SP	space
OB	observation
SA	sample
MA	material
DB	debris

Reminders to Surveyors

1. Limit your comments to UNIQUE info only.
2. Be brief, use the abbreviations.
3. These comments will be entered into the database and linked to the corresponding records on the FSDS and MSDS.

Reminder to Data Processor:

1. Do Not use the abbreviations for data entry.

Dept Code:	Part 205-209 Bruce Survey
Bldg. Name:	B-4965
Bldg. No:	7-13-01
Bldg. Type:	
Sheet No.:	pg 4 of 4
Date:	
Surveyed by:	DLC

Comments # on FSDS/MSDS	Comments
1.	~~Concealed MA, assumed to be present based on systems understanding.~~
E-414 26.27.	Archives - (Room 58) (234 Market St); concrete floor; Wood and sheetrock walls over brick [WLSH previously sampled by ACC (-)]; ceiling sheetrock (-) by ACC; PUTTY-131. No other suspect materials
28.	Fire Shop (Room 57) - 775 3rd St.; concrete floor, WLSH walls [previously (-) by ACC], open to wood substrate ceiling; BBMAS-128 (80 LF), PUTTY-131 (24 LF). No other suspect materials.
29.	773 3rd Street offices (Rooms 58-69); CLI-132 throughout (no sheetrock underneath) WLSH throughout (previously (-) by ACC). BBMAS-128 throughout (800 LF), CPMAS-130 throughout (3000 ft), ELVCT-125 in Rooms 66-69 (Mens & Womens Toilets) - 120 ft; no suspect piping; non-suspect silian wallpaper glues throughout Room 59; new windows - no suspect int. door or window caulking or putty.
E-414 30.	No exterior door caulkings or putties throughout Structure E-414. No ext. window caulkings or putties also throughout Structure E-414.
31.	Fire doors suspect: THL

Attachment 3

Previous ACC Environmental Consultants' 1996 Asbestos Survey Report

Attachment 2

Field Data Sheets - Asbestos

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ENVIRONMENTAL
CONSULTANTS

COPY

SUPPLEMENTAL ASBESTOS SURVEY REPORT

September 17, 1996

Buildings E412, E413 and E414
Oakland, California

Prepared for:
Port of Oakland
530 Water Street
Oakland, CA 94607

ACC Project No. 2022-29

OAKLAND ▪ SACRAMENTO
SEATTLE ▪ LOS ANGELES

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ENVIRONMENTAL
CONSULTANTS

SUPPLEMENTAL
ASBESTOS SURVEY REPORT

Port of Oakland
Buildings E412, E413, and E414
Oakland, California

Prepared for:
Port of Oakland
530 Water Street
Oakland, CA 94607

Prepared by:
ACC Environmental Consultants, Inc.
September 17, 1996
ACC Project No. 2022-29

Prepared by: Larry Everton
Larry Everton
Certified Asbestos Consultants No. 92-1215

Prepared by:
Kenneth Churchill
Certified Asbestos Consultants No. 92-0025

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TABLE OF CONTENTS

Section 2.0 Bulk Sampling Protocol and Analytical Methods

Bulk samples of suspect asbestos containing building materials were obtained using standard industrial hygiene techniques including wetting the material to minimize fiber release. ACC personnel wore half-face air purifying respirators equipped with high efficiency particulate (HEPA) filters while obtaining samples.

ACC bases the sampling strategy for suspect friable surfacing materials on the guidelines outlined in the EPA publication Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials, and the procedures outlined in 40 CFR 763, Subpart E (AHERA). For non-friable suspect materials, AHERA requires the building inspector to determine the appropriate number of samples to obtain and analyze. Usually one to three samples of non-friable materials are collected.

For each homogeneous material identified by visual inspection as suspect material, random samples are obtained. A single bulk sample is randomly selected from each homogeneous material for first-round testing. If the sample is positive, the remaining samples are not analyzed; if the sample is negative, the other samples are submitted for study. Every sample must be reported negative if the material is to be considered non-asbestos containing.

The bulk samples were delivered to an independent laboratory that participates in the bulk sample proficiency analysis program conducted by the United States Environmental Protection Agency and is accredited by the National Voluntary Laboratory Program (NVLAP). The samples were analyzed using Polarized Light Microscopy (PLM) with dispersion staining to estimate the percent of asbestos composition by volume. Samples with no observable asbestiform minerals are designated as None-Detected. Samples in which asbestiform minerals are observed, but exist in concentrations of less than one percent (<1%), are designated as present in Trace amounts; all other samples are designated as asbestos containing with the appropriate percent of asbestos noted.

Section 3.0 Summary of Findings

The following table is a list of materials which were tested for the presence of asbestos at Port of Oakland, sorted by each building at the property. A complete description of sampled suspect ACBM is included in Section 5.

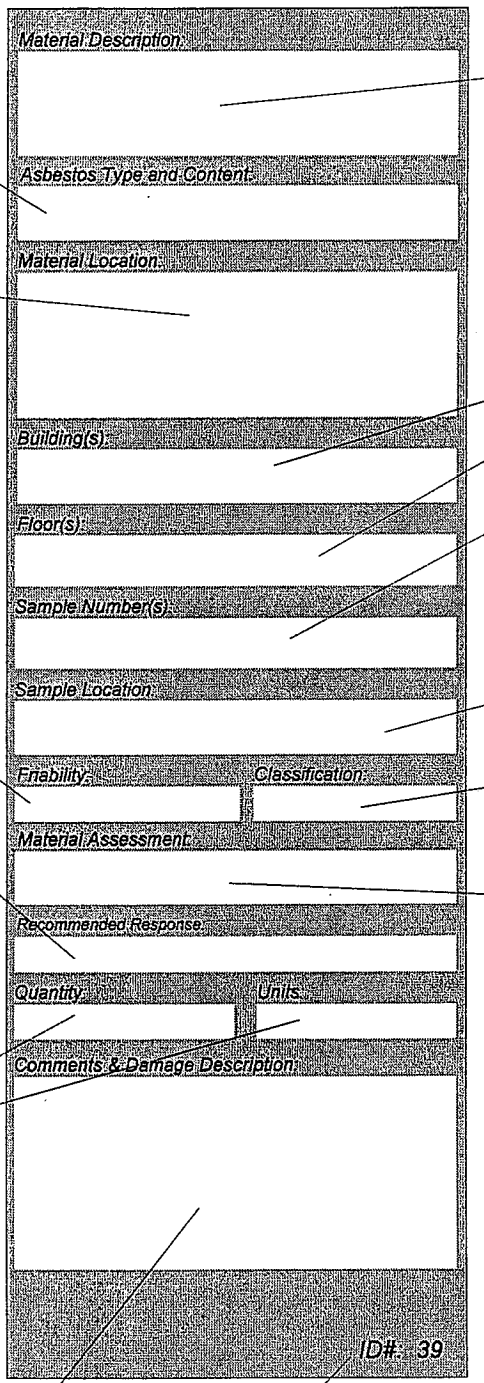
Building & Floors	Suspect Material	Material Location	Asbestos Present
Building: E-412	Duct Tape	In The Mezzanine Area.	Yes
Building: E-412	Drywall And Joint Compound	In Room 16 Behind Stairwell	Yes
Building: E-412	Drywall And Joint Compound	In The Mezzanine Area	Yes
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	Under Carpet In Room 12	Yes
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	In Room 12a Under Carpet	Yes
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	In Room 7 Under Carpet	Yes
Building: E-412	4 X 2 Ceiling Tile	In The Front Of Room 12	No
Building: E-412	12" X 12" Off-white Ceiling Tile	In Room 12	No
Building: E-412	4" X 4" Linoleum Yellow W/brown Spot	In Bathroom 12b	No

Building & Floors	Suspect Material	Material Location	Asbestos Present
Building: E-412 Floor(s): First	Drywall Joint Compound	In The Men's Room Near Electrical Panel	Yes
Building: E-412 Floor(s): Roof	Roofing Tar And Felt	On The Northeast, West, And Middle Sections Of The Roof	No
Building: E-412 Floor(s): Second	9" X9" Maroon Floor Tile And Adhesive	Front Cabinet Of Hallway	Yes
Building: E-412 Floor(s): Second	1' X 1' Off-white Ceiling Tile	In The Computer Room	No
Building: E-412 Floor(s): Second	2' X 4' Ceiling Tile	In The Office At East Section	No
Building: E-413	Roof Patch	On The Roof	Yes
Building: E-413 Floor(s): Roof	Roofing Tar And Felt	On The Roof	No
Building: E-414	12" X 12" Grey Floor Tile And Adhesive	In The Mezzanine Area	Yes
Building: E-414	Roofing Tar And Felt	On The Southeast Section Of Roof	Yes
Building: E-414	Duct Tape	In The Mezzanine Area	No

Building & Floors	Suspect Material	Material Location	Asbestos Present
Building: E-414	Drywall And Joint Compound	At The Entrance To Building In Front Of Men's Room And Entrance To Diver's Storage	No
Building: E-414	Drywall And Joint Compound	In The Divers Storage	No
Building: E-414 Floor(s): Roof	Roof Patch	On The East Section	Yes
Building: E-414 Floor(s): Roof	Roof Patch	In The South Section Of The Roof	Yes
Building: E-414 Floor(s): Roof	Roofing Tar And Felt	On The Northeast, Middle And Southeast Sections Of The Roof	No

4.0 Explanation of Material Table Data

This survey report organizes information on each suspect ACBM identified in tables located in Section 5. This section describes how to interpret the data found on materials listed in Section 5.



Asbestos type and content:
Describes the type of asbestos and its percentage in the material.

Material description:
Contains the description of the suspect homogeneous asbestos containing building material.

Material Location:
Describes where the material is found throughout the building.

Building(s) & Floor(s):
Specifies where a material is located

Sample number(s):
Identifies a particular material sample obtained from a specific sample location. Sample numbers are used primarily for laboratory identification.

Friability:
Identifies the material as Friable, Non-friable or Jacketed (for thermal systems insulation only) if asbestos is present.

Sample Location:
Identifies where the samples of this material were obtained.

Classification:
Categorizes each material as surfacing, TSI or miscellaneous.

ommended Response:
Suggests the appropriate options for controlling or maintaining ACBM in a safe manner. There are four options used:
1) Operations & Maintenance of the material
2) Repair of small damaged areas
3) Abatement of the materials due to condition
4) Abatement of the material prior to renovation (used when renovations are anticipated).

Material Assessment:
Identifies the condition of the material in relation to physical and water damage, delamination of the material from its substrate, the extent of the damage and the potential for damage from building conditions, such as, accessibility by building occupants, influence of vibration, etc. The six standard assessment categories ranked by hazard potential, with the first being the lowest hazard are as follows:
1) Potential for Damage
2) Potential for Significant Damage
3) Damaged
4) Damaged with Potential for Damage
5) Damaged with Potential for Significant Damage
6) Significantly Damaged
Only friable materials are assessed under AHERA regulations. Non-friable materials, unless damaged, are not assessed and can be assumed to be in good condition.

Quantity & Units:
Reports approximate total quantity per unit of measure for each material.

Comments & Damage Description:
Any additional information and or specific details of material damage are noted here.

Material ID #:
Used to reference the material for reinspections, etc.

Section 4.1 Definitions of Terms

Classification of Materials

Surfacing Materials - Asbestos containing materials that are sprayed-on, trowled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal Systems Insulation (TSI) - Asbestos containing materials applied to pipes, fittings, boilers, breeching, tanks, ducts or other interior structural components to prevent heat loss or gain or water condensation.

Miscellaneous Materials - Asbestos containing materials applied to or a part of building components that are not classified as surfacing materials or thermal systems insulation.

Damaged - The damage or deterioration of the material results in inadequate cohesion or adhesion with crumbling, blistering, water stains, marring or otherwise abraded over less than on-tenth (1/10) of the surface if the damage is evenly distributed or one-fourth (1/4) if the damage is localized.

Significant Damage - The damage or deterioration of the material results in inadequate adhesion or cohesion and the damage is extensive and severe with one or more of the following characteristics: 1) Crumbling or blistering over at least one-tenth (1/10) of the surface if evenly distributed, one-fourth (1/4) if the damage is localized; 2) Areas of the material hanging from the surface, delaminated, or showing adhesive failure; 3) Water stains, gouges or marred.

Friability

Friable - An asbestos containing material that can be crumbled, pulverized or reduced to powder, when dry, by hand pressure, such as spray applied fireproofing on structural steel members, spray applied acoustical ceiling materials or damaged thermal systems insulation. Friable materials are of greatest concern due to their potential fiber release.

Non-Friable - An asbestos containing material where the asbestos is bound tightly in a matrix or sealed by a protective layer. Non-friable materials can become friable by being rendered to a crumbled, pulverized or powdered state, when dry, by crushing, sanding, sawing, shot-blasting, severe weathering or by other mechanically induced means. Common examples of non-friable materials are adhesives, floor tiles, transite and roofing materials.

Jacketed - An asbestos containing material applied to thermal systems insulation and "jacketed" with a protective outer layer such as canvas or metal to keep the material in good condition. Undamaged jacketed ACBM is considered non-friable. If the jacketing is damaged, the material is considered friable.

Recommended Responses

Operations & Maintenance (O&M) - A program designed to "manage" asbestos in-place. As long as asbestos containing materials remain in a building, an O&M program should be instituted to alert maintenance personnel, custodial workers and outside vendors of the existence and location of these materials and to set a policy for the maintenance of these materials. The material is usually only required to be removed if it is significantly damaged, prior to demolition of the building or if it will be disturbed by renovation activities.

Repair - The restoration of damaged or deteriorated asbestos containing building materials to an intact condition. Once the intact condition is established, the material should be included in an O&M program. The material is usually only required to be removed if it is significantly damaged, prior to demolition of the building or if it will be disturbed by renovation activities.

Abate Due to Condition - This material is significantly damaged and is unsafe in its current condition. The access to the area should be restricted to personnel equipped with appropriate personal protection. This material should be properly removed by a licensed contractor using workers trained in the safe removal of asbestos.

Abate Prior to Renovation - This material should be properly removed prior to planned renovation activities by a licensed contractor using workers trained in the safe removal of asbestos.

5.0 Table of Materials Analyzed for the Presence of Asbestos at:

rt Of Oakland, Buildings E412, E413 And E414, Oakland, California

Material Description: Duct Tape	*Material Description:* Drywall and Joint Compound	*Material Description:* Drywall and Joint Compound
Asbestos Type and Content: 90-95% Chrysotile	*Asbestos Type and Content:* 1-5% Chrysotile	*Asbestos Type and Content:* 1-5% Chrysotile
Material Location: In The Mezzanine Area.	*Material Location:* In Room 16 Behind Stairwell	*Material Location:* In The Mezzanine Area
Building(s): E-412	*Building(s):* E-412	*Building(s):* E-412
Floor(s):	*Floor(s):*	*Floor(s):*
ple Number(s): 412-2	*Sample Number(s):* E-412-1	*Sample Number(s):* E-412-3 AND E-412-4
Sample Location: Mezzanine Area	*Sample Location:* Room 16	*Sample Location:* Mezzanine Area
Friability: Non-Friable / *Classification:* TSI	*Friability:* Non-Friable / *Classification:* Miscellaneous	*Friability:* Non-Friable / *Classification:* Miscellaneous
Material Assessment: Not assessed under AHERA	*Material Assessment:* Not assessed under AHERA	*Material Assessment:* Not assessed under AHERA
Recommended Response: Operations & Maintenance	*Recommended Response:* Operations & Maintenance	*Recommended Response:* Operations & Maintenance
Quantity: 6 / *Units:* Linear Feet	*Quantity:* 400 / *Units:* Square Feet	*Quantity:* 760 / *Units:* Square Feet
Comments & Damage Description:	*Comments & Damage Description:*	*Comments & Damage Description:*
Port41:355	Port41:354	Port41:356

Section 1.0 Introduction

ACC Environmental Consultants, Inc. (ACC) performed a survey of the Port of Oakland Buildings E412, E413 and E414, Oakland, California, to identify asbestos-containing building materials (ACBM). This report identifies the locations and asbestos content of the friable and non-friable ACBM, provides assessment of the friable ACBM in relation to the material's hazard potential to building occupants and provides removal cost estimates.

This survey addresses non-friable suspect asbestos-containing building materials. Friable materials include material that can be crumble, pulverized or reduced to powder, when dry, by hand pressure, such as spray-applied fireproofing on structural steel members, spray-applied acoustical ceiling materials, acoustical ceiling tile and damaged thermal systems insulation. Non-friable materials can become friable by being rendered to a crumbled, pulverized or powdered state, when dry, by crushing, sanding, sawing, shot-blasting, severe weathering or by other mechanically induced means.

This report is prepared for the express use and benefit of the Port of Oakland, its agents and employees. The information in this report or portions thereof may be required to be included in notifications to employees, contractors or other visitors to the building(s). This report is not intended to be used by the Owner or its agents as a specification or work plan for any of the work suggested or recommended in the report.

This report is based upon conditions and practices observed at the property and information made available to ACC. This report does not purport to identify all hazards or unsafe practices, nor to indicate that other hazards or unsafe practices do not exist at the premises.

ACC shall not be responsible for identifying ACBM located behind walls and/or columns, beneath flooring, under carpeting, above solid ceilings, underground or any other inaccessible areas.

Removal cost estimates for the asbestos-containing building materials identified at the property have been included in Section 6.0. These estimates are for budgeting purposes only and should not be used as a quote for removal of the materials. It is not ACC's recommendation to remove these materials unless they are beyond repair or planned demolition or renovation activities will disturb the materials. Estimates are based on recent pricing ACC has received from contractors performing similar work and may vary from actual prices obtained due to the actual scope of work, quantity of material removed, control measures specified and contractor work loads, etc.

On Wednesday, August 28, 1996, Mr. Larry Everton, a United States Environmental Protection Agency (EPA) Certified Building Inspector and Management Planner from ACC, performed an asbestos survey of the building(s) in accordance with the Asbestos Hazard and Emergency Response Act of 1987 (AHERA).

5.0 Table of Materials Analyzed for the Presence of Asbestos at:

Port Of Oakland, Buildings E412, E413 And E414, Oakland, California

Material Description: 9" x 9" Maroon Floor Tile and Adhesive	*Material Description:* 9" x 9" Maroon Floor Tile and Adhesive	*Material Description:* 9" x 9" Maroon Floor Tile and Adhesive
Asbestos Type and Content: Tile: 5% Chrysotile Adhesive: Trace Chrysotile	*Asbestos Type and Content:* Tile: 1-5% Chrysotile Adhesive: None	*Asbestos Type and Content:* Tile: 5-10% Chrysotile Adhesive: None
Material Location: Under Carpet In Room 12	*Material Location:* In Room 12a Under Carpet	*Material Location:* In Room 7 Under Carpet
Building(s): E-412	*Building(s):* E-412	*Building(s):* E-412
Floor(s):	*Floor(s):*	*Floor(s):*
Sample Number(s): E-412-7	*Sample Number(s):* E-412-8	*Sample Number(s):* E-412-9
Sample Location: Room 12	*Sample Location:* Room 12a	*Sample Location:* Room 7
Friability: Non-Friable *Classification:* Miscellaneous	*Friability:* Non-Friable *Classification:* Miscellaneous	*Friability:* Non-Friable *Classification:* Miscellaneous
Material Assessment: Not assessed under AHERA	*Material Assessment:* Not assessed under AHERA	*Material Assessment:* Not assessed under AHERA
Recommended Response: Operations & Maintenance	*Recommended Response:* Operations & Maintenance	*Recommended Response:* Operations & Maintenance
Quantity: 520 *Units:* Square Feet	*Quantity:* 860 *Units:* Square Feet	*Quantity:* 360 *Units:* Square Feet
Comments & Damage Description:	*Comments & Damage Description:*	*Comments & Damage Description:*
Port41.360	*Port41.361*	*Port41.362*

5.0 Table of Materials Analyzed for the Presence of Asbestos at:

t Of Oakland, Buildings E412, E413 And E414, Oakland, California

Material Description: Duct Tape	*Material Description:* Drywall and Joint Compound	*Material Description:* Drywall and Joint Compound
Asbestos Type and Content: None Detected	*Asbestos Type and Content:* None Detected	*Asbestos Type and Content:* None Detected
Material Location: In The Mezzanine Area	*Material Location:* At The Entrance To Building In Front Of Men's Room And Entrance To Diver's Storage	*Material Location:* In The Divers Storage
Building(s): E-414	*Building(s):* E-414	*Building(s):* E-414
Floor(s):	*Floor(s):*	*Floor(s):*
e Number(s): 4-3	*Sample Number(s):* E-414-1 AND E-414-2	*Sample Number(s):* E-414-5, AND E-414-6
Sample Location: Mezzanine Area	*Sample Location:* Entrance To Building In Front Of Men's Room And Entrance To Diver's Storage	*Sample Location:* Diver's Storage, Front Of Entrance To Market Street And Entrance To Room
Friability: *Classification:* TSI	*Friability:* *Classification:* Miscellaneous	*Friability:* Non-Friable *Classification:* Miscellaneous
Material Assessment: No Assessment Required, No Asbestos Detected	*Material Assessment:* No Assessment Required, No Asbestos Detected	*Material Assessment:* No Assessment Required, No Asbestos Detected
Recommended Response: No Response Required, No Asbestos Detected	*Recommended Response:* No Response Required, No Asbestos Detected	*Recommended Response:* No Response Required, No Asbestos Detected
Quantity: *Units:*	*Quantity:* *Units:*	*Quantity:* *Units:* Square Feet
Comments & Damage Description:	*Comments & Damage Description:*	*Comments & Damage Description:*
Port41 370	*Port41 369*	*Port41 372*

5.0 Table of Materials Analyzed for the Presence of Asbestos at:

rt Of Oakland, Buildings E412, E413 And E414, Oakland, California

Material Description: Roof Patch	*Material Description:* Roof Patch	*Material Description:* Roofing Tar and Felt
Asbestos Type and Content: 5-10% Chrysotile	*Asbestos Type and Content:* 1-10% Chrysotile	*Asbestos Type and Content:* None Detected
Material Location: On The East Section	*Material Location:* In The South Section Of The Roof	*Material Location:* On The Northeast, Middle And Southeast Sections Of The Roof
Building(s): E-414	*Building(s):* E-414	*Building(s):* E-414
Floor(s): Roof	*Floor(s):* Roof	*Floor(s):* Roof
ple Number(s): ,14-10	*Sample Number(s):* E-414-11 AND E-414-12	*Sample Number(s):* E-414-7 AND E-414-8
Sample Location: East Section	*Sample Location:* South Section	*Sample Location:* Northeast, Middle And Southeast Sections Of Roof
Friability: Non-Friable; *Classification:* Miscellaneous	*Friability:* Non-Friable; *Classification:* Miscellaneous	*Friability:*; *Classification:* Miscellaneous
Material Assessment: Not assessed under AHERA	*Material Assessment:* Not assessed under AHERA	*Material Assessment:* No Assessment Required, No Asbestos Detected
Recommended Response: Operations & Maintenance	*Recommended Response:* Operations & Maintenance	*Recommended Response:* No Response Required, No Asbestos Detected
Quantity: 120; *Units:* Square Feet	*Quantity:* 210; *Units:* Square Feet	*Quantity:*; *Units:*
Comments & Damage Description:	*Comments & Damage Description:*	*Comments & Damage Description:*
Port41 375	Port41 376	Port41 373

Section 6.0 Removal Cost Estimates

These estimates are for budgeting purposes only and should not be used as a quote for removal of the materials. It is not ACC's recommendation to remove these materials unless they are beyond repair or planned demolition or renovation activities will disturb the materials. Estimates are based on recent pricing ACC has received from contractors performing similar work and may vary from actual prices obtained due to the actual scope of work, quantity of material removed, control measures specified and contractor work loads, etc.

Building & Floors	Suspect Material	Material Location	Removal Costs (low to high)
Building: E-412	Duct Tape	In The Mezzanine Area.	$60 $500
Building: E-412	Drywall And Joint Compound	In Room 16 Behind Stairwell	$400 $500
Building: E-412	Drywall And Joint Compound	In The Mezzanine Area	$760 $760
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	Under Carpet In Room 12	$1,300 $1,300
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	In Room 12a Under Carpet	$2,150 $2,150
Building: E-412	9" X 9" Maroon Floor Tile And Adhesive	In Room 7 Under Carpet	$900 $900
Building: E-412 Floor(s): First	Drywall Joint Compound	In The Men's Room Near Electrical Panel	$30 $500
Building: E-412 Floor(s): Second	9" X9" Maroon Floor Tile And Adhesive	Front Cabinet Of Hallway	$160 $500

Building & Floors	Suspect Material	Material Location	Removal Costs (low to high)
Building: E-413	Roof Patch	On The Roof	$120 $500
Building: E-414	12" X 12" Grey Floor Tile And Adhesive	In The Mezzanine Area	$2,063 $2,063
Building: E-414	Roofing Tar And Felt	On The Southeast Section Of Roof	$6,000 $9,000
Building: E-414 Floor(s): Roof	Roof Patch	On The East Section	$120 $500
Building: E-414 Floor(s): Roof	Roof Patch	In The South Section Of The Roof	$210 $500
	Total Removal Costs:	$14,273 to $19,673	

Appendix A

Laboratory Bulk Sampling Reports and Chains of Custody

Forensic Analytical
Analytical Report

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Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310 763-8683

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258227
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-412

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-412-1 Skim coat with paint. Asbestos in skim coat (1-5%). Composite reported.	19659497	1-5%	Non-Det.%	Chrysotile (1-5%)
E-412-2 White fibrous material.	19659498	90-95%	1-5%	Chrysotile (90-95%) Cellulose (1-5%)
12-3 Tan fibrous material with drywall and skim coat. Asbestos in skim coat (1-5%). Composite reported.	19659499	Trace%	55-60%	Chrysotile (Trace%) Cellulose (55-60%)
E-412-4 Drywall with tan fibrous material and skim coat. Asbestos in skim coat (1-5%). Composite reported.	19659500	1-5%	25-30%	Chrysotile (1-5%) Cellulose (20-25%) Fibrous Glass (1-5%)
E-412-5 Grey fibrous material with paint.	19659501	Non-Det.%	75-80%	Cellulose (60-65%) Fibrous Glass (10-15%)
E-412-6 Grey fibrous material with paint.	19659502	Non-Det.%	80-85%	Cellulose (15-20%) Fibrous Glass (60-65%)
E-412-7 Maroon tile with black mastic. Asbestos in tile (5-10%) and in mastic (1-5%). Composite reported.	19659503	5-10%	Trace%	Chrysotile (5-10%) Synthetic (Trace%)
E-412-8 Maroon tile with black mastic and black nonfibrous material and debris. Asbestos in tile (5-10%). Composite reported.	19659504	1-5%	Trace%	Chrysotile (1-5%) Synthetic (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Forensic Analytical
Analytical Report

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Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310/763-8684

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258227
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-412

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-412-9 Maroon tile with black mastic. Asbestos in tile (5-10%) and in mastic (1-5%). Composite reported.	19659505	5-10%	Trace%	Chrysotile (5-10%) Cellulose (Trace%)
E-412-10 Sheet vinyl with debris.	19659506	Non-Det.%	5-10%	Cellulose (Trace%) Fibrous Glass (5-10%)
E-412-11 Grey fibrous material with paint.	19659507	Non-Det.%	90-95%	Cellulose (5-10%) Fibrous Glass (80-85%)
E-412-12 Maroon tile with black mastic. Asbestos in tile (5-10%) and in mastic (1-5%). Composite reported.	19659508	5-10%	Trace%	Chrysotile (5-10%) Cellulose (Trace%)
E-412-13 Grey fibrous material with paint.	19659509	Non-Det.%	80-85%	Cellulose (45-50%) Fibrous Glass (30-35%)
E-412-14 Tan fibrous material with skim coat an drywall. Asbestos in skim coat (1-5%). Composite reported.	19659510	Trace%	45-50%	Chrysotile (Trace%) Cellulose (45-50%)
E-412-15 Black fibrous tar with silver paint.	19659511	Non-Det.%	5-10%	Cellulose (5-10%) Fibrous Glass (Trace%)
E-412-16 Black fibrous tar with silver paint.	19659512	Non-Det.%	5-10%	Cellulose (5-10%) Fibrous Glass (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

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Analytical Report

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Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez CA 90221 • Phone 310/763-2374 • Fax 310 763-8664

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258227
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-412

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-412-17 Black tar with stones.	19659513	Non-Det.%	1-5%	Fibrous Glass (1-5%)
E-412-18 Black fibrous tar with stones.	19659514	Non-Det.%	5-10%	Cellulose (Trace%) Fibrous Glass (5-10%)
12-19 Black fibrous tar with stones.	19659515	Non-Det.%	5-10%	Cellulose (Trace%) Fibrous Glass (5-10%)
E-412-20 Black fibrous tar with stones.	19659516	Non-Det.%	10-15%	Cellulose (Trace%) Fibrous Glass (10-15%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Forensic Analytical

BULK SAMPLE REQUEST FORM

CLIENT NAME & ADDRESS:

5207 ACC
7977 Capwell Drive, Suite 100
Oakland, CA 94621

Page one of TWO

Please fax To → Larry EVERTON
ATTENTION

PHONE: (510) 638-8400

DATE: 8-28-96

Circle the Method and Turn Around Time

___hr/12hr/(24hr)/48hr/Ext

ANALYZE TO 1ST POSITIVE? (YES) NO

Results Needed: 8-29-96

(PLM:) Standard / Point Count

Gravimetry Prep

CONTACT: Massoud NAVVAB

TEM: QUAL. / QUANT. / WATER

P.O.#

JOB # 2022-29

AA/Flame AA/Furnace ICP

SITE: Port OF OAKLAND building E-412

METALS:_____

SAMPLE NUMBER	DATE COLLECTED	SAMPLE LOCATION/DESCRIPTION
E-412-1	8-28-96	Room 16, behind stairs wall / Drywall with joint compound.
E-412-2	8-28-96	mezzanine area / duct Tape ~ 6 feet.
E-412-3	8-28-96	mezzanine area / Drywall with joint Compound.
E-412-4	8-28-96	mezzanine area / Drywall with joint Compound.
E-412-5	8-28-96	Corridor Front of Room 12 / ceiling Tile 4x2 / ~ 32 Square feet.
E-412-6	8-28-96	Room 12 / 12"x12" off white ceiling Tile / ~ 144 Square feet.
E-412-7	8-28-96	Room 12 / 9"x9" Brown floor Tile & black mastic / under The carpet.
E-412-8	8-28-96	Room 12a / 9"x9" Brown floor Tile & black mastic / under the Carpet.
E-412-9	8-28-96	Room 7 / 9"x9" Brown floor Tile & black mastic / under The Carpet.
E-412-10	8-28-96	bathroom 12b / yellow linoleum with Brown spot / 4x4 Square feet.

Sampled by: Massoud Navvab

Date: 8-28-96

Time: Start 9 AM

Relinquished by: Massoud Navvab

Date/Time: 8-28-96 16:00

Received By:

Date/Time: 8/28/96 1600

Sealed Condition (circle one) YES / NO

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Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 • Telephone: 310/763-2374 Fax: 310/763-8684

250227

Forensic Analytical

BULK SAMPLE REQUEST FORM

CLIENT NAME & ADDRESS: 5207 ACC 7977 Capwell Drive, Suite 100 Oakland, CA 94621 Page Two of Two	PHONE: (510) 638-8400	DATE: 8-28-96
	Circle the Method and Turn Around Time __hr/12hr/(24hr)/48hr/Ext ANALYZE TO 1ST POSITIVE? (YES) / NO	Results Needed: 8-29-96
	(PLM:) Standard / Point Count	Gravimetry Prep
CONTACT: Massoud NAVVAB	TEM: QUAL. / QUANT. / WATER	
P.O.# / JOB # 2022-29	AA/Flame AA/Furnace ICP	
SITE: Port OF OAKLAND building E-412	METALS:	

SAMPLE NUMBER	DATE COLLECTED	SAMPLE LOCATION/DESCRIPTION
E-412-11	8-28-96	Second Floor. Computer room / 1x1 off white Ceiling Tile / ~ 135 square feet.
E-412-12	8-28-96	Second Floor. Hallway front of cabinet / 9"x9" brown Floor Tile and black mastic
E-412-13	8-28-96	Second Floor office at EAST Section / 2x4 Ceiling Tile / 400 square feet.
E-412-14	8-28-96	First Floor. Room 14 men's room, Electrical Panel room / Drywall with joint compound.
E-412-15	8-28-96	Roof area Northeast Section / Roof Patch.
E-412-16	8-28-96	Roof area West Section / Roof Tar
E-412-17	8-28-96	Roof area West Section / Roofing material
E-412-18	8-28-96	Roof area West Section / Roof TOP layer
E-412-19	8-28-96	Roof area middle North Section / Roof TOP layer
E-412-20	8-28-96	Roof area Northeast Section / Roof TOP layer.

E-412
Roof = 75x75 = 5625
9"x9" Floor Tile & black mastic
Second Floor ~ 600 sq ft
First Floor ~ 500 sq ft
Drywall ~ 400 sq ft
E-412-E-14
E-413

Sampled by: Massoud Navvab	Date: 8-28-96 Time: Start 9 AM
Relinquished by: Massoud Navvab Date/Time: 8-28-96 16:00	Received By: [signature] Date/Time: 8/28/96 1600 Sealed Condition (circle one) (YES) / NO

Forensic Analytical
Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510/887-8828 • Fax 510/887-4218
Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310 763-8683

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258221
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-413

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-413-1 Black fibrous tar.	19659457	Non-Det.%	30-35%	Cellulose (Trace%) Fibrous Glass (30-35%)
E-413-2 Black fibrous tar.	19659458	10-15%	Trace%	Chrysotile (10-15%) Cellulose (Trace%) Fibrous Glass (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Forensic Analytical

258221

BULK SAMPLE REQUEST FORM

CLIENT NAME & ADDRESS: 5207 ACC 7977 Capwell Drive, Suite 100 Oakland, CA 94621 Please Fax TO ATTENTION Larry EVERTON	PHONE: (510) 638-8400 DATE: 8-28-96 Circle the Method and Turn Around Time Results Needed: 8-29-96 ___hr/12hr/(24hr)/48hr/Ext ANALYZE TO 1ST POSITIVE? (YES) / NO (PLM:) Standard / Point Count Gravimetry Prep
CONTACT: Massoud Navvab	TEM: QUAL. / QUANT. / WATER
P.O.# / JOB # 2022-29	AA/Flame AA/Furnace ICP
SITE: Port OF OAKLAND building E-413	METALS:

SAMPLE NUMBER	DATE COLLECTED	SAMPLE LOCATION/DESCRIPTION
E-413-1	8-28-96	Mechanical shop roof area / Roof Covering
E-413-2	8-28-96	Mechanical shop roof area / Roof Patch

Sampled by: Massoud Navvab	Date: 8-28-96 Time: Start 9AM
Relinquished by: Massoud Navvab Date/Time: 8-28-96 16:00	Received By: Date/Time: 8/28/96 1600 Sealed Condition (circle one) (YES) / NO

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545 • Telephone: 510/887-8828 800/827-FASI Fax: 510/887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 • Telephone: 310/763-2374 Fax: 310/763-8684

Forensic Analytical
Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510/887-8828 • Fax 510/887-4218
Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310 763-8684

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258224
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-414

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-414-1 Tan fibrous material with skim coat and paint.	19659470	Non-Det.%	35-40%	Cellulose (35-40%)
E-414-2 Off-white nonfibrous material with off-white fibrous material.	19659471	Non-Det.%	40-45%	Cellulose (40-45%)
14-3 Off-white fibrous material.	19659472	Non-Det.%	85-90%	Cellulose (85-90%)
E-414-4 Off-white tile with tan mastic and tan fibrous material. Asbestos in tile (1-5%). Composite reported.	19659473	1-5%	15-20%	Chrysotile (1-5%) Cellulose (15-20%)
E-414-5 Drywall with tan fibrous material, skim coat and paint.	19659474	Non-Det.%	25-30%	Cellulose (25-30%)
E-414-6 Skim coat with paint.	19659475	Non-Det.%	Trace%	Cellulose (Trace%)
E-414-7 Black tar with silver paint.	19659476	Non-Det.%	Trace%	Cellulose (Trace%)
E-414-8 Black fibrous tar.	19659477	Non-Det.%	15-20%	Cellulose (10-15%) Fibrous Glass (1-5%)
E-414-9 Black fibrous tar.	19659478	5-10%	Trace%	Chrysotile (5-10%) Cellulose (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Forensic Analytical
Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510/887-8828 • Fax 510/887-4218
Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310/763-8684

Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:
ACC

7977 Capwell Drive, Suite 100
Oakland, CA 94621

Client ID: 5207
Report Number: 258224
Date Received: 08/28/96

P.O. Num:
Job ID: 2022-29
Site: Port of Oakland - Building E-414

Sample Number / Gross Description/Comments	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
E-414-10 Black fibrous tar.	19659479	5-10%	Trace%	Chrysotile (5-10%) Cellulose (Trace%)
E-414-11 Multilayered black fibrous tar with silver paint. Asbestos in tar (1-5%). Composite reported.	19659480	1-5%	1-5%	Chrysotile (1-5%) Cellulose (Trace%) Fibrous Glass (1-5%)
E-414-12 Black fibrous tar.	19659481	5-10%	Trace%	Chrysotile (5-10%) Cellulose (Trace%)

David Kahane, C.I.H., Laboratory Director, Hayward Laboratory

Forensic Analytical

258224

BULK SAMPLE REQUEST FORM

CLIENT NAME & ADDRESS:
5207 ACC
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Page one of TWO
Please fax To ATTENTION → Larry EVERTON

PHONE: (510) 638-8400

DATE: 8-28-96

Circle the Method and Turn Around Time

__hr/12hr/24hr/48hr/Ext

Results Needed: 8-29-96

ANALYZE TO 1ST POSITIVE? (YES) / NO

(PLM): Standard / Point Count

Gravimetry Prep

CONTACT: Massoud NAVVAB

TEM: QUAL. / QUANT. / WATER

P.O.#

JOB # 2022-29

AA/Flame AA/Furnace ICP

SITE: PORT OF OAKLAND building E-414

METALS:

SAMPLE NUMBER	DATE COLLECTED	SAMPLE LOCATION/DESCRIPTION
E-414-1	8-28-96	Entrance To building from 3erd ST / Diy wall with joint compound.
E-414-2	8-28-96	Front of men's room, Entrance To diver storage / Diywall with joint compound.
E-414-3	8-28-96	Mezzanine area / duct Tape
E-414-4	8-28-96	mezzanine area / 12"x12" Gray Floor Tile & brown mastic ~825 square feet.
E-414-5	8-28-96	Diver's storage front of Entrance To market ST / Drywall with joint compound.
E-414-6	8-28-96	Divers Storage Entrance To Room 13 left side / Diy wall with joint compound.
E-414-7	8-28-96	Roof area Northeast Section / Roof insulation / build ng E-414
E-414-8	8-28-96	Roof area middle Section / Roof Covering / building E-414
E-414-9	8-28-96	Roof Southeast Section / Roofing material / building E-414
E-414-10	8-28-96	Roof area / Roof Patch EAST Section / building E-414

Sampled by: Massoud Navvab

Date: 8-28-96

Time: start 9 AM

Relinquished by: Massoud Navvab

Date/Time: 8-28-96 16:00

Received By:

Date/Time: 8/28/96 1600

Sealed Condition (circle one) (YES) / NO

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545 • Telephone: 510/887-8828 800/827-FASI Fax: 510/887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 • Telephone: 310/763-2374 Fax: 310/763-8684

Forensic Analytical

BULK SAMPLE REQUEST FORM

CLIENT NAME & ADDRESS: 5207 ACC 7977 Capwell Drive, Suite 100 Oakland, CA 94621 Page 2 of 2	PHONE: (510) 638-8400	DATE: 8-28-96
	Circle the Method and Turn Around Time	Results Needed: 8-29-96
	__hr/12hr/(24hr)/48hr/Ext ANALYZE TO 1ST POSITIVE? (YES) / NO	
	(PLM): Standard / Point Count	Gravimetry Prep
CONTACT: Massoud Navrad	TEM: QUAL. / QUANT. / WATER	
P.O.# JOB # 2022-29	AA/Flame AA/Furnace ICP	
SITE: Port of OAKLAND building E-414	METALS:_____	

SAMPLE NUMBER	DATE COLLECTED	SAMPLE LOCATION/DESCRIPTION
E-414-11	8-28-96	Roof area / Roof Patch South Section / building E-414
E-414-12	8-28-96	Roof area / Roof patch / building E-414

Sampled by: Massoud Navrad — Date: 8-28-96 — Time: Start 9AM

Relinquished by: Massoud Navrad

Date/Time: 8-28-96 16:00

Received By: JS

Date/Time: 8/28/96 1600

Sealed Condition (circle one) (YES) / NO

Attachment 4

Sampling Location Drawings - Asbestos

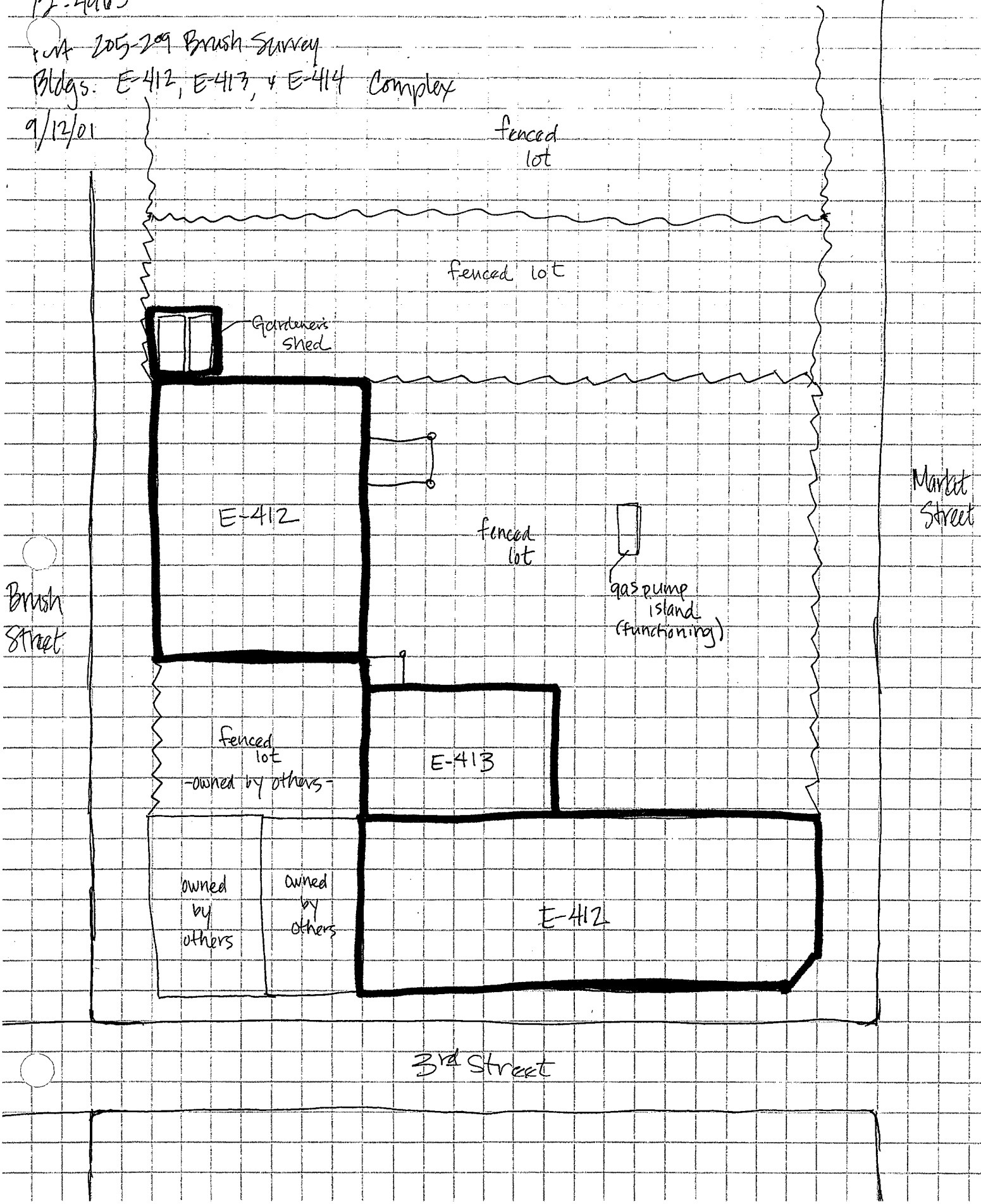
Port of Oakland

B-4965

Pt. 205-209 Brush Survey

Bldgs. E-412, E-413, & E-414 Complex

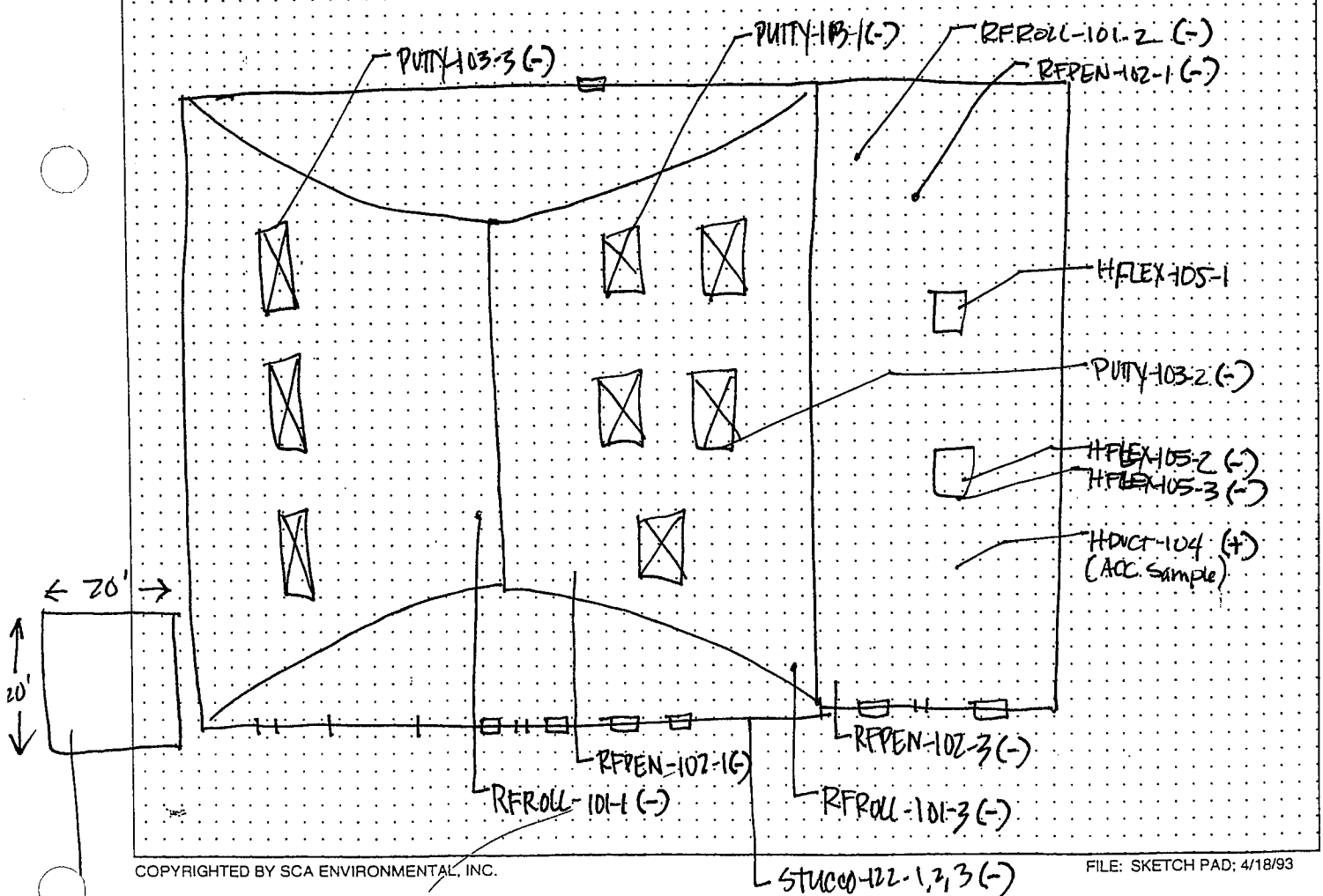
9/12/01



Exterior

SCA Environmental, Inc.	TITLE: Asbestos Roof Sampling Locations		
80 Grand Ave., 4th Flr. Oakland, CA 94612 Tel: (510) 465-9944 Fax: (510) 465-9109	PROJECT: Port of Oakland - 205-209 Brush (Bldg. E-412)		
	PROJECT NO.: B-4965	SCALE: NTS	SHEET/SKETCH NO.: 1 of 2
	DRAWN BY: DLC	CHECKED BY:	DATE: 9.11.01

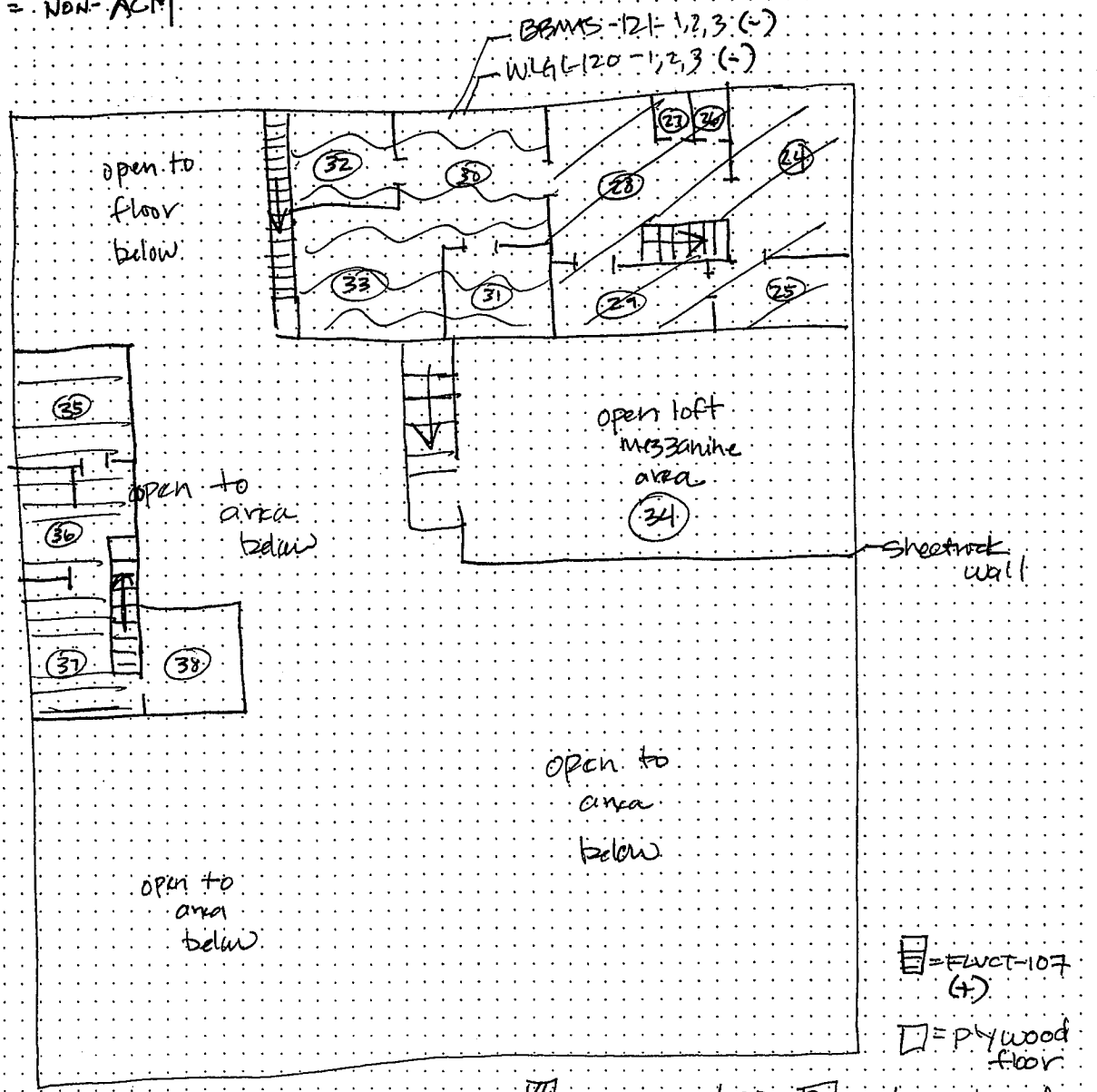
LEGEND:
(+) = ACM
(-) = NON-ACM
(TR) = TRACE (<1%) ASBESTOS
(NA) = NOT ANALYZED; ASSUMED ACM PER SERIAL ANALYSES



FILE: SKETCH PAD: 4/18/93

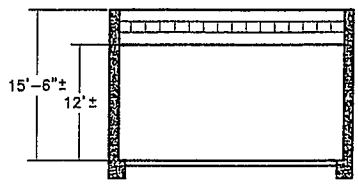
SCA Environmental, Inc.	TITLE: Port of Oakland - 205-209 Brush Survey (Bldg. E-412)		
80 Grand Ave., 4th Flr. Oakland, CA 94612 Tel: (510) 465-9944 Fax: (510) 465-9109	PROJECT: Second Floor Asbestos Sampling Locations		
	PROJECT NO.: B-4965	SCALE: NTS	SHEET/SKETCH NO.: 2 of 2
	DRAWN BY: DLL	CHECKED BY:	DATE: 9.12.01

LEGEND:
(+) = ACM
(-) = NON-ACM

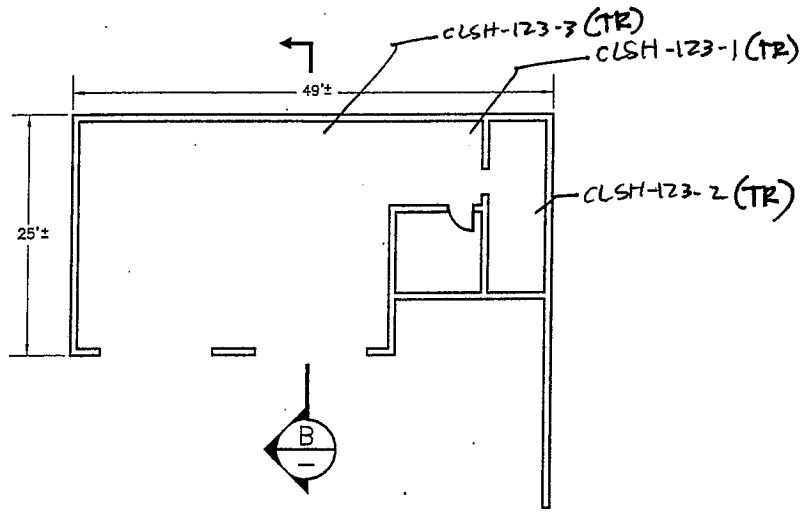


B.4965
Port of Oakland
205-209 Brush Sunray
Bldg. E-413
Asbestos Sampling locations
9.13.01

LEGEND:
(+) = ACM
(-) = NON-ACM
(TR) = TRACE (<1%) ASBESTOS



SECTION B



FLOOR PLAN

BUILDING E-413
SCALE: 1"= 10'±

3754.DWG W.O.#103897
1=1 08-01-01 10:00AM

REFERENCES:	NO.		DATE	APP'D	REV
PLANS					
FIELD BOOKS					
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL					
CAUTION: CHECK TRACING FOR LATEST REVISIONS					

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ VISION 2000 PROGRAM

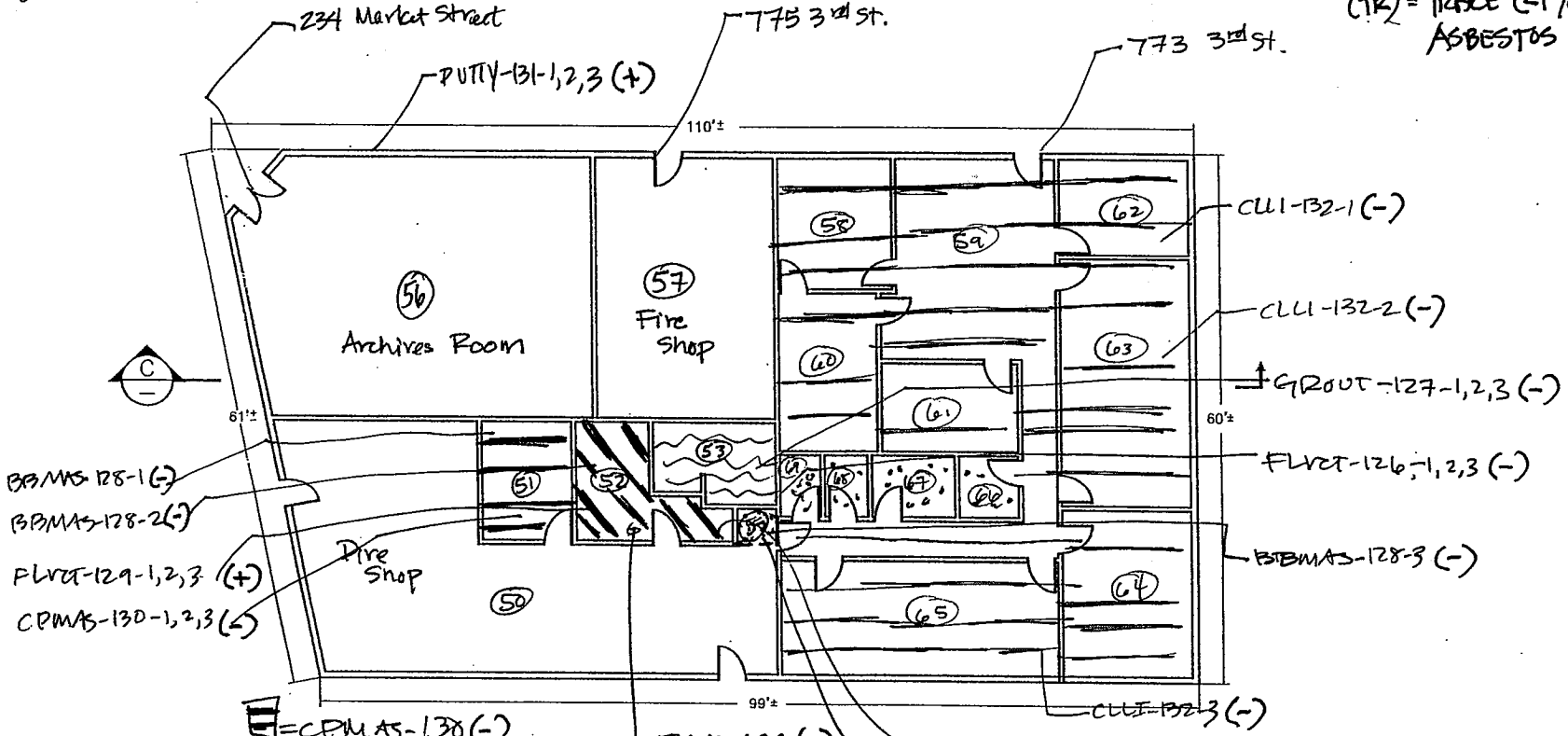
DRAWN S. KWAN
DESIGNED ____ REG. ENGINEER NO.
CHECKED ____ REG. ENGINEER NO.
REVIEWED ____ REG. ENGINEER NO.

PORT

3-4965
Port of Oakland
05-2009 Brush Survey
.13-01
~~ESP~~ Sampling locations
Asbestos

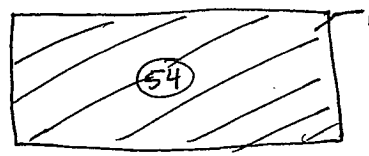
SECTION C

LEGEND:
(+) = ACM
(-) = NON-ACM
(TR) = TRACE (<1%) ASBESTOS



= CPMAS-130 (-)
= FLVCT-129 (+)
= FLVCT-126 (-)
= Concrete floor
= FLVCT-125 (+)
= 12x12 grey VAT (ACC sampled) (+)

FLOOR PLAN



mezzanine level - wood substrate (above Rooms 51-53)

BUILDING E-414

SCALE: 1" = 10'±

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

S. KWAN REG. ENGINEER NO. REG. ENGINEER NO. REG. ENGINEER NO.	**PORT OF OAKLAND** 530 WATER ST. OAKLAND, CALIFORNIA	CHIEF ENGINEER APPROVED REG. ENGINEER NO. RECOMMENDED REG. ENGINEER NO.	PROJECT LOCATION DEMOLITION OF BUILDINGS E-412, E-413 AND E-414 BUILDINGS E-413 & E-414	DATE: SCALE: AS SHOWN SHEET: X OF SHEETS

Attachment 5

Representative XRF Lead-Based Paint Sampling Results

REPRESENTATIVE SAMPLING OF LEAD-BASED PAINTS
PORT OF OAKLAND
205-209 BRUSH ST.
SAMPLED BY SCA ENVIRONMENTAL, INC. ON SEPT. 12 & 13, 2001
SCA Project No. B-4965

Sample I.D.	Sub No.	Location	Building	Floor	Surface Color	Substrate Component	Substrate Material	L-Shell Value mg/cm^2	LBP per HUD Criteria*	Condition
GY-01	1	Room 1	412	1	Gray	Wall	Sheetrock	0.10	No	Intact
GY-02	1	Room 1	412	1	Gray	Door Frame	Wood	0.10	No	Intact
OW-03	1	Room 1	412	1	Off-white	Wall	Sheetrock	0.10	No	Intact
GY-01	2	Room 1	412	1	Gray	Wall	Brick	0.10	No	Intact
WH-04	1	Room 2	412	1	White	Wall	Sheetrock	0.00	No	Intact
YW-05	1	Room 9	412	1	Yellow	Wall	Wood	0.01	No	Intact
GR-06	**1**	**Room 16**	**412**	**1**	**Green**	**Wall**	**Ceramic Tile**	**>>5.0**	**YES**	**Intact**
GR-07	1	Room 13	412	1	Green	Door Frame	Wood	0.20	No	Intact
GY-01	3	Room 19	412	1	Gray	Wall	Brick	0.00	No	Intact
GR-06	2	Room 21	412	1	Gray	Wall	Sheetrock	0.10	No	Intact
GY-01	4	Room 22	412	1	Gray	Wall	Sheetrock	0.00	No	Intact
RD-08	1	Room 22	412	1	Red	Wall	Sheetrock	0.00	No	Intact
YW-09	1	Room 22	412	1	Yellow	Floor	Concrete	0.20	No	Intact
BE-10	1	Room 31	412	2	Beige	Door Frame	Wood	0.00	No	Intact
BE-10	2	Room 30	412	2	Beige	Door Frame	Wood	0.00	No	Intact
BE-10	3	Room 36	412	2	Beige	Wall	Sheetrock	0.00	No	Intact
GY-01	5	Room 36	412	2	Gray	Wall	Sheetrock	0.00	No	Intact
BE-11	**1**	**Exterior-East**	**412**	**Exterior**	**Beige**	**Wall**	**Stucco**	**1.10**	**YES**	**Cracked**
BR-12	**1**	**Exterior-East**	**412**	**Exterior**	**Brown**	**Wall**	**Stucco**	**1.10**	**YES**	**Cracked**
BR-13	1	Exterior-East	412	Exterior	Brown	Trim	Wood	0.00	No	Intact
BR-14	1	Exterior-East	412	Exterior	Brown	Door Frame	Metal	0.10	No	Intact
BR-14	2	Exterior-East	412	Exterior	Brown	Door Frame	Metal	0.00	No	Intact
BR-13	2	Exterior-East	412	Exterior	Brown	Window Frame	Wood	0.00	No	Intact
BR-13	3	Exterior-East	412	Exterior	Brown	Lattice	Wood	0.00	No	Chipped
BR-13	4	Exterior-East	Garden Shed	Exterior	Brown	Trim	Wood	0.10	No	Intact

REPRESENTATIVE SAMPLING OF LEAD-BASED PAINTS
PORT OF OAKLAND
205-209 BRUSH ST.
SAMPLED BY SCA ENVIRONMENTAL, INC. ON SEPT. 12 & 13, 2001
SCA Project No. B-4965

Sample I.D.	Sub No.	Location	Building	Floor	Surface Color	Substrate Component	Substrate Material	L-Shell Value mg/cm^2	LBP per HUD Criteria*	Condition
PK-15	**1**	**Exterior-East**	**Garden Shed**	**Exterior**	**Pink**	**Wall**	**Metal**	**2.60**	**YES**	**Rusted**
PK-15	**2**	**Exterior-South**	**Garden Shed**	**Exterior**	**Pink**	**Wall**	**Metal**	**3.10**	**YES**	**Rusted**
BL-16	1	Interior	413	1	Blue	Wall	Concrete	0.10	No	Intact
RD-17	1	Interior	413	1	Red	Wall	Concrete	0.10	No	Intact
GY-18	1	Interior	413	1	Gray	Wall	Concrete	0.80	No	Intact
BR-19	1	Exterior	413	Exterior	Brown	Door	Metal	0.30	No	Peeling
BR-20	1	Exterior	413	Exterior	Brown	Trim	Metal	0.30	No	Peeling
OW-21	1	Interior-Dive Shop	414	1	Off-white	Wall	Sheetrock	0.00	No	Intact
OW-21	2	Interior-Dive Shop	414	1	Off-white	Door Frame	Wood	0.00	No	Intact
OW-21	3	Interior-Dive Shop	414	1	Off-white	Wall	Sheetrock	0.00	No	Intact
BL-22	1	Interior-Dive Shop	414	1	Blue	Wall	Wood	0.00	No	Intact
TL-23	1	Interior-Dive Shop	414	1	Teal	Floor	Ceramic Tile	0.30	No	Intact
WH-24	1	Interior-Dive Shop	414	1	White	Wall	Ceramic Tile	0.60	No	Intact
OW-21	4	Interior-Archives	414	1	Off-white	Wall	Sheetrock	0.00	No	Intact
OW-21	5	Interior-Archives	414	1	Off-white	Wall	Brick	0.10	No	Intact
OW-21	6	Interior-Fire Shop	414	1	Off-white	Wall	Sheetrock	0.20	No	Intact
OW-21	7	Interior-773 3rd Street	414	1	Off-white	Wall	Sheetrock	0.10	No	Intact

REPRESENTATIVE SAMPLING OF LEAD-BASED PAINTS
PORT OF OAKLAND
205-209 BRUSH ST.
SAMPLED BY SCA ENVIRONMENTAL, INC. ON SEPT. 12 & 13, 2001
SCA Project No. B-4965

Sample I.D.	Sub No.	Location	Building	Floor	Surface Color	Substrate Component	Substrate Material	L-Shell Value mg/cm^2	LBP per HUD Criteria*	Condition
OW-21	8	Interior-773 3rd Street	414	1	Off-white	Wall	Sheetrock	0.20	No	Intact
OW-21	9	Interior-773 3rd Street	414	1	Off-white	Wall	Sheetrock	0.00	No	Intact
BR-25	1	Exterior-Dive Shop	414	Exterior	Brown	Door	Wood	0.40	No	Peeling
BR-26	1	Exterior-Dive Shop	414	Exterior	Brown	Door Frame	Metal	0.10	No	Intact
BR-25	2	Exterior-Archives	414	Exterior	Brown	Door	Wood	0.20	No	Intact
BR-25	3	Exterior-Fire Shop	414	Exterior	Brown	Door	Wood	0.40	No	Intact
BR-25	4	Exterior-773 3rd Street	414	Exterior	Brown	Door	Wood	0.60	No	Intact
BR-26	2	Exterior-773 3rd Street	414	Exterior	Brown	Door Frame	Metal	0.10	No	Intact

* HUD definition for Lead-Based Paints is $\geq$1.0 mg/cm^2 or $\geq$0.5% lead by weight.
Note: Paints and glazing with a detectable lead content are subject to the Contractor's compliance with Cal/OSHA regulation 8 CCR 1532.1 during demolition, scraping of loose and peeling paints, spot abatement prior to torching or cutting, etc.
Figures in bold represent lead-based paints (LBP) per HUD definition.
Table indicates representative samples only; treat all similarly painted surfaces in kind.

Attachment 6

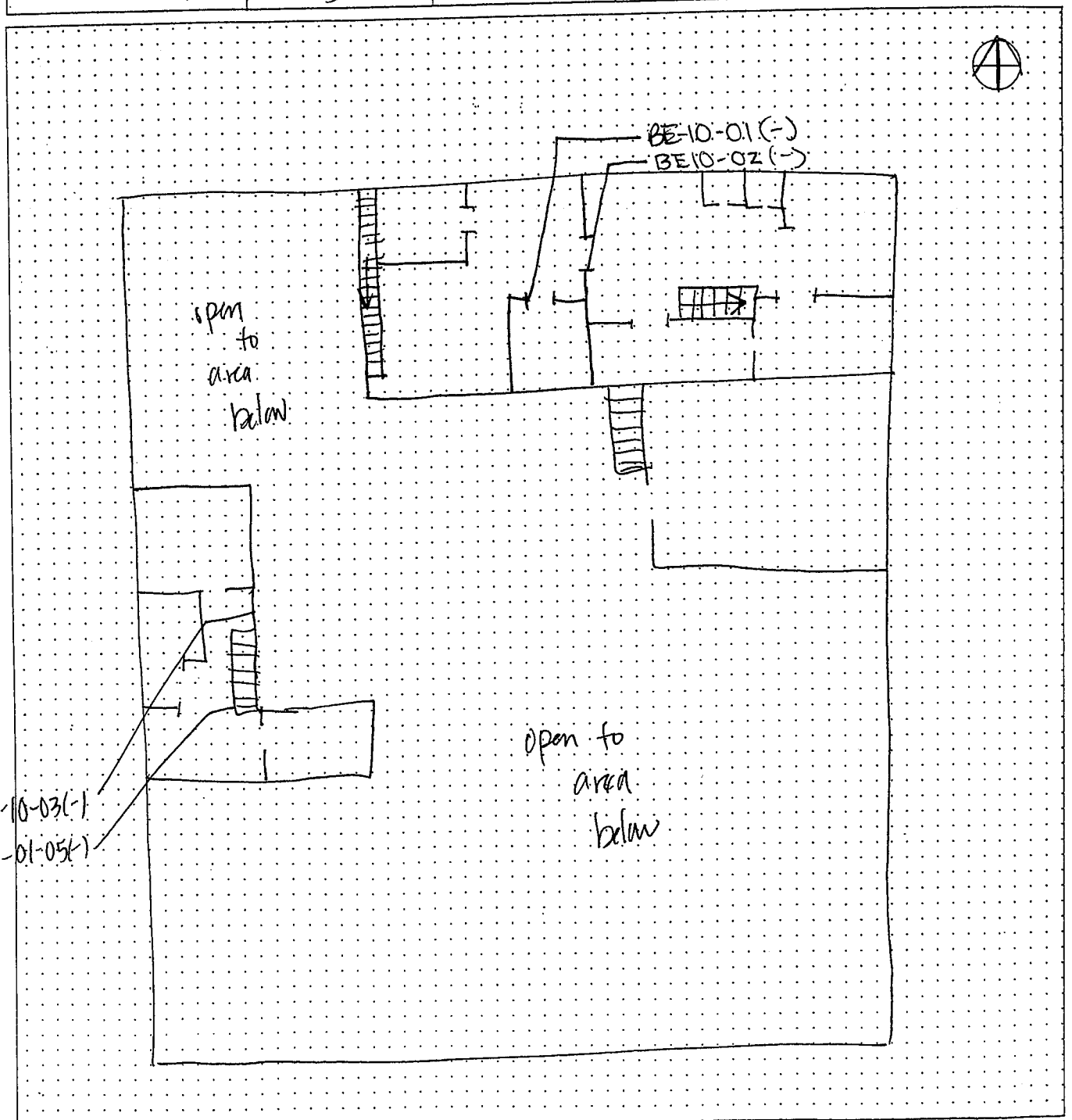
Sampling Location Drawings – Lead-Based Paints

2nd Floor

SCA
Environmental, Inc.

80 Grand Ave., 4th Flr.
Oakland, CA 94612
Tel: (510) 465-9944
Fax: (510) 465-9109

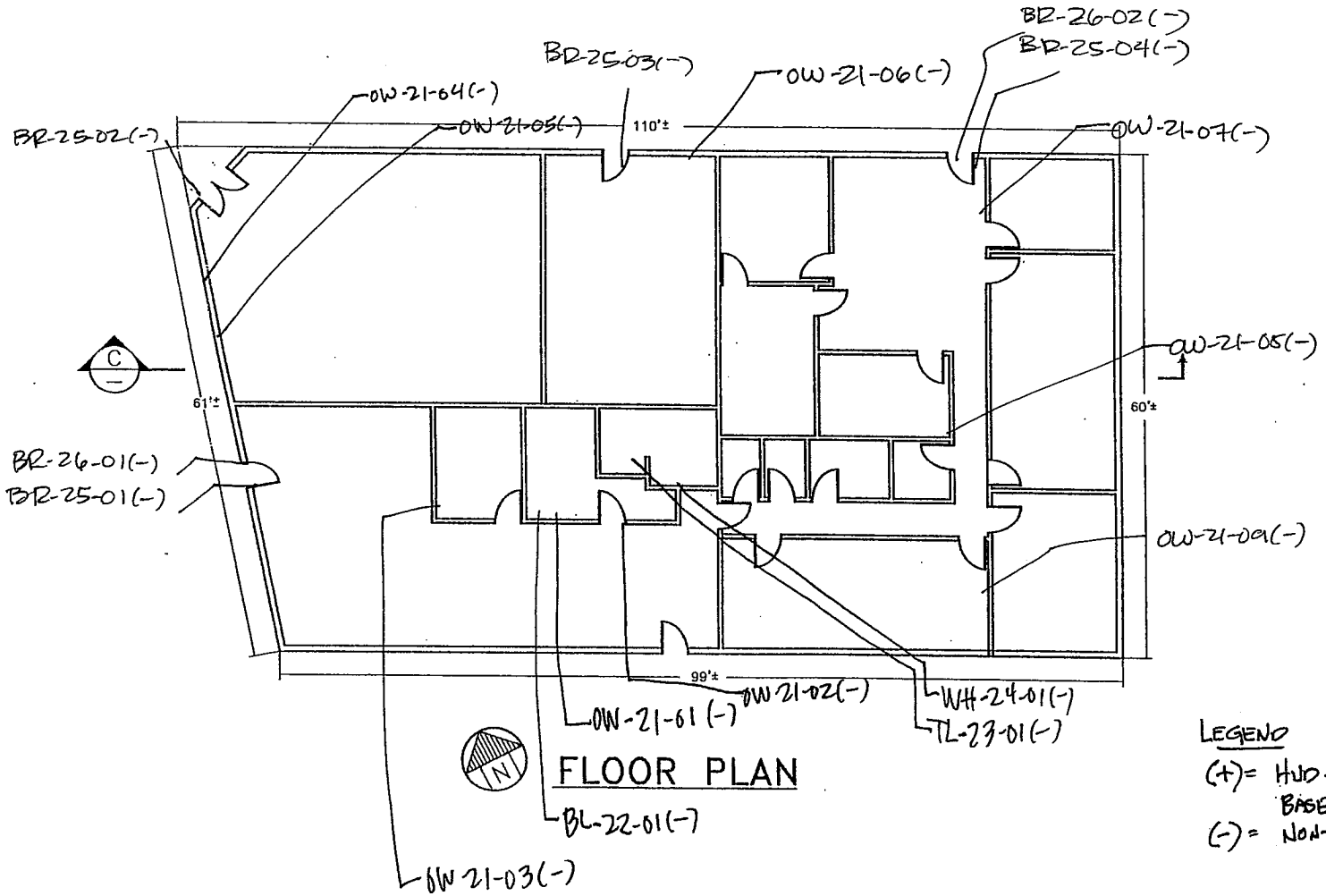
TITLE: Lead-Based Paint Sampling Locations			
PROJECT: Port of Oakland - 205-209 Brush St. (Bldg. E-412)			
PROJECT NO.: B-4965		SCALE: NTS	SHEET/SKETCH NO.: 3 of
DRAWN BY: DLE	CHECKED BY:	DATE: 9.12.01	



FILE: SKETCH PAD; 4/18/93

B-4965
Port of Oakland
205-209 Brush Survey
7.13.01
~~Asbestos~~ Sampling Locations
LBP

SECTION C



FLOOR PLAN

BUILDING E-414

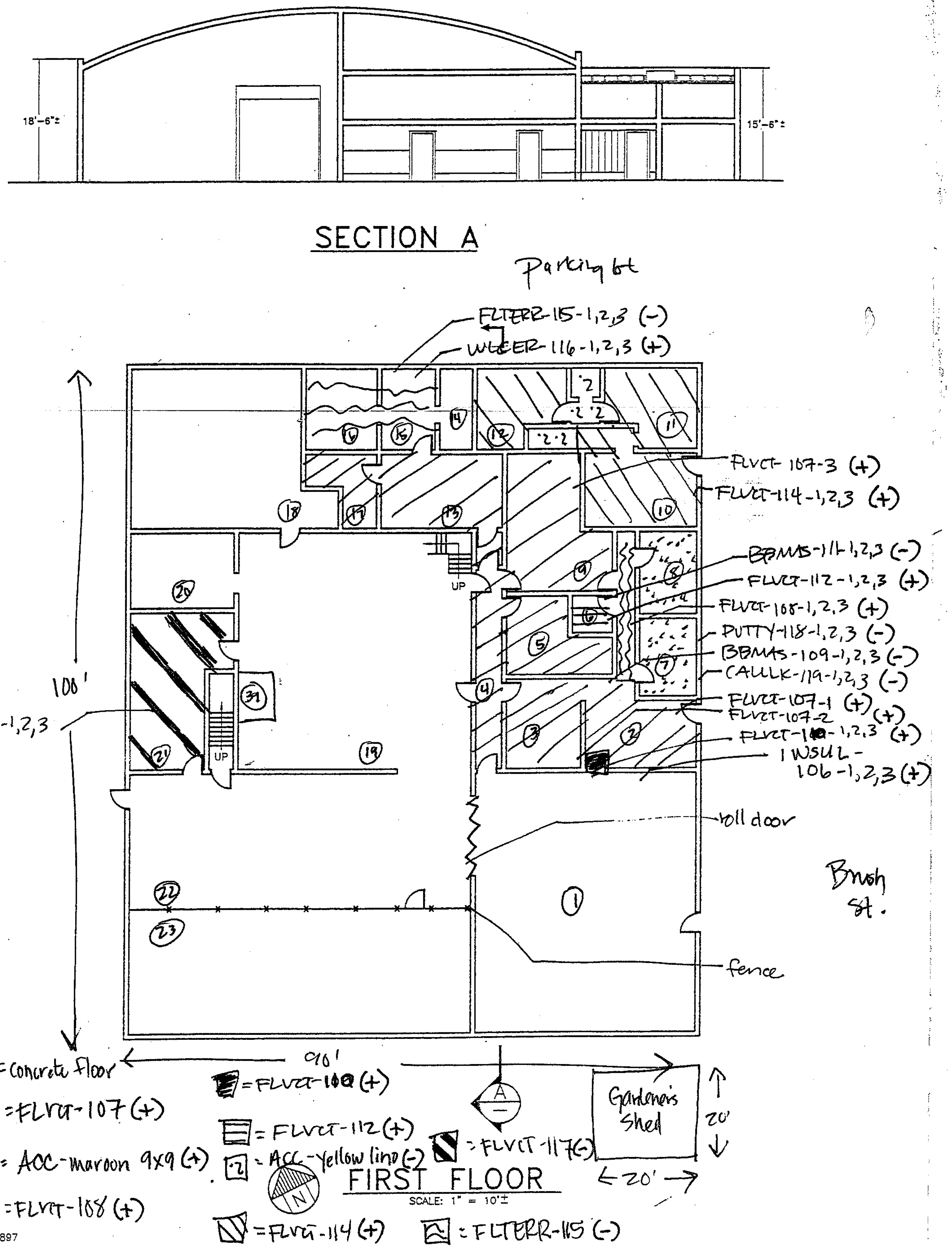
SCALE: 1"= 10'±

LEGEND
(+)= HUD-DEFINED LEAD-BASED PAINT (LBP)
(-)= NON-LBP

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

S. KWAN REG. ENGINEER NO. REG. ENGINEER NO. REG. ENGINEER NO.	PORT OF OAKLAND 530 WATER ST. OAKLAND, CALIFORNIA	CHIEF ENGINEER APPROVED REG. ENGINEER NO. RECOMMENDED REG. ENGINEER NO.	PROJECT LOCATION DEMOLITION OF BUILDINGS E-412, E-413 AND E-414 BUILDINGS E-413 & E-414	DATE: SCALE: AS SHOWN SHEET: X OF SHEETS

B-4965
SCA Env.
D. Chuter
9-12-01
Asbestos Sampling Locations



FIRST FLOOR
SCALE: 1" = 10'±

LEGEND:
(+) = ACM
(-) = NON-ACM
(TR) = TRACE (<1%) ASBESTOS
(NA) = NOT ANALYZED; ASSUMED ACM PER SERIAL ANALYSES

AA3754.DWG W.O.#103897
1=1 07-30-01 10:00AM

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

REFERENCES: PLANS FIELD BOOKS "PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL				
CAUTION: CHECK TRACING FOR LATEST REVISIONS	NO.	DATE	APP'D	REV

REVIEWED ________ FACILITIES DEPARTMENT
REVIEWED ________ CONSTRUCTION DEPARTMENT
REVIEWED ________ VISION 2000 PROGRAM

DRAWN S. KWAN
DESIGNED ________ REG. ENGINEER NO.
CHECKED ________ REG. ENGINEER NO.
REVIEWED ________ REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

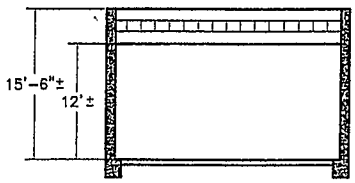
CHIEF ENGINEER ________ REG. ENGINEER NO.
APPROVED ________ REG. ENGINEER NO.
RECOMMENDED ________ REG. ENGINEER NO.

PROJECT LOCATION
DEMOLITION OF BUILDINGS E-412, E-413 AND E-414
BUILDING E-412

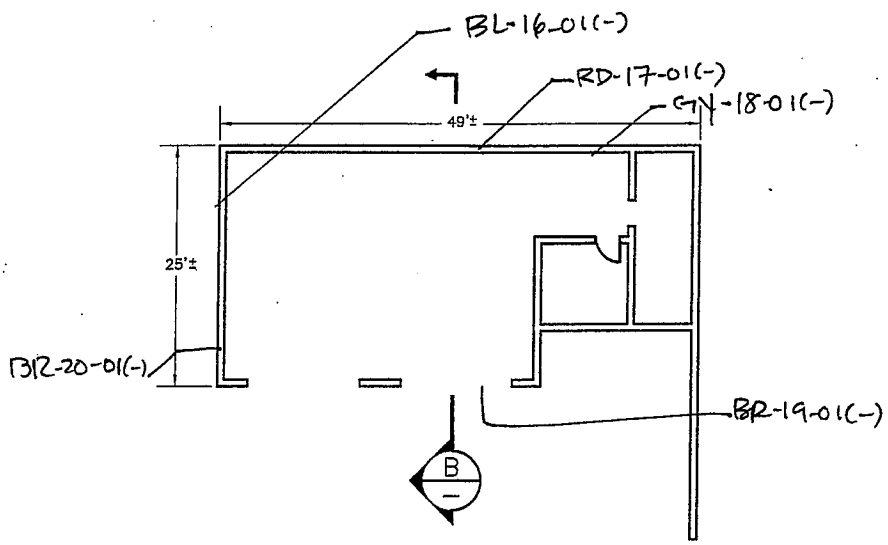
DATE: 07-30-01
SCALE: AS SHOWN
SHEET: X OF SHEETS

B-4965
Port of Oakland
205-209 Brush Surray
Bldg. E-413
LBP Sampling Locations
9.13.01

LEGEND:
(+) = HUD-DEFINED LEAD-BASED PAINT (LBP)
(-) = NON-LBP



SECTION B



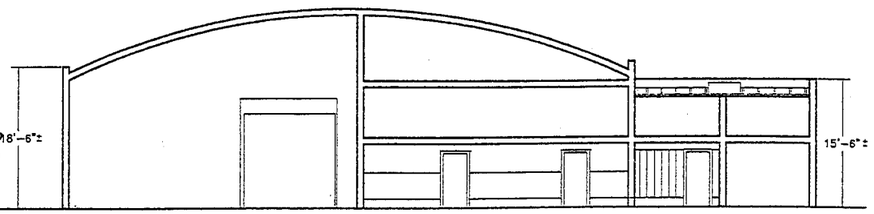
FLOOR PLAN

BUILDING E-413
SCALE: 1"= 10'±

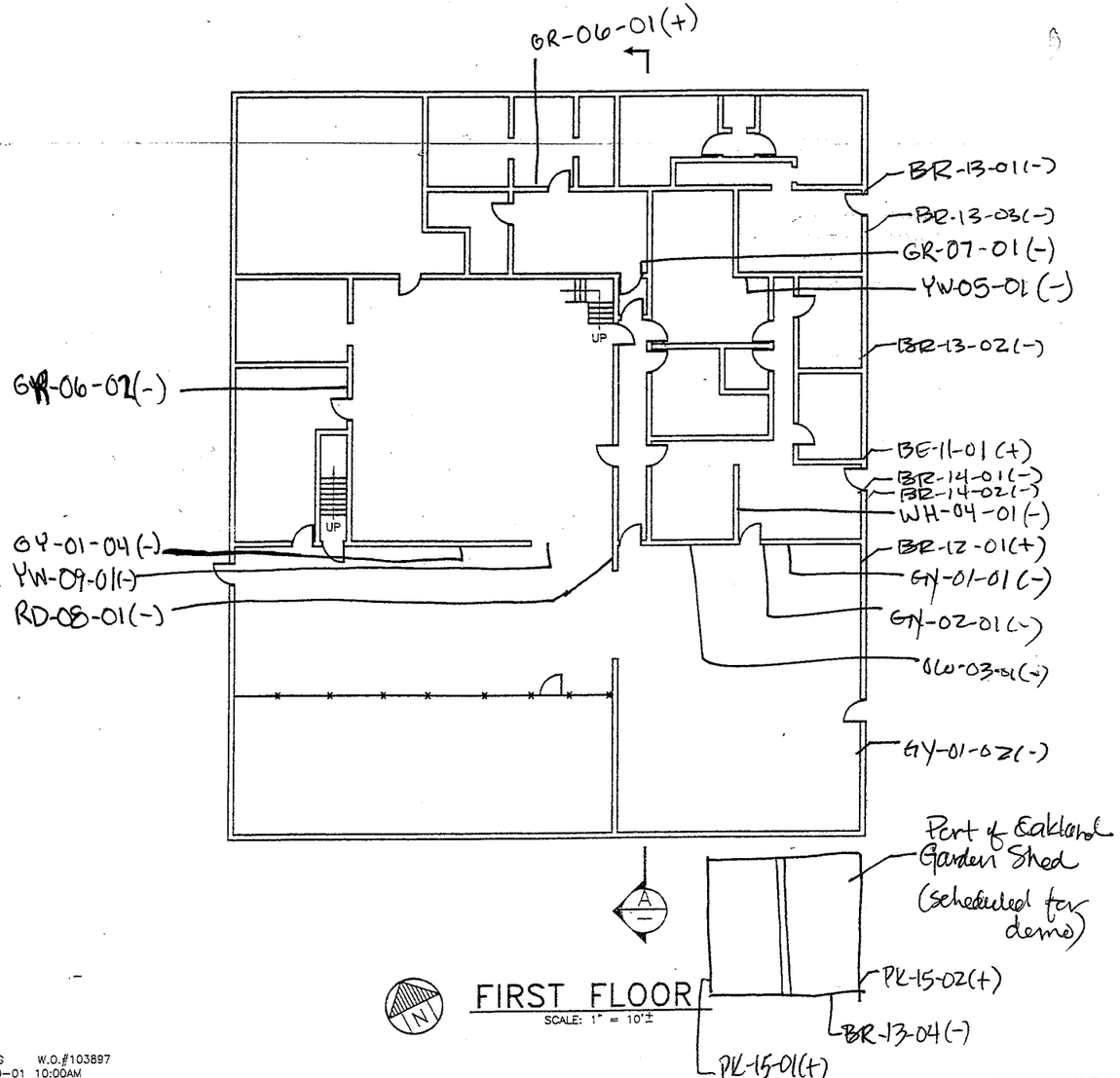
3754.DWG W.O.#103897
1=1 08-01-01 10:00AM

REFERENCES: PLANS; FIELD BOOKS; "PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL; CAUTION: CHECK TRACING FOR LATEST REVISIONS	NO.		DATE	APP'D	REV	REVIEWED FACILITIES DEPARTMENT; REVIEWED CONSTRUCTION DEPARTMENT; REVIEWED VISION 2000 PROGRAM	DRAWN S. KWAN; DESIGNED; CHECKED; REVIEWED; REG. ENGINEER NO.	PORT

B.4965
SCA Env.
Crater
9.12.01
LBP Sampling Locations -
First Floor Exterior
Bldg. E-412



SECTION A



FIRST FLOOR
SCALE: 1" = 10'±

LEGEND:

(+) = HUD-DEFINED LEAD-BASED PAINT (LBP)
(-) NON-LBP

AA3754.DWG W.O.#103897
1=1 07-30-01 10:00AM

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

REFERENCES:
PLANS
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

NO.		DATE	APP'D	REV

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ VISION 2000 PROGRAM

DRAWN S. KWAN
DESIGNED ____ REG. ENGINEER NO.
CHECKED ____ REG. ENGINEER NO.
REVIEWED ____ REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

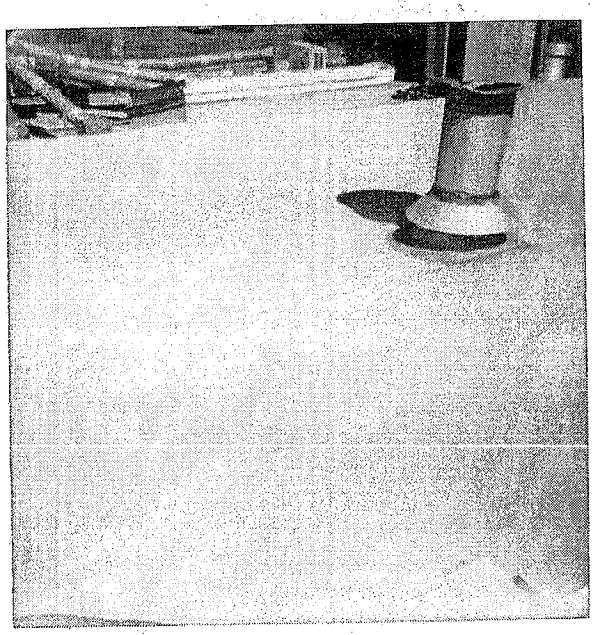
CHIEF ENGINEER ____ REG. ENGINEER NO.
APPROVED ____ REG. ENGINEER NO.
RECOMMENDED ____ REG. ENGINEER NO.

PROJECT LOCATION
DEMOLITION OF BUILDINGS E-412, E-413 AND E-414
BUILDING E-412

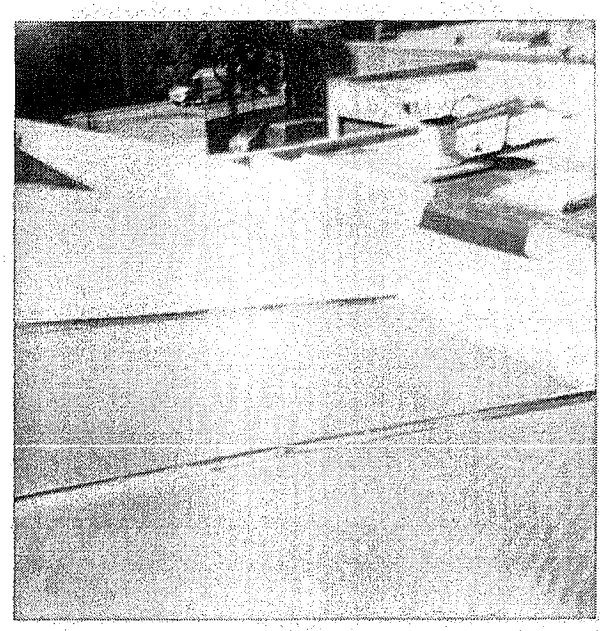
DATE: 07-30-01
SCALE: AS SHOWN
SHEET: X OF SHEETS

Attachment 7

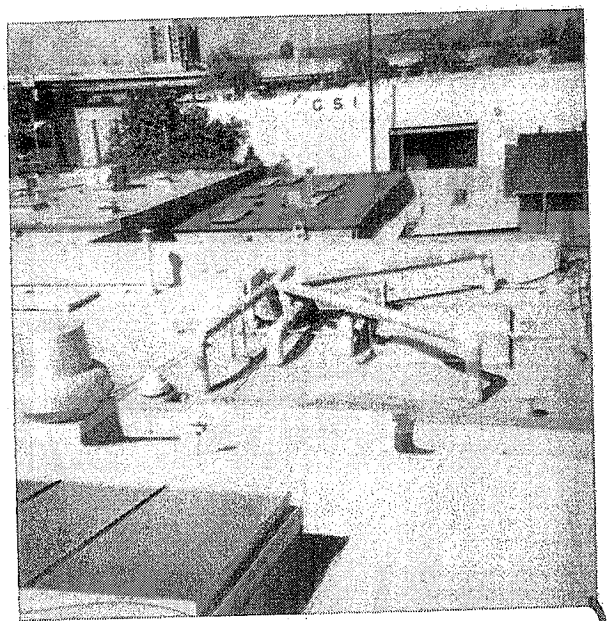
Photographs



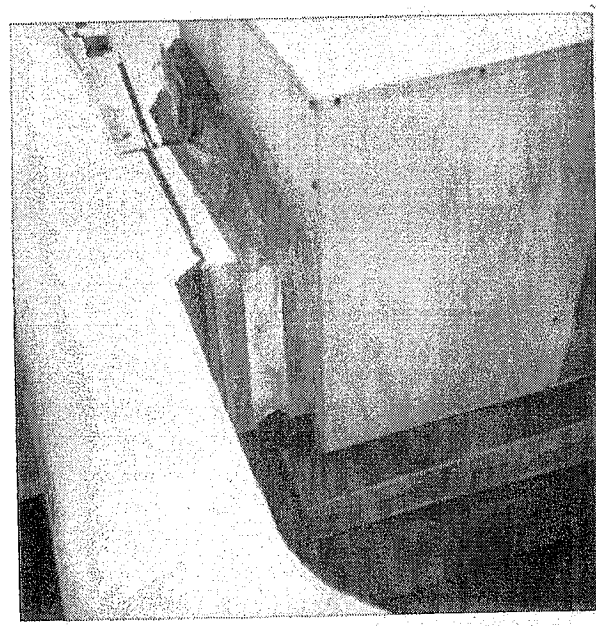
RFROLL-101
RF DEN-102



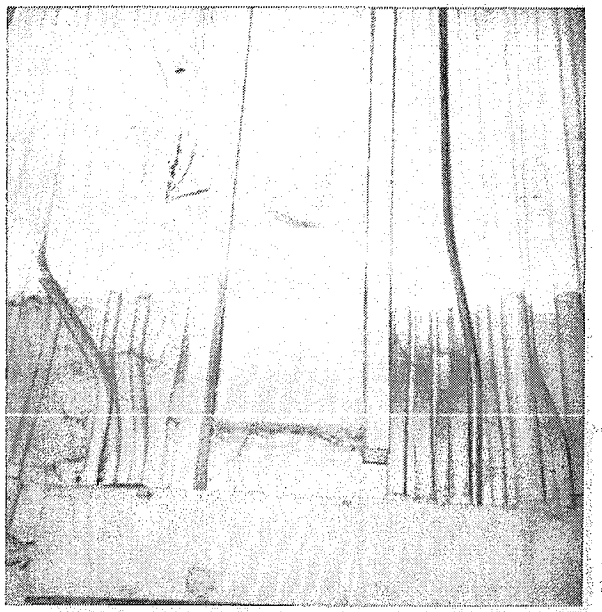
Putty 103



(ACC Sampled)
HDUCT-104

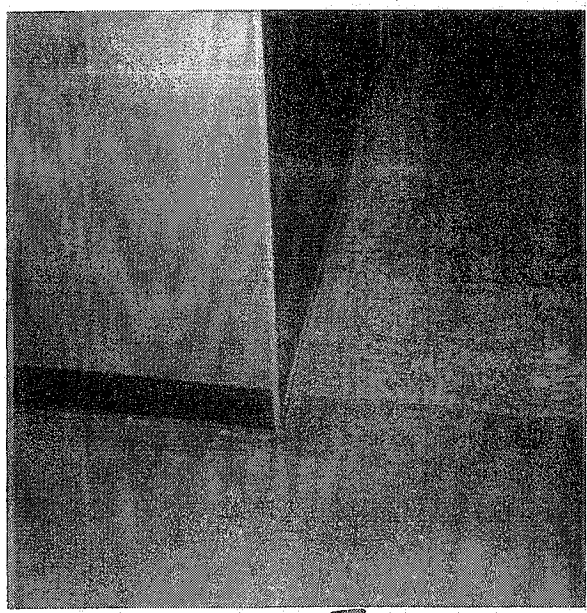


HFLEX-105

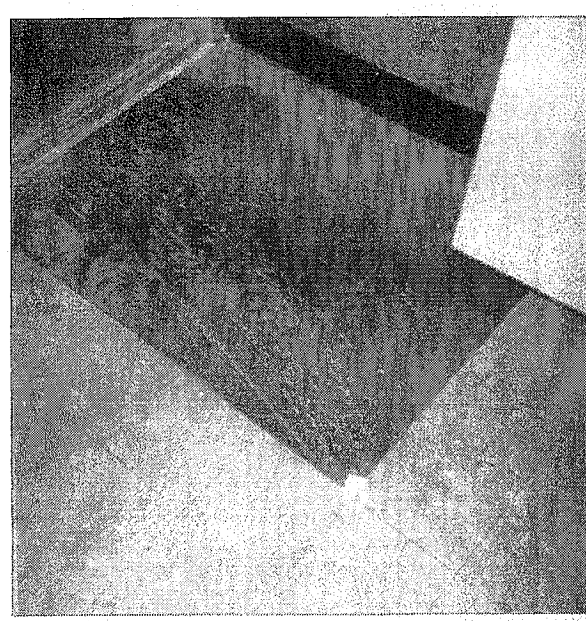


INSUL-106
WLSH (ACC sampled)

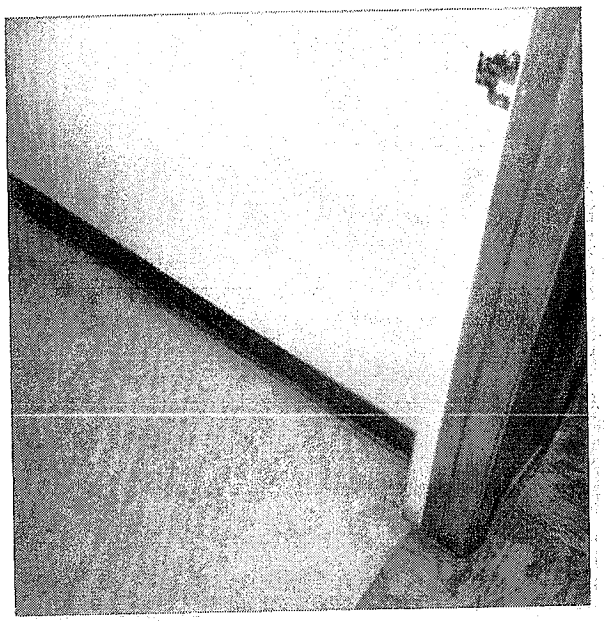
9x9 linoleum-
(ACC sampled)



FLVCT-107, FLVCT-108
BBNAS-109

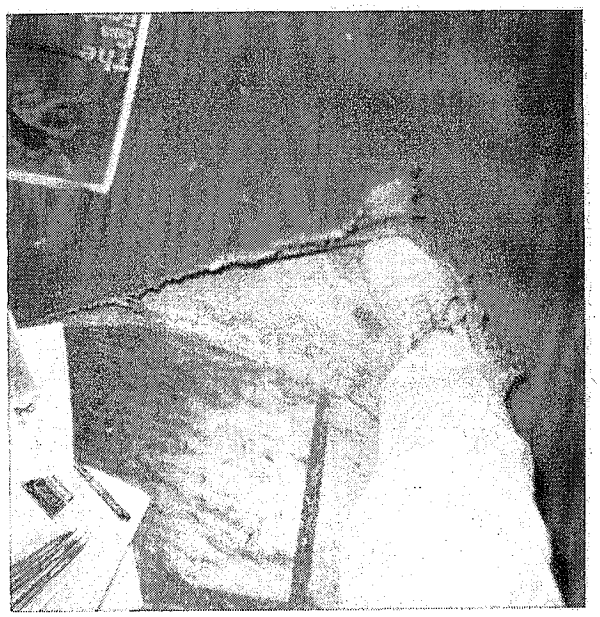


FLVCT-110



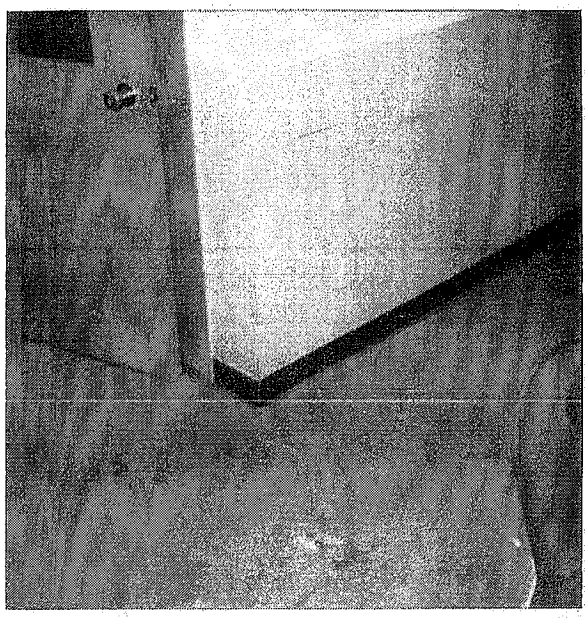
BRWLS-111
FLWL-112

WLGL-113



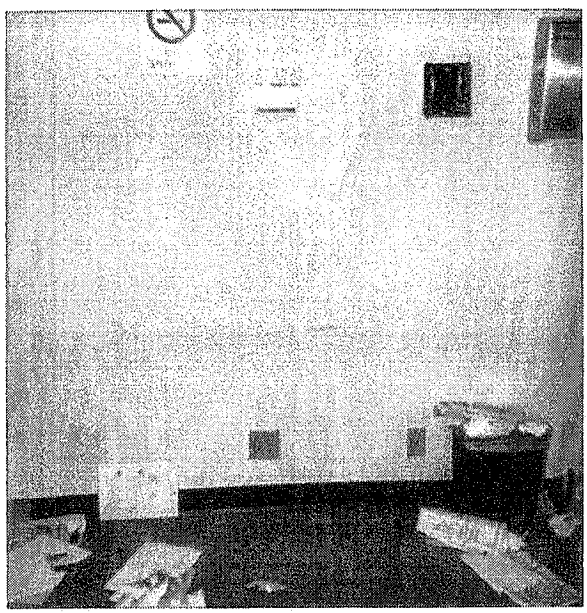
FLWL-114

FLTERB-115
WLCEB-116



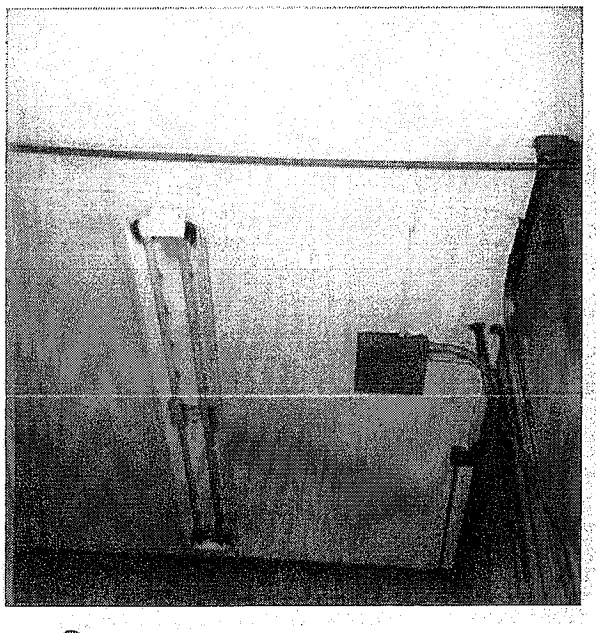
FLVCT-117

PUTTY-118-01
CAULK-119-01



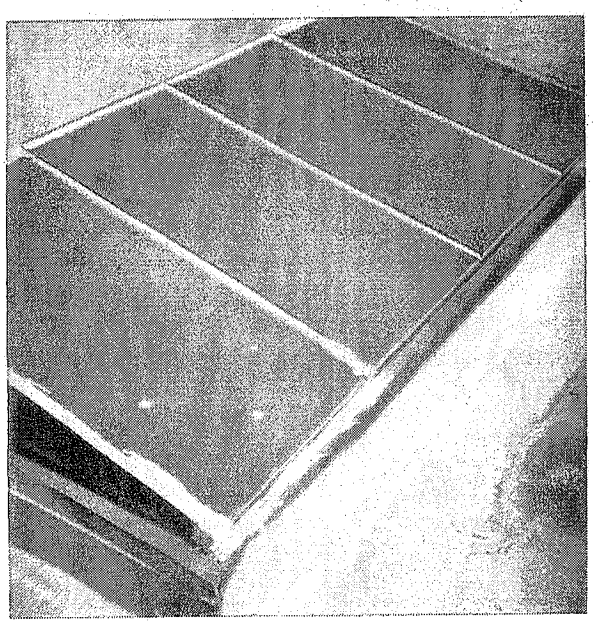
WLGL-120
BBMAS-121

STUCCO-122

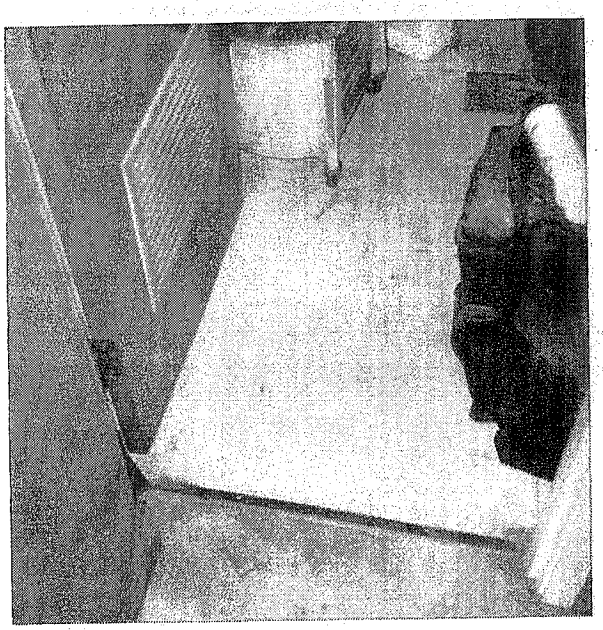


CLSH-123

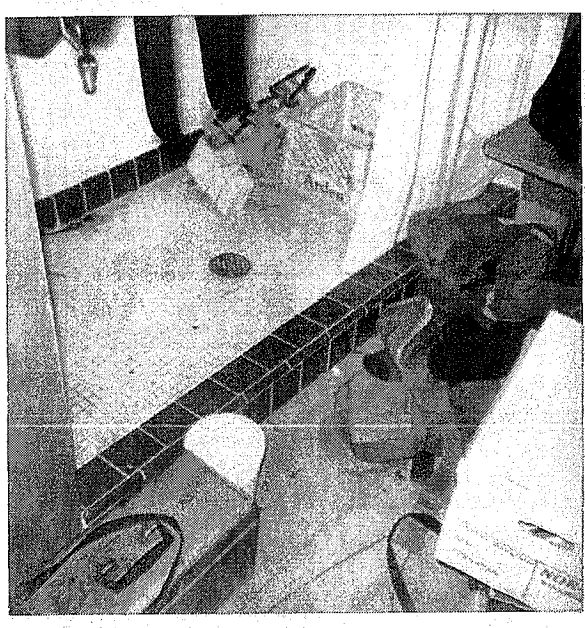
BLDG. E-414 - ACC Sampled
12x12 gray tile



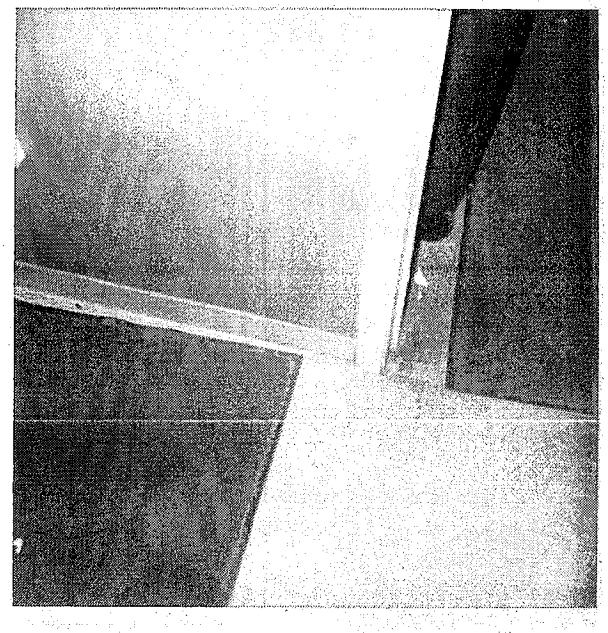
PUTTY-124



FLVCT-125

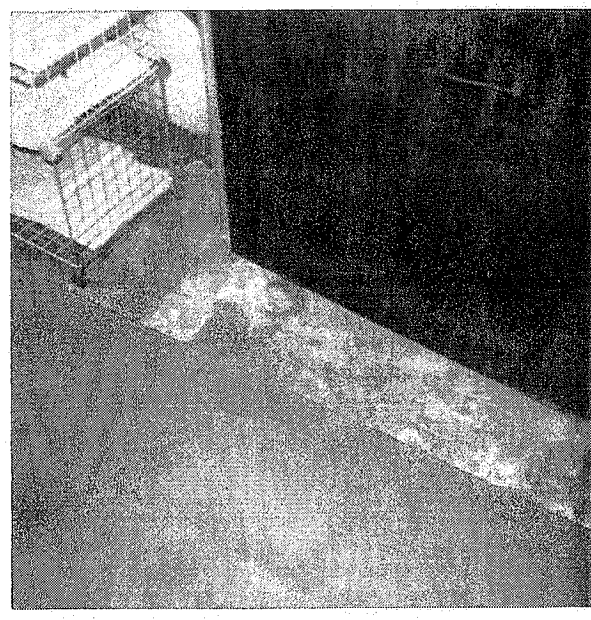


FLVCT-126
GROUT-127



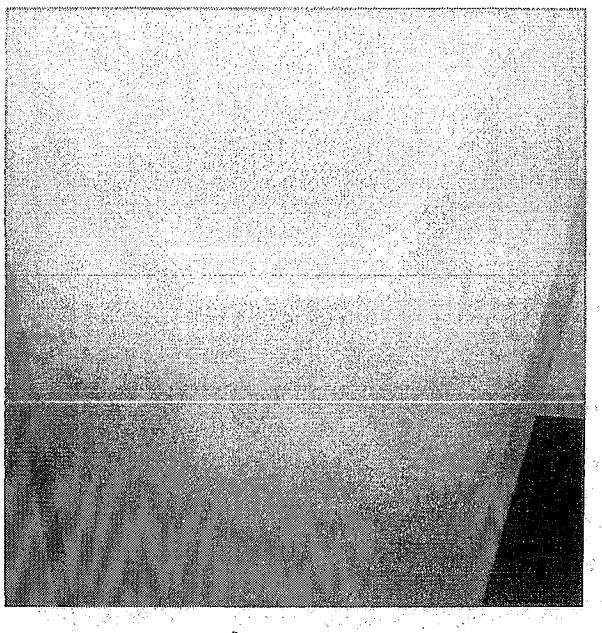
BBMAS-128

FLVCT-129



CPMAS-130

PUTTY-131



CLL-132

Attachment 8

Abatement Work Plan

Abatement Work Plan

Project:	205-209 Brush Street Demolition	**Updated:**	9/19/2001
Location:	Building E-412, E-413 & E-414 Demolition, 205-209 Brush Street, Oakland, CA 94607		

The work covered by this work plan includes the removal, handling and disposal of various hazardous materials in accordance with the Port of Oakland's Specifications and applicable federal, state and local regulations at the above designated site.

A copy of this Abatement Work Plan is to be posted on-site during the abatement work.

I. Summary of Work

x	Removal and disposal of asbestos-containing materials (ACM) as part of Port's Demolition Program.
x	Scraping and stabilization of loose and peeling paints as required for disposal of intact painted elements as non-hazardous waste, including associated dust controls and personal protective procedures in compliance with Cal/OSHA's Construction Lead Standard, 8 CCR 1532.1 and DHS regulation 17 CCR Sections 35001 through 36100.
x	Demolition, removal and disposal of painted surfaces with lead ceramic glazing or lead-based paints (LBPs) whereby airborne exposures may exceed the permissible exposure level, requiring such work to be completed by DHS Certified Lead Workers and Supervisors in compliance with Cal/OSHA's Construction Lead Standard, 8 CCR 1532.1 and DHS regulation 17 CCR Sections 35001 through 36100.
x	Removal and disposal of PCB-containing ballasts, as designated.
x	Removal and recycling of mercury-containing lamps and/or mercury-containing thermostats.

II. Submittals:

Pre-job Submittals (as designated):

x	BAAQMD Notification (10 working days in advance);
x	Cal/OSHA Notification per 8 CCR 1529 (24-hours in advance);
x	DHS Notification Form DHS 8551 (12/97) for Abatement of Lead Hazards
x	copy of current Contractors' State Licensing Board (CSLB) License;
x	copy of Cal/OSHA Asbestos Registration Certificate;
x	proof of all required permits or variances;
x	abatement work schedule;
x	abatement work plan(s);
x	copies of workers' asbestos training certificates, including the Competent Person;
x	copies of DHS Certified Lead Worker's and Supervisor's training certificates, as applicable;
x	copies of workers' lead awareness training certificates;
x	copies of workers' annual medical exam and respirator approval;
x	copies of workers' 12-month respirator fit testing records;
x	copies of workers' blood lead test within past 90 days;
x	Material Safety Data Sheets (MSDS) for chemicals used;
x	emergency phone and pager listing;
√	Independent third-party DOP testing of negative pressure units and vacuums;
√	proposed location of locked dumpster;
√	rotameter calibrations within past 6 months;

Periodic Submittals (as designated):

x	personal air monitoring (daily);
x	updated worker documentation (as needed);
x	boundary access logs (daily);
x	negative pressure records (daily); and
x	copies of updated notification to regulatory agencies (as needed).

Project Close-out Submittals (as designated within 2 weeks of completion):

x	Certificate of Completion;
x	receipt and weight tickets from landfill operator or recycler (as applicable);
x	copies of completed uniform waste manifests, including hazardous and non-hazardous waste;
x	waste profiling data (TCLP, WET and SW846, as applicable);
x	filter change logs for all filtration units, water filtration units (as applicable) and respirators;
x	foreman's daily job reports;
x	employee and visitor entry/exit logs for all containments;
x	manometer printouts for all applicable containments;
x	air sample results for all personnel, work areas and air filtration units;

III. Schedule

Start Date:	To be determined.
End Date:	To be determined.
Maximum Abatement Shifts:	10 concurrent asbestos and lead hazard/abatement shifts
Time frame:	7:00 a.m. to 3:30 p.m., Monday thru Friday, unless otherwise indicated in the Contract Documents.

IV. Contacts:

Contact	*Individual*	*Phone #*	*FAX #*	*Pager #*
Port's Project Manager:	Douglas Herman – Environmental Health & Safety Compliance	(510) 627-1184	(510) 451-5916	
SCA's Project Manager	Glenn Cass	(510) 465-9944	(510) 465-9109	(888) 681-4028

Note: Contact the Port's Project Manager only in an emergency.

V. Security

Arrange site security with the Port at the beginning of the job.

Provide temporary security at building penetrations created by the demolition and abatement.

VI. Special Conditions

Air Sampling:

1. PCM Analysis: Analysis of PCM samples shall follow the procedures outlined in NIOSH method 7400 and within these Contract Documents.

2. TEM Analysis: The U. S. Environmental Protection Agency passed regulations for schools under the Asbestos Hazard Emergency Response Act (AHERA), which are found in 40 CFR Part 763 "Asbestos Containing Materials in Schools". This regulation

states that all abatement work shall be evaluated upon completion by collecting air samples using aggressive sampling techniques and that all such samples shall be analyzed using Transmission Electron Microscopy (TEM). The TEM protocol for large projects/zones calls for the collection of a minimum of 5 inside samples, 5 outside samples, and 3 blank samples and each should be analyzed by TEM. The regulation strictly defines the criteria that must be met to determine that a building is acceptably clean after removal. TEM analysis turnaround times shall be 24 hours, unless otherwise indicated.

3. The sampling and analytical criteria in the AHERA regulation for schools shall be viewed as the preferred method for determining that any asbestos abatement project in any building has achieved a satisfactory level of cleanliness. The Port shall clear all work areas visually unless otherwise noted.

4. The Port shall pay the Environmental Consultant's costs of the final round of visual inspections, aggressive air sampling, and PCM and/or TEM analyses that will meet the asbestos abatement specification. All rounds of visual inspections, aggressive air sampling, and PCM and/or TEM analyses that fail to meet the contract criteria shall be borne by the Contractor. For the purpose of this paragraph, visual inspection includes the area isolation inspection, pre-encapsulation inspection, and final area clean-up inspection.

5. During all asbestos-related work, perimeter sample results will be collected by the Port and/or their Environmental Consultant (Industrial Hygienist). These samples will be analyzed by Phase Contrast Microscopy (PCM). Sample results that are in excess of the background level or 0.01 fibers per cubic centimeter (f/cc) Project Action Level may be forwarded for analysis by Transmission Electron Microscopy (TEM) with a 12-hour turnaround specified. Handling, shipping, and analysis charges (including the Environmental Consultants time and expenses) will be paid for by the Contractor. Any sample results in excess of 70 asbestos structures per square millimeter of filter area (corrected for a 1,200 - 1,800 liter sample volume as appropriate) will require cleaning, inspection, and resampling of the affected area at the Contractor's expense.

6. During all lead hazard-related work, such as demolition, torching and welding activities, etc., as applicable, perimeter air sample and/or lead wipe sample results will be collected by the Port's Environmental Consultant (Industrial Hygienist). These samples will be analyzed by flame atomic absorption. Wipe sample results which are in excess of the construction dust control standard of 800 micrograms per square foot for adjoining construction zones on two consecutive samplings (or two consecutive days) or 50 micrograms per square foot for adjoining occupied (floor) areas on any occasion will require isolation and clean-up of the affected areas. Air sampling results in excess of the Cal/OSHA "Project Action Level" of 30 micrograms per cubic meter will require isolation of the work area and amendment of work procedures and/or clean-up of the affected areas. Resampling of the affected areas and handling, shipping, and analysis charges (including the Environmental Consultant's time and expenses) for additional sampling required to show background levels below these construction lead standards shall be borne by the Contractor.

Submittals:

1. All pre-construction submittals shall be forwarded to the Port's Environmental Health & Safety Compliance Department and the Port's designated Environmental Consultant prior to the start of abatement as designated in the Contract Documents and herein.

2. Failure by the Contractor to fulfill the submittal requirements as specified in the Contract Documents and herein shall be the basis for withholding final payment until such submittal requirements are satisfied.

Additional Liquidated Damages:

1. The Contractor shall pay for all Environmental Consultant costs for delays in completion of work beyond the authorized schedule established by the Port. Such charges shall include Consultant's observations and inspections, daily air monitoring, equipment, transportation and analysis charges. Such costs are estimated at $1,000 per day, exclusive of any costs associated with final clearance air testing. See the Liquidated Damages Section in the General Conditions for further requirements.

Waste Manifests:

1. The Contractor shall coordinate the inspection and signing of all waste manifests with the Port and its Environmental Consultant, while on-site. Failure to complete the manifests or callbacks after completion of the project will be backcharged to the Contractor.

VII. Summary of Survey Result and Conditions

Sampling by SCA in September 2001 and ACC in 1996 found the following ACM:

Building E-412

- Duct taping on rooftop HVAC systems and Mezzanine Level, totaling about 300 LF [ACC Sample I.D. E412-2 with 90 to 95% Chrysotile].
- Whitish-beige insulation on top of the wall-mounted flues on the north side of Room #1, totaling about 20 SF [SCA Sample I.D. INSUL-106-1 with 20 to 30% Chrysotile].
- 9-inch square light brown vinyl floor tiles with white specks and black and gold mastics over concrete and leveling compounds, sampled in Rooms #2, 3 and 9, totaling about 1,797 SF [SCA Sample I.D. FLVCT-107-1 thru 3 with 1-5% Chrysotile in the tan tiles and 5-10% Chrysotile in the black mastics].
- 12-inch square yellow and brown patterned vinyl floor tiles with gold mastics over leveling compounds and concrete substrate, sampled in Room #2, totaling about 66 SF [SCA Sample I.D. FLVCT-108-1 with 1-5% Chrysotile in the tan tiles only].
- 12-inch square dark brown vinyl floor tiles with white and black mastics over concrete substrate, sampled in Room #2, totaling about 10 SF [SCA Sample I.D. FLVCT-110-1 thru 3 with 1-5% Chrysotile in the tiles and <1% Chrysotile in the mastics].
- 12-inch square tannish vinyl floor tiles with white streaks and black mastics over concrete substrate, sampled in Rooms #5 & 6, totaling 100 SF [SCA Sample I.D. FLVCT-112-1 with 1-5% Chrysotile in the mastics only].
- Tannish-brown glues located behind wood paneling over sheetrock wallboard throughout the building, sampled in Room #2, totaling about 3,540 SF [SCA Sample I.D. WLGL-113-1 with 1-5% Chrysotile in the glues].
- 9-inch square brown and yellow vinyl floor tiles with brown mastics over concrete substrates under carpeting in some areas with non-asbestos yellow mastics, sampled in Room #10, totaling about 990 SF [SCA Sample I.D. FLVCT-114-1 with 5-10% Chrysotile in the tiles only].
- Green and white ceramic wall tiles with related grouts located in the Men's & Women's Toilets (Rooms #15 & 16), totaling about 390 SF [SCA Sample I.D. WLCER-116-1 & 3 with 1-5% Chrysotile in the tan glues].
- 9-inch square maroon vinyl floor tiles and mastics under carpeting, sampled in Rooms #7, 12 & 12a, totaling about 1,740 SF [ACC Sample I.D. E-412-7, 8 & 9 with 1-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].

- 9-inch square maroon vinyl floor tiles sampled in the 2nd Floor Front Cabinet in the Hallway, totaling about 64 SF [ACC Sample I.D. E-412-12 with 5-10% Chrysotile in the tiles and trace (<1%) Chrysotile in the mastics].

Building E-413

- Roof patching compounds, totaling about 120 SF [ACC Sample I.D. E-413-2 with 10-15% Chrysotile].

Building E-414:

- White skylight glazing putties, totaling about 40 LF [SCA Sample I.D. PUTTY-124-1 with 1-5% Chrysotile].
- 12-inch square tannish vinyl floor tiles with dark tan streaks and black mastics over concrete substrate in Rooms #44 and 66-69, totaling about 160 SF [SCA Sample I.D. FLVCT-125-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the black mastics].
- 12-inch square tan vinyl floor tiles with brown streaks and black mastics over concrete substrate, sampled in Room #52, totaling about 120 SF [SCA Sample I.D. FLVCT-129-1 with 1-5% Chrysotile in the tiles and 5-10% Chrysotile in the mastics].
- 12-inch square gray vinyl floor tiles and mastics sampled on the Mezzanine Level, totaling about 825 SF [ACC Sample I.D. E-414-4 with 1-5% Chrysotile in the tiles and 15-20% Chrysotile in the mastics].
- Tar and felt roofing throughout the southeast section, totaling about 6,000 SF [ACC Sample I.D. E-414-9 with 5-10% Chrysotile].
- Roof patching compounds, sampled on the eastern section, totaling about 120 SF [ACC Sample I.D. E-414-10 with 5-10% Chrysotile in the mastics].
- Roof patching compounds, sampled on the southern section, totaling about 210 SF [ACC Sample I.D. E-414-11 & 12 with 1-10% Chrysotile in the mastics].
- White interior window glazing putties, sampled in the Archives (234 Market Street, Room #56), averaging about 24 LF per window, typical of >5 assemblies [SCA Sample I.D. PUTTY-131-1 with 1-5% Chrysotile].

"Trace" asbestos-containing materials (<1% asbestos by weight) sampled by SCA include:

Building E-412

- Sheetrock wallboard and joint compounds, sampled in Room #16 behind the Stairwell, totaling about 400 SF [ACC Sample I.D. E-412-1 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Mezzanine Area, totaling about 760 SF [ACC Sample I.D. E-412-3 & E-412-4 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite].
- Sheetrock wallboard and joint compounds sampled in the Men's Toilet near the Electrical Closet [ACC Sample I.D. E-412-14 with 1-5% Chrysotile in the joint compounds and trace (<1%) Chrysotile composite]. [Sheetrock quantities throughout Building E-412 are estimated at about 20,600 SF].

Building E-413:

- Sheetrock ceiling board and joint compounds, totaling about 1,225 SF [SCA Sample I.D. CLSH-123-1 with 1-5% Chrysotile in the Joint Compounds and trace (<1%) Chrysotile composite].

Suspect asbestos-containing materials that were not tested include:

Building E-412:

- Fire doors throughout, totaling about 5 units [SCA Sample I.D. DOOR-AAA, assumed ACM].

Building E-414:

- Transite flue to the roof, totaling about 30 LF [SCA Sample I.D. TRANS-AAA, assumed ACM].

Non-asbestos materials sampled by SCA in September 2001 and ACC in 1996 include:

Building E-412

- Silver-black rolled roofing with black tars over a whitish-brown wood substrate and insulation, totaling about 8,000 SF [SCA Sample I.D. RFROLL-101-1 thru 3].
- Dark gray-black roofing penetration tars and mastics located throughout the roof, totaling about 160 LF [SCA Sample I.D. RFPEN-102-1 thru 3].
- White skylight glazing putties, totaling about 288 LF [SCA Sample I.D. PUTTY-103-1 thru 3].
- Tannish flexible duct connectors located on the rooftop HVAC units, totaling about 20 LF [SCA Sample I.D. HFLEX-105-1 thru 3].
- 6-inch high black and brown vinyl baseboards with related brown mastics over wood and sheetrock substrates, sampled in Room #2, totaling about 470 LF [SCA Sample I.D. BBMAS-109-1 thru 3].
- 4-inch high brown vinyl baseboards with yellow mastics over various substrates, sampled in Room #6, totaling about 54 LF [SCA Sample I.D. BBMAS-111-1 thru 3].
- Gray, white and green terrazzo flooring in the Men's Toilet (Rooms #15 & 16), totaling about 165 SF [SCA Sample I.D. FLTERR-115-1 thru 3].
- 12-inch square tannish vinyl floor tiles with gray streaks and yellow mastics over wood substrate over concrete, sampled in Room #21 [SCA Sample I.D. FLVCT-117-1 thru 3].
- White window glazing putties located on the eastern façade of the building, sampled in Room #2 [SCA Sample I.D. PUTTY-118-1 thru 3].
- Perimeter window caulking at frame to brick substrate, sample in Room #2 [SCA Sample I.D. CAULK-119-1 thru 3].
- Yellow wallpaper glue over sheetrock wallboard within the 2nd Floor Computer Room and Rooms #30-33, totaling about 500 SF [SCA Sample I.D. WLGL-120-1 thru 3].
- 4-inch high blue and gray vinyl baseboards with brown mastics throughout Rooms 30-33 and Room 39 [SCA Sample I.D. BBMAS-121-1 thru 3].
- Stucco exterior plasters on top of brick structure on the eastern façade with tan and brown paints, totaling about 350 SF [SCA Sample I.D. STUCCO-122-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the front Office (Room #12) [ACC Sample I.D. E-412-5].
- 12-inch square off-white acoustical ceiling tiles sampled in Room #12 [ACC Sample I.D. E-412-6].
- 4-inch square patterned yellow linoleum flooring with brown spots, sampled in Bathroom #12b [ACC Sample I.D. E-412-10].
- Tar and felt roofing, sampled on the northeast, west and middle sections of the roof [ACC Sample I.D. E-412-15, 16, 17, 18, 19 & 20].
- 12-inch square off-white acoustical ceiling tiles sampled in the 2nd Floor Computer Room [ACC Sample I.D. E-412-11].
- 2-ft. by 4-ft. laid-in ceiling tiles sampled in the 2nd Floor eastern Offices [ACC Sample I.D. E-412-13].

Building E-413:

- Tar and felt roofing throughout [ACC Sample I.D. E-413-1].

Building E-414:

- 12-inch square bluish-white vinyl floor tiles with gray streaks and yellow mastics over concrete substrate in the Room #53 Toilets, totaling about 200 SF [SCA Sample I.D. FLVCT-126-1 thru 3].
- White and teal ceramic wall tiles and grouts over sheetrock wallboard throughout Room #53, totaling about 3009 SF [SCA Sample I.D. GROUT-127-1 thru 3].
- 4-inch high brown and gray vinyl baseboards with brown mastics over sheetrock wallboard throughout Rooms #51-53, 55 and other areas, totaling about 240 LF [SCA Sample I.D. BBMAS-128-1 thru 3].
- Yellow carpet mastics sampled in Room #51 and throughout, totaling about 3,400 SF [SCA Sample I.D. CPMAS-130-1 thru 3].
- Duct tape, sampled on the Mezzanine Level [ACC Sample I.D. E-414-3].
- Sheetrock wallboard and joint compounds sampled at the Entrance to the Building in front of the Men's Room and the Entrance to the Diver's Storage Room [ACC Sample I.D. E-414-1 & 2].
- Sheetrock wallboard and joint compounds sampled in the Diver's Storage Room, the Front Entrance on Market Street and the Entrance to the Room [ACC Sample I.D. E-414-5 & 6].
- Tar and felt roofing throughout the northeast and middle sections [ACC Sample I.D. E-414-7 & 8].
- Yellow carpet mastics at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CPMAS-130-1 thru 3].
- 2-ft. by 4-ft. laid-in ceiling tiles with sprinkled hole pattern throughout the offices at 773 3rd Street (Fire Shop #57) [SCA Sample I.D. CLLI-132-1 thru 3].

Lead-based paints tested on-site, requiring protection from disturbances causing airborne lead dusts during the abatement phase include the following HUD-defined lead-based paints:

- Green ceramic tile glazing in Building E-412 Toilets [SCA Sample I.D. GR-06-1 with >5.0 mg/cm^2 of lead].
- Beige exterior stucco paints at Building E-412 throughout [SCA Sample I.D. BE-11-1 with 1.1 mg/cm^2].
- Brown exterior stucco paints at Building E-412 [SCA Sample I.D. BR-12-1 with 1.10 mg/cm^2].
- Pink paints on the exterior metal walls of the Garden Shed near E-412 [SCA Sample I.D. PK-15-1 & 2 with 2.6 to 3.10 mg/cm^2].

Treat all similar paints and substrates in kind. Note that most building paints contain some lead content, and require demolition dust control procedures for compliance with Cal/OSHA's Construction Lead Standard under 8 CCR 1532.1.

Scrape and stabilize all loose and peeling paints on-site and characterize for possible disposal as hazardous waste. Intact painted elements may be disposed as non-hazardous waste complying with dust controls and personal protective procedures per Cal/OSHA regulation 8 CCR 1532.1 and DHS regulation 17 CCR Sections 35001 through 36100.

VIII. Scope of Work

Asbestos Abatement:

Abatement Material Group A-1	Vinyl Floor Tiles with Related Mastics			
Method:	x Full Isolation or Mini-Containment	___ Glovebag	___ Glovebag-Cutout	
Material	***Activity Class***	***Sample I.D.***	***% Asbestos***	***Est. Quantity***
Various colored and sized vinyl floor tiles with related mastics	2	See Table 1	See Table	See Table 1 & Plans

Asbestos Abatement Procedures for Material Group A-1 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Floor:	___ # Layers Poly	___ Drop Cloths	___ Scaffold
Walls:	1 # of Polyethylene Layers	x Splash Guards	
Criticals:	1 # of Polyethylene Layers	___ Plywood Barriers	

Other Comments: **For flooring removal:** Abate the vinyl floor tiles and mastics using full isolation or mini-containment abatement methods per Cal/OSHA 8 CCR 1529 Work Class II procedures, minimum, with negative pressurization of the zone(s). Demolish interior partitions and counters to access and abate concealed materials as noted on the Demolition Plans. Remove the mastics using an approved "low odor" mastic remover with greater than 140°F flash point. Dispose of waste as Category 1 non-friable waste.

All loose and abated materials must be locked within the waste dumpster daily before leaving the site. HEPA vacuum the contained area for final visual inspection.

Abatement Material Group A-2:	Roof Removal			
Method:	x Cordon Area	___ Glovebag	___ Glovebag-Cutout	
Material	***Activity Class***	***Sample I.D.***	***% Asbestos***	***Est. Quantity***
Building E-413 Roof patching compounds	2	E-413-2	10-15% CH	~120 SF
E-414 Skylight window Caulking	2	PUTTY-124-1	1-5% CH	~40 LF
E-414 Southeast Tar and felt roofing	2	E-414-9	5-10% CH	~6,000 SF
E-414 Eastern Roof patching compounds	2	E-414-10	5-10% CH in mastics	~120 SF
E-414 Southern Roof patching compounds	2	E-414-11 & 12	1-10% CH in mastics	~210 SF

Asbestos Abatement Procedures for Material Group A-2 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Floor:	___ # Layers Poly	x Drop Cloths	___ Scaffold
Walls:	___ # of Polyethylene Layers	___ Splash Guards	
Criticals:	1 # of Polyethylene Layers	___ Plywood Barriers	

Other Comments: Set-up drop cloths on the ground under roofing removal area and abate the rolled roofing, roof patching and penetration compound, and skylight caulking & mastics using wet methods. Seal rooftop vents, windows, etc. with one layer of 6-mil polyethylene sheeting as a critical barrier. Bag or wrap waste in 2 layers of 6-mil polyethylene sheeting and lower to ground. Debris chutes must be sealed and negatively pressurized, if used. HEPA vacuum the surrounding area following the abatement for final clearance. Dispose of all debris as Category 1 non-friable asbestos waste.

Coordinate with abatement of loose and peeling lead-based paints. All loose and abated materials must be locked within the waste dumpster daily before leaving the site. Allow for a 20 ft. minimum buffer zone between the roof removal activities and other demolition or renovation work.

Abatement Material Group A-3: Sheetrock Impacts

Method:	x Full Isolation or Cordoned Area	___ Glovebag	___ Glovebag-Cutout

Material	***Activity Class***	***Sample I.D.***	***% Asbestos***	***Est. Quantity***
sheetrock walls and ceilings throughout Building E-412	---	E-412-1, 3, 4 & 14	<1% CH composite	~20,600 SF; throughout walls & ceilings
Tannish brown glues on wood paneling over sheetrock	2	WLGL-113-1	1-5% CH in glues	~3,540, includes Room #2 and various areas
Green and white ceramic wall tile grouts and mastics in E-412 Men's & Women's Toilets (#15 & 16)	2	WLCER-116-1 & 3	1-5% CH in glues	~390 SF, includes Toilets
Fire Doors in Bldgs. E-412 & E-414	2	DOOR-AAA	Assumed ACM	~5 per bldg.
Sheetrock ceiling and joint compounds throughout E-413	---	CLSH-123-1	<1% CH composite	~1,225 SF; throughout Bldg. E-413's ceiling

Asbestos Abatement Procedures for Material Group A-3 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Floor:	1 # Layers Poly	___ Drop Cloths	___ Scaffold
Walls:	1 # of Polyethylene Layers	x Splash Guards	
Criticals:	1 # of Polyethylene Layers	___ Plywood Barriers	

Other Comments: **For "trace" Sheetrock:** Remove materials using full isolation or mini-containment procedures, satisfying the requirements of Cal/OSHA 8 CCR 1529 Work Class II procedures, unless otherwise noted. Use wet methods for dust controls. Dispose of composite sheetrock and joint compound materials as "trace" composite asbestos waste. HEPA vacuum the contained area for final inspection.

Trace asbestos materials may be demolished with the building intact; however, quantities exceeding 100 SF require asbestos registration by the Demolition Contractor in compliance with the California Business & Professions Code. Use wet methods and dust controls. Demolition workers will be required to wear respiratory protection and Tyvek coveralls unless a negative exposure assessment is submitted for such work.

Remove wall paneling with glues and dispose as Category 1 non-friable waste. If wall mastics are not segregated from the trace asbestos sheetrock wallboard, all commingled waste shall be placed in a lined dumpster as Category 1, non-friable waste.

Remove the fire doors intact and double wrap in 2 layers of 6-mil polyethylene sheeting. Dispose as friable asbestos waste.

Abatement Material Group A-4:	Thermal System Insulation (TSI)		
Method:	x Full Isolation or Secondary Containment	x Glovebag	___ Glovebag-Cutout

Material	***Activity Class***	***Sample I.D***	***% Asbestos***	***Est. Quantity***
Duct taping on Rooftop and Mezzanine Level mechanical equipment in E-412	1	E-412-2	90-95% CH	~300 LF
Whitish-beige insulation on top of wall-mounted flues in Room #1, Building E-412	1	INSUL-106-1	20-30% CH	~20 SF

Asbestos Abatement Procedures for Material Group A-4 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Floor:	2 # Layers Poly	___ Drop Cloths	___ Scaffold
Walls:	1 # of Polyethylene Layers	__ Splash Guards	
Criticals:	2 # of Polyethylene Layers	__ Plywood Barriers	

Other Comments: Set-up secondary containment for all glovebag abatement areas, or set-up full isolation containment. Set-up glovebags and abate using wet methods. Double bag the waste and dispose as friable asbestos waste.

Areas with evidence of damaged TSI will require HEPA-vacuuming of the access to this debris as well as vacuuming of all piping, ductwork and substrate materials within a minimum 5-ft. radius of all such contamination.

Removal of TSI shall be sufficient to accommodate access by applicable trades within the plenum, wall cavity or crawl space zone for routing of conduit, cables, etc. Coordinate with abatement of other applicable materials

Abatement Material Group A-5	Vinyl Floor Sheeting (Linoleum) – Not Applicable to this Site

Abatement Material Group A-6:	Plaster Demolition – Not Applicable to this Site

Abatement Material Group A-7: Exterior Stucco & Exterior Window Impacts

Method:	x Cordon Area	___ Glovebag	___ Glovebag-Cutout

Material	***Activity Class***	***Sample I.D.***	***% Asbestos***	***Est. Quantity***
White interior window glazing putties in Archives (234 Market St., Room #56)	2	PUTTY-131-1	1-5% CH	~24 LF per window times 5 windows
Transite flue in E-414	2	TRANS-AAA	Assumed ACM	~30 LF

Asbestos Abatement Procedures for Material Group A-7 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Floor:	___ # Layers Poly	x Drop Cloths	___ Scaffold
Walls:	___ # of Polyethylene Layers	___ Splash Guards	
Criticals:	1 # of Polyethylene Layers	___ Plywood Barriers	

Other Comments: Remove transite flue intact and dispose as Category 2 non-friable waste. If the flue requires breakage into segments, wrap the break pint in 2 layers of 6-mil polyethylene sheeting and carefully break, avoiding pulverization.

For interior window glazing compounds: Close and seal off all windows from the outside, and complete scraping of caulking as required for window removal. Install drop cloths on floors as required to contain caulking debris. HEPA-vacuum sills and surrounding area and drop cloths before final visual clearances.

As an alternative, remove the windows intact to avoid disturbance to the window glazing putties. Dispose of windows as Category 2 non-friable waste.

Coordinate with abatement of loose and peeling lead-based paints. All loose and abated materials must be locked within the waste dumpster daily before leaving the site. Allow for a 20 ft. minimum buffer zone between the roof removal activities and other demolition or renovation work.

Lead Hazards Construction Work:

Zone L-1: Interior & Exterior Paints

Sample I.D.	***Color***	***Area***	***Lead Content***	***Activity Class***
see representative LBP Sample Table	varies	varies	>1.0 mg/cm^2	1
other representative painted finishes	varies	varies	generally <1 mg/cm^2	1

Lead Hazard Procedures for Zone #L-1 (Applicable Indicated):

Decon System:	x Shower	x Central	___ Bucket
Required Methods:	___ Full Containment	x Manual Methods w/Drop Cloths	x Loose & Peeling Paints Only

Other Comments: Manually scrape and stabilize loose and peeling paints prior to demolition of the structure using drop cloths, wet methods, and HEPA vacuums for dust control in compliance with Cal/OSHA regulation 8 CCR 1532.1. Avoid dry sweeping. Clean-up daily all work areas before leaving the site. Characterize and dispose of loose chips and debris as possible hazardous waste.

Demolish and dispose of intact painted substrates as non-hazardous waste. Complete abatement work exceeding the permissible exposure limit using DHS Certified Lead Workers and Supervisors, including but not necessarily limited to demolition of lead glazed ceramic tiles, extensive manual or mechanical scraping or sanding of loose and peeling paints, demolition of concrete-encased primed steel, and spot abatement of primed structural steel prior to torching or cutting, as applicable.

Other Items (as designated):

PCB Ballasts:	x	Remove and dispose of PCB ballasts throughout.
Mercury Lamp Recycling	x	Remove and recycle fluorescent lamps and mercury-containing thermostats throughout.

IX. Monitoring and Clearance

Asbestos Clearance Requirements (includes budgeted # of samples):

Vinyl Flooring	x Visual Only	___ PCM/zone	___ TEM/zone
Roofs & Patching Compounds	x Visual Only	___ PCM/zone	___ TEM/zone
Sheetrock Wallboard & Panel & Tile Glues	x Visual Only	___ PCM/zone	___ TEM/zone
Duct Taping & Mechanical Insulation	x Visual Only	___ PCM/zone	___ TEM/zone
Transite Flue & Window Putties	x Visual Only	___ PCM/zone	___ TEM/zone

Lead Clearance Requirements (includes budgeted # of samples):

Zone L-1 (Interior)	x Visual Only	___ Wipes	___ Air
Zone L-1 (Exterior)	x Visual Only	___ Wipes	___ Air

X. Diagrams

See the Port's Demolition Plans

Consultant's Signature:	Date: 9/19/01

Table 1: Preliminary Abatement Cost Estimate							
205-209 Brush Street, Oakalnd, CA							
Prepared by SCA Environmental, Inc. on 9/19/01							
SCA Project No.: B-4965							
Building	**Sample I.D.**	**Location**	**Description**	**% Asbestos**	**Estimated Quantity**		**Abatement Procedures**
E-412	E-412-2	Mezzanine Level	Duct taping on rooftop HVAC systems and Mezzanine Level	90-95% CH	300	LF	A-4
E-412	INSUL-106-1	Room #1	Whitish-beige insulation on top of the wall-mounted flues on the north side of Room #1	20-30% CH	20	SF	A-4
E-412	FLVCT-107-1 thru 3	sampled in Rooms #2, 3 & 9	9-inch square light brown vinyl floor tiles with white specks and black and gold mastics over concrete and leveling compounds, sampled in Rooms #2, 3 and 9	1-5% CH in tiles & 5-10% CH in mastics	1797	SF	A-1
E-412	FLVCT-108-1	Room #2	12-inch square yellow and brown patterned vinyl floor tiles with gold mastics over leveling compounds and concrete substrate, sampled in Room #2	1-5% CH in tiles only	66	SF	A-1
E-412	FLVCT-110-1 thru 3	Room #2	12-inch square dark brown vinyl floor tiles with white and black mastics over concrete substrate, sampled in Room #2	1-5% CH in tiles & <1% CH in mastics	10	SF	A-1
E-412	FLVCT-112-1	Rooms #5 & 6	12-inch square tannish vinyl floor tiles with white streaks and black mastics over concrete substrate, sampled in Rooms #5 & 6	1-5% CH in mastics only	100	SF	A-1
E-412	WLGL-113-1	Throughout	Tannish-brown glues located behind wood paneling over sheetrock wallboard throughout the building, sampled in Room #2	1-5% CH in glues	3540	SF	A-3 & L-1
E-412	FLVCT-114-1	Room #10	9-inch square brown and yellow vinyl floor tiles with brown mastics over concrete substrates under carpeting in some areas with non-asbestos yellow mastics, sampled in Room #10	5-10% CH in tiles only	990	SF	A-1

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SCA Project No.: B-4965							
Building	**Sample I.D.**	**Location**	**Description**	**% Asbestos**	**Estimated Quantity**		**Abatement Procedures**
E-412	WLCER-116-1 & 3	Women's & Men's Toilets (#15 & 16)	Green and white ceramic wall tiles with related grouts located in the Men's & Women's Toilets (Rooms #15 & 16)	1-5% CH in glues	390	SF	A-3 & L-1
E-412	E-412-7, 8 & 9	Rooms #7, 12 & 12a	9-inch square maroon vinyl floor tiles and mastics under carpeting, sampled in Rooms #7, 12 & 12a	1-10% CH in tiles & <1%CH in mastics	1740	SF	A-1
E-412	E-412-12	2nd Floor Front Cabinet in Hallway	9-inch square maroon vinyl floor tiles sampled in the 2nd Floor Front Cabinet in the Hallway	5-10% CH in tiles & <1% CH in mastics	64	SF	A-1
E-412	E-412-1, 3, 4 & 14	Throughout walls and ceiling	Sheetrock wallboard and joint compounds throughout, including materials behind paneling, laid-in ceilings, etc.	1-5% CH in joint compounds & <1% CH composite	20600	SF	A-3 & L-1
E-412	DOOR-AAA	Throughout	Fire doors throughout	assumed ACM	5	EA	A-3
E-413	CLSH-123-1	Throughout Ceiling	Sheetrock ceiling board and joint compounds	1-5% CH in joint compounds & <1% CH composite	1225	SF	A-3
E-413	E-413-2	Roof	Roof patching compounds	10-15% CH	120	SF	A-2
E-414	PUTTY-124-1	Skylights	White skylight glazing putties	1-5% CH	40	LF	A-2 & L-1
E-414	FLVCT-125-1	Rooms #44 and 66-69	12-inch square tannish vinyl floor tiles with dark tan streaks and black mastics over concrete substrate in Rooms #44 and 66-69	1-5% CH in tiles & 5-10% CH in mastics	160	SF	A-1
E-414	FLVCT-129-1	Room #52	12-inch square tan vinyl floor tiles with brown streaks and black mastics over concrete substrate, sampled in Room #52	1-5% CH in tiles & 5-10% CH in mastics	120	SF	A-1
E-414	E-414-4	Mezzanine Level	12-inch square gray vinyl floor tiles and mastics sampled on the Mezzanine Level	1-5% CH in tiles & 15-20% CH in mastics	825	SF	A-1

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Prepared by SCA Environmental, Inc. on 9/19/01							
SCA Project No.: B-4965							
Building	**Sample I.D.**	**Location**	**Description**	**% Asbestos**	**Estimated Quantity**		**Abatement Procedures**
E-414	E-414-9	Southeast Section of Roof	Tar and felt roofing throughout the southeast section	5-10% CH	6,000	SF	A-2
E-414	E-414-10	Eastern Roof	Roof patching compounds, sampled on the eastern section	5-10% CH in mastics	120	SF	A-2
E-414	E-414-11 & 12	Southern Roof	Roof patching compounds, sampled on the southern section	1-10% CH in mastics	210	SF	A-2
E-414	PUTTY-131-1	234 Market Street (Room #56) Interior Windows	White interior window glazing putties, sampled in the Archives (234 Market Street, Room #56), averaging about 24 LF per window, typical of >5 assemblies	1-5% CH	120	LF	A-7
E-414	TRANS-AAA	Flue to Roof	Transite flue to the roof	assumed ACM	30	LF	A-7
E-414	DOOR-AAA	Throughout	Fire doors throughout.	assumed ACM	5	EA	A-3
Throughout		Throughout	Painted substrate demolition and stabilization of loose and peeling paints and LBP hazardous waste disposal and work per 8 CCR 1532.1	---	As req'd		L-1
Throughout		Throughout	Ceramic tile demolition and disposal dust controls and personnel protection per 17 CCR Section 35001 thru 36100 & 8 CCR 1532.1	---	As req'd		L-1
Throughout		Throughout	Mercury thermostat recycling	---	Throughout		
Notes:							
See the Abatement Work Plan for a description of Abatement & Controlled Renovation Methods							
AM = Amosite asbestos							
CH = Chrysotile asbestos							
TR = Trace asbestos (<1%)							

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Prepared by SCA Environmental, Inc. on 9/19/01							
SCA Project No.: B-4965							
Building	**Sample I.D.**	**Location**	**Description**	**% Asbestos**	**Estimated Quantity**		**Abatement Procedures**
CRO = Crocidolite asbestos							
ND = None Detected							