

August 3, 2015

Mr. Hamid Reza Jodatian
Director
Capital Planning, Design and Construction
San Francisco State University
1600 Holloway Avenue
San Francisco, California 94132

Subject: Preliminary Hazards Material Observations
Building 86
Romberg Tiburon Center (RTC) for Environmental Studies
San Francisco State University
3150 Paradise Drive, Tiburon, CA 94920
PSI Project No. 0582

Dear Mr. Jodatian:

Per your request, this report provides a summary of the Preliminary Hazardous Material Assessment provided to San Francisco State University (SFSU) by Professional Service Industries (PSI) for the Romberg Tiburon Center, Building #86, located at 3152 Paradise Drive in Tiburon, California. The assessment is preliminary in nature and consisted of a site visit to document current site conditions and inventory building materials suspected of containing asbestos or coated with lead containing paint. The assessment was performed by PSI Principal Robert White, CAC, REPA.

Background

The Romberg Tiburon Center (RTC) for Environmental Studies fronts San Francisco Bay on the Tiburon Peninsula in Marin County. PSI understands that Building #86 is an approximate 11,600 square foot warehouse structure built in the 1940's. In general terms, the building is used for storage but has been built out to accommodate a small office, breakroom and restroom. PSI was requested to perform a preliminary hazardous materials survey in support of a lease/ use evaluation.

General Site Observations

The building is a high bay metal warehouse structure built in the 1940's. The structure was reported originally used by the U.S. Navy as a machine shop. The exterior is unpainted corrugated metal, with steel framing. The roof is also corrugated metal sheeting with a tar type roof membrane. The roof membrane was observed to be in poor condition with significant detachment noted throughout the roof field and on the ground around the building. Although the corrugated metal siding was unpainted, steel framing noted around the roll up doors and at areas of the roof framing were painted with a primer coat. This primer did not appear to be

uniformly applied but was noted as deteriorated

The interior of the building is primarily open warehouse space with some limited office areas. At the time of the site visit, a section of the warehouse was being built-out with an older office area being renovated. PSI noted an older office area along the Southwest wall of the building which was reported constructed prior to 1981. Rooms noted within this older built-out area included an office, breakroom and restroom. The older office area was constructed using wood framing with a painted plywood exterior finish (exterior of the office area but still within the warehouse). Interior finishes consisted of textured and painted drywall on walls and ceilings. In the office, the floor was finished with a wood panel system. The floor in the breakroom and restroom was unfinished concrete. The restroom and breakroom were being renovated at the time of the assessment with new drywall being installed. The area above the office area was used for storage.

A small new area was under construction was across from the office area on the Southeast end of the building. This new construction area consisted of a raised wood floor and drywall partial height walls and appeared to be for a display area.

Contents within the open areas of the warehouse were filled with a variety of equipment, salvage display/aquarium items, furniture, tools and marine testing equipment. The contents did not appear to be organized and the warehouse area was generally disheveled in appearance.

Hazardous Materials

In general terms, Hazardous Materials is be grouped into the following categories:

- Building Construction Materials
- Building Contents
- Prior Use

Building Construction Materials

Regarding Building materials, the primary concerns are Asbestos-Containing Materials (ACM) and Lead Based Paints (LBP). Information is currently not available related to the results of any prior ACM or LBP evaluations. A comprehensive sampling of suspect building materials was also beyond the scope of this preliminary assessment. Suspect ACM identified during the preliminary hazardous material assessment include the following:

- Roof Membrane and associated flashing and penetration mastics
- Interior drywall texture and taping compound in the older office area
- Window caulking

PSI collected four (4) samples of roofing debris from the ground around the building. Analysis of the samples was performed at Micro Analytical Laboratory located in Emeryville, CA, in accordance with the EPA Standard Method for Determination of Asbestos in Bulk Building Materials (EPA / 600/R-93/116 July 1993). Asbestos was not detected in any of the sampled

roofing materials. A summary of the laboratory results is provided in Table 1. Copies of the Laboratory Reports are provided as Attachment A.

Table 1 –Limited Asbestos Sampling Results Summary

Sample #	Material	Results
RTC-86-01	Roof Membrane Debris	ND
RTC-86-02	Roof Membrane Debris	ND
RTC-86-03	Roof Membrane Debris	ND
RTC-86-04	Roof Membrane Debris	ND

ND = Non detected at the analytical limit of detection

Although the debris samples were found not to contain asbestos, additional evaluation of the roofing system would be required to verify the number of layers, as well as the use of flashing or associated penetration mastics. Drywall texture and joint compound associated with the order office area, as well as exterior window caulking should be assumed to contain asbestos until it can be properly sampled and characterized.

Based on the age of the building, all paints and coatings are required by regulation to be assumed to be LBP. During the site visit, the corrugated metal siding of Building 86 was not painted, however framing, interior office areas were painted. Paint associated with metal framing was in fair overall condition with some blistering noted on some roof framing and on metal roll up door framing. In addition, some painted metal piping was stored in the warehouse near the Northwest end that was noted as having paint in poor overall condition.

Building Contents

In terms of building contents, the materials within the warehouse did not appear to be particularly organized and the overall warehouse appeared disheveled. A comprehensive evaluation of contents was beyond the scope of this preliminary assessment. PSI did however, identify potential storage concerns related primarily to oils cleaners and lubricants. PSI did not observe any fire cabinets or special provisions for storage of oils, cleaners or lubricants. This materials were also not centralized but was most prevalent in the Northwest area of the building. Many of the stored materials appeared very old were and in original metal containers, within cardboard boxes.

In addition to oils, cleaners and lubricants, PSI noted several compressed gas cylinder in the warehouse. Cylinders noted included Carbon Dioxide, Oxygen Oxy-Acetylene welding, propane and some unmarked tanks likely associated with scuba diving. In most cases, the cylinders did not appeared to be chained or otherwise secured from failing. In one case, the valve portion of what appeared to be a loose scuba tank had rolled beneath the leg of a rolling stair tower, possibly subject to breakage. PSI also noted one storage box labeled as containing human blood. Although it is likely that this box was a salvaged cooler, confirmation of contents and correction of the label should be performed. Although not directly related to hazardous materials, PSI did note several fire extinguishers in the warehouse area that were either out of

date or improperly stored.

Prior Use

PSI learned that the building was originally a machine shop for the U.S. Navy. Machine shops typically generate waste metal shavings as well as quantities of waste lubrication oil and cooling fluids. These fluids can find their way to soil beneath the building slab via cracks or other openings. Although no evidence of soil contamination was noted, consideration to the potential presence of soil contamination should be included for any potential site work or renovations involving site trenching, excavation or drilling activities.

Warranty

PSI warrants that the findings contained herein have been prepared in general accordance with the standard of care exercised within the asbestos and/or lead-based paint testing and abatement industries. PSI recognizes that raw laboratory test data is usually sufficient to make all abatement and management decisions.

The information contained in this report is based upon the data furnished by the client and observations and test results provided by PSI. These observations and results are time dependent, are subject to changing site conditions, and revisions to Federal, State and local regulations.

PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

No other warranties are implied or expressed.

Use by Third Parties

This report was prepared pursuant to the contract PSI has with the client. That contractual relationship included an exchange of information about the subject site that was unique and between PSI and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between PSI and its client, reliance or any use of this report by anyone other than the client, for whom it was prepared, is prohibited and therefore not foreseeable to PSI.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to PSI's contract with the client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

Unidentifiable Conditions

This report is necessarily limited to the conditions observed and to the information available at the time of the work. Due to the nature of the work, there is a possibility that conditions may exist, which could not be identified within the scope of work or which were not apparent at the time of our site work. This report is also limited to information available from the client at the time it was conducted. The report may not represent all conditions at the subject site as it only reflects the information gathered from specific locations.

PSI appreciates the opportunity to support SFSU on this project. If you have any questions regarding this letter, please do not hesitate to contact us at (510) 434-9200.

Sincerely,
Professional Service Industries, Inc.

A handwritten signature in blue ink, appearing to read 'R. White', is positioned above the printed name.

Robert White, REPA, CAC
Vice President/Principal Consultant

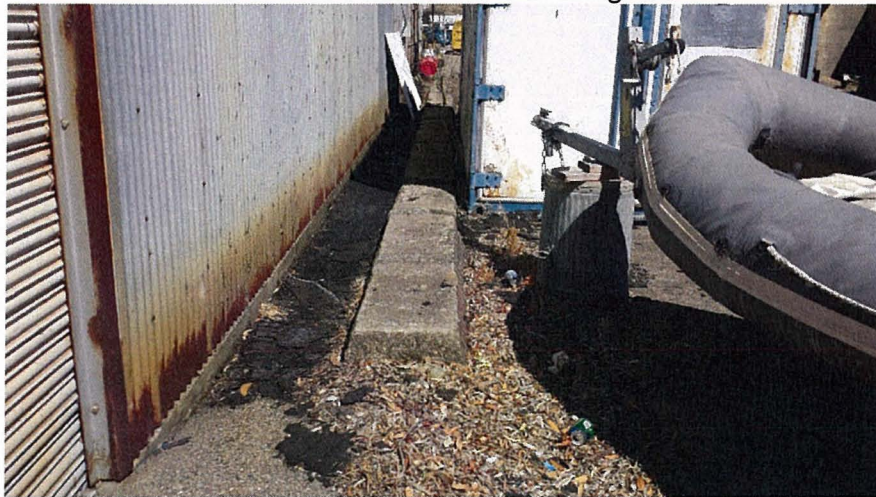
Attachments

Attachment A - Photo log
Attachment B – Asbestos Laboratory Analytical Report

Attachment A – Photo log



General outside view of Bldg. 86



Roof Membrane Debris along West Wall of Building



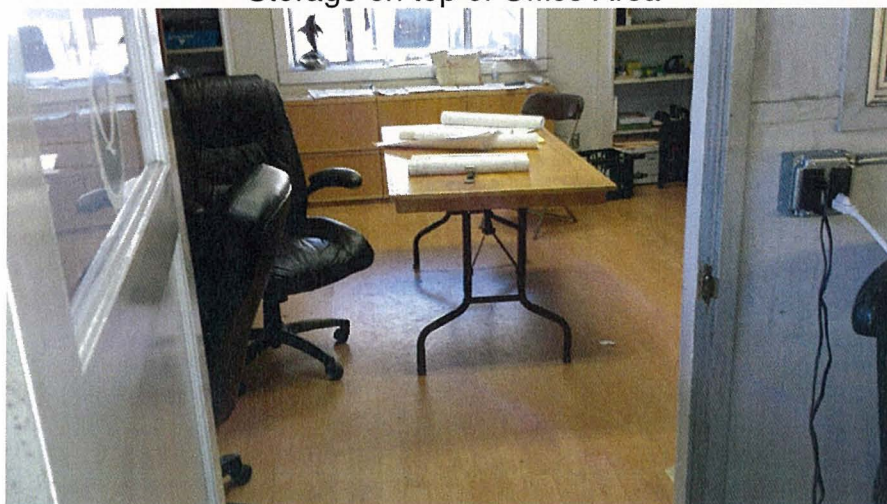
Roof Membrane Debris along West Wall of Building



General view of Warehouse area



Storage on top of Office Area



Office interior and warehouse facing finishes



Storage of Oil related products



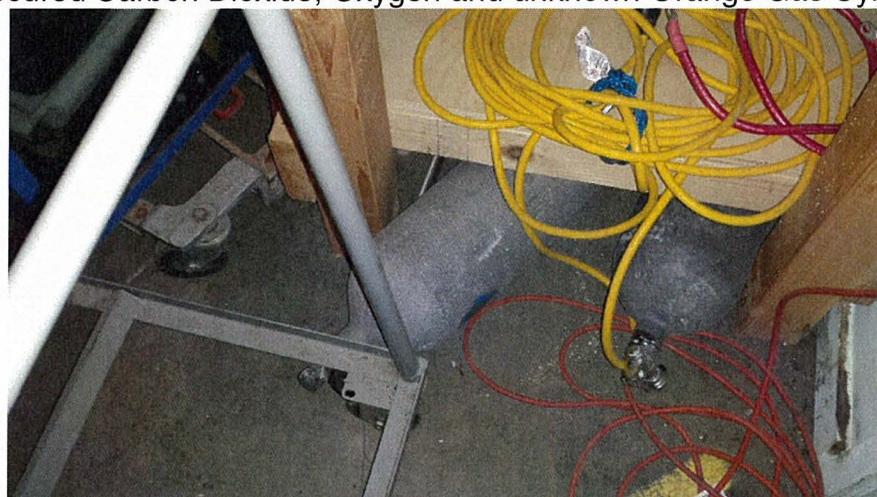
Storage of Cleaners and Lubrication Oils



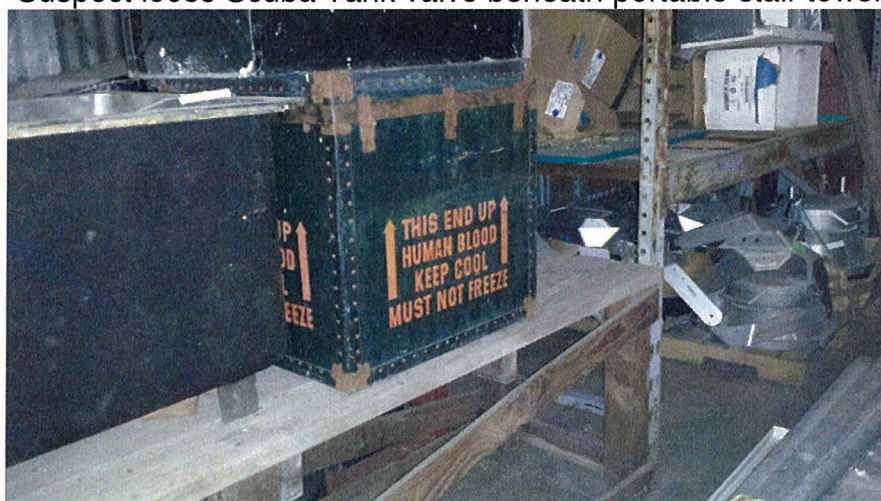
Storage of Used Paint Cans



Unsecured Carbon Dioxide, Oxygen and unknown Orange Gas Cylinders



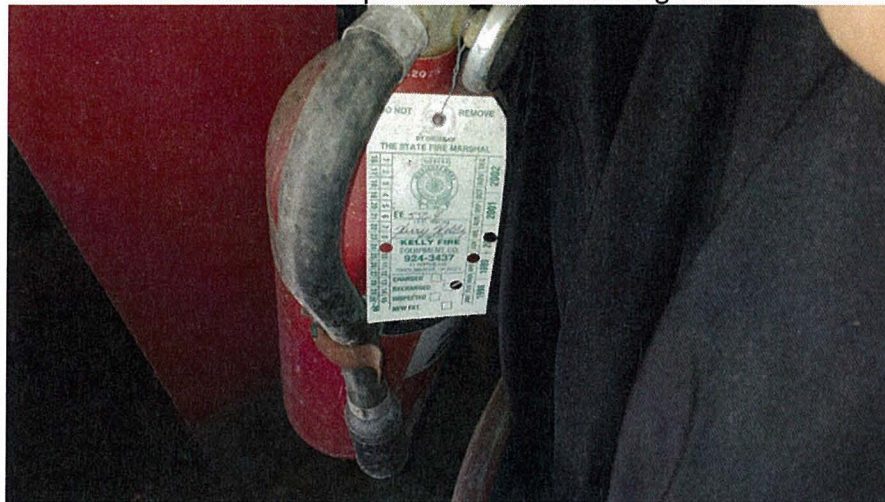
Suspect loose Scuba Tank valve beneath portable stair tower



Storage Box Labeled "Human Blood"



Stored Metal Pipes with Deteriorating Paint.



Fire Extinguisher, out of date (2000) and improperly stored

Attachment B – Asbestos Laboratory Analytical Report

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1005
Bob White
Professional Service Industries
4703 Tidewater Avenue, Suite B
Oakland, CA 94601

PROJECT:
JOB NO. 05821206-1
SFSU
RTC, BUILDING 8

Micro Log In **209221**
Total Samples 3
Date Sampled 08/03/2015
Date Received 08/03/2015
Date Analyzed 08/03/2015

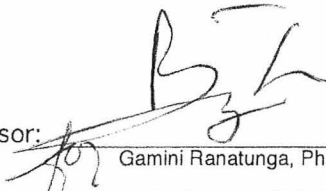
ASBESTOS INFORMATION

SAMPLE IDENTIFICATION

QUANTITY (AREA %) / TYPES / LAYERS / DISTINCT SAMPLES

DOMINANT OTHER MATERIALS

Client #: RTC-86-01		
Micro #: 209221-01 RTC BUILDING 86 ROOFING DEBRIS	Analyst: BK TAR WITH GRAVEL: NONE DETECTED FELT: NONE DETECTED	15 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: RTC-86-02		
Micro #: 209221-02 RTC BUILDING 86 ROOFING DEBRIS	Analyst: BK GLOSSY TAR: NONE DETECTED FELT: NONE DETECTED	15 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: RTC-86-03		
Micro #: 209221-03 RTC BUILDING 86 ROOFING DEBRIS	Analyst: BK GLOSSY TAR: NONE DETECTED FELT: NONE DETECTED	15 % CELLULOSE NFM: TAR/ASPHALT, BINDER

Technical Supervisor: 

Gamini Ranatunga, Ph.D.

8/3/2015

Date Reported

NVLAP Lab Code 101872-0. CA ELAP Certification #1037. Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow the EPA Interim Method for Bulk Insulation Samples (1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for any reported materials other than asbestos. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in all layers of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Samples that were reanalyzed are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. NFM = Non-fibrous materials.

p ____ of ____

Client ID #

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis St., Suite M, Emeryville, CA 94608 (510) 653-0824 - Fax (510) 653-1361 - www.labmicro.com

PLM (Bulk Asbestos Tests) Chain of Custody -- Rev. 04/20/2015

Log in #

209221

Name / Client / Address:

Robert White

PSI, Inc

4703 Tidewater Ave, #B, Oakland CA

E-mail robert.white@psi-usa.com

Job No.

05821206-1

SFSU, RTC, Bldg 86

Analysis Requested:

- ☒ PLM ☐ _____
☐ (400 pts.) / 1% _____
☐ (400 pts.) CARB 435 / 0.25% _____
☐ (1,200 pts.) EPA or CARB (mod.) / 0.1% _____

Number of Samples Turn-Around Time

3

Same Day

Micro ID # Lab Use Only	Client Sample ID#	Description	Date Sampled	Comments
1	RTC-86-01	RTC Bldg 86 - Roofing Debris	8-3-15	RUSH!
2	RTC-86-02	" "	8-3-15	
3	RTC-86-03	" "	8-3-1	

Instructions / Notes:

☒ E-mail To: robert.white@psi-usa.com

Sample Return: YES NO If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.
If "NO" is checked, solid samples may be disposed of within three months (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Robert White

8-3-15 11:45

Relinquished By

Date / Time

Drop Box / Courier

Received

Cyrus

8/3/15 11:50PM

Date / Time

Relinquished

Date / Time

Drop Box / Courier

Received

Date / Time

Lab. Notes: