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**ASBESTOS SURVEY REPORT  
FOR  
VAMC Building 27, Prosthetics Lab  
VAMC Campus  
Boise, Idaho 83702**

**prepared for:**

**ZGA Architects & Planners  
565 W. Myrtle Street, Suite 225  
Boise, Idaho 83702**

**MTI File Number BII0785e**

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STEVE TURNEY  
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BOISE, IDAHO 83702

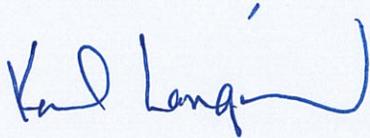
Subject: **Asbestos Survey Report**  
**VAMC Building 27, Prosthetics Lab**  
**VAMC Campus**  
**Boise, Idaho 83702**

Dear Steve Turney:

Materials Testing Inspection (MTI) has completed an Asbestos Survey for the Prosthetics Lab in Bldg 27 located at the VAMC Campus in Boise, Idaho. Guidelines and procedures for conducting and evaluating the various elements of the survey are outlined in the Federal Register 40 CFR Part 61, EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Revision Final Rule dated Tuesday, November 20, 1990, and 29 CFR Part 1926, Section 1101, Asbestos; portions of the EPA Model Accreditation Program (MAP) as defined by 40 CFR 763, Subpart E, Appendix C; and Housing and Urban Development (HUD) Title X.

The contract with ZGA Architects & Planners specifically requested that the building materials be tested for Asbestos Containing Materials (ACM). NESHAP regulations currently require that a facility be inspected for asbestos prior to demolition or renovation.

Please review this report to determine that it accurately reflects your response intentions, and if you have any questions or if we need to make changes, please call us. We appreciate the opportunity to provide this service to you and look forward to a continuing relationship as your environmental consultant.



conducted by: Karl Languirand, P.G.  
Environmental Services Assistant Manager  
Certified AHERA Asbestos Inspector

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**INSPECTION REPORT**  
**VAMC Building 27, Prosthetics Lab**  
**VAMC Campus**  
**Boise, Idaho 83702**

**EXECUTIVE SUMMARY**

ZGA Architects & Planners has contracted with MTI of Boise, Idaho to inspect the building located at the VAMC Campus, Boise, Idaho for the presence of hazardous materials including: Asbestos Containing Materials (ACM).

ACM

Our survey identified the following regulated ACM:

Sample #	Location	~ Quantity
01 (01-03)	Flooring within the Prosthetics Lab	1600 Sf
07 (19-21)	TSI Fittings on Piping above ceiling grid Prosthetics Lab	50 fittings

Prior to any renovation or demolition of the building, measures must be taken to notify the local EPA compliance office and NESHAP regulations must be followed using special abatement methods for removal of the asbestos containing materials. NESHAP requirements and forms are included in this document.

LBP

Our survey identified the following areas with either LBP or Lead within the building material:

Date	#	Pass / Fail	Room	Component	Substrate	Color	Condition	Result	Regulatory Limit
22-Aug-11	1	PASS	<b>Standardization</b>						
22-Aug-11	4	Positive	entry	wall	concrete	white	intact	1.0	1.0 mg/cm <sup>2*</sup>
22-Aug-11	10	Positive	foyer	wall	concrete	beige	intact	1.0	1.0 mg/cm <sup>2</sup>
22-Aug-11	11	Positive	main room	wall	concrete	beige	intact	1.0	1.0 mg/cm <sup>2</sup>
22-Aug-11	15	Positive	main room	wall	wall board	white	intact	1.0	1.0 mg/cm <sup>2</sup>
22-Aug-11	16	Positive	outside	window sash	wood	pink	intact	5.0	1.0 mg/cm <sup>2</sup>
22-Aug-11	17	Positive	main room	wall	wall board	white	intact	1.0	1.0 mg/cm <sup>2</sup>
22-Aug-11	18	Positive	entry	wall siding	composite	yellow	intact	5.0	1.0 mg/cm <sup>2</sup>

## INTRODUCTION

MTI of Boise, Idaho inspected the structure located on the VAMC Campus, Boise, on August 22, 2011 for the presence of Asbestos Containing Materials (ACM). At the time of the sampling the building was occupied by a Prosthetics Lab. Rules and procedures for conducting the inspections are outlined in the Federal Register 40 CFR Part 61, EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Revision Final Rule dated Tuesday, November 20, 1990, and 29 CFR Part 1926, Section 1101, Asbestos; portions of the EPA Model Accreditation Program (MAP) as defined by 40 CFR 763, Subpart E, Appendix C.

The scope of this inspection included:

- A visual inspection for the presence of any suspect ACM, either friable or non-friable and collection (by destructive means) and analysis of bulk samples to determine the presence of asbestos in suspect materials by standard polarized light microscopy (PLM) analysis.

The following sections outline the results of the survey, as well as the methods and details of the inspection process. Pertinent data sheets, sample analyses, and drawings are included.

The United States Environmental Protection Agency's National Emission Standard for Hazardous Air Pollutants (NESHAP), Asbestos Final Rule currently classifies asbestos under three separate categories; they are as follows:

**Category I Non-friable ACM:** This category includes all asphalt roofing products and resilient flooring products (floor tile and sheet flooring). In theory, these materials consist mostly of cohesive elements, which rarely release significant numbers of asbestos fibers into the air, even when they are damaged. In practice, however, roofing and flooring can become brittle or crumbly with age and be damaged enough by construction equipment to release fibers into the air during removal. At this point the EPA requires special methods during removal and handling of the materials to protect people against fiber release. If, on a specific renovation or demolition project, MTI believes there is a chance of fiber release associated with roofing or flooring, we assume that special methods (abatement by removal) will be required. In the case of intentional burning, all ACM, friable or non-friable, must be removed prior to any such activities.

**Category II Non-friable ACM:** This category includes all other non-friable asbestos containing materials. These materials must always be removed using special abatement methods if they are expected to be disturbed or damaged in any way during renovation or removal activities.

**Regulated Asbestos Containing Materials (RACM):** is all friable asbestos containing materials, including Category I and II materials that have become or will become friable due to renovation or demolition activities. Friable asbestos is defined as any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. These materials must always be removed using special abatement methods prior to any renovation or demolition activity.

## INSPECTION AND SAMPLING PROCEDURES

The building inspection or survey was conducted by Karl Languirand, certified AHERA asbestos Building Inspector, certificate #4318-02. The inspector accessed the building with a VAMC and ZGA Representative. A detailed visual examination of all exposed suspect ACM in the building was performed. Suspect ACM were grouped into homogeneous areas on the onsite sketched floor plans, and sampling plans were then developed. At the time of the survey, the area examined - Prosthetics Lab, was vacant and mostly unfurnished the remainder of the building (27) was operating as a hospital. The area examined included a therapy room, a main area three offices and a storage area. Destructive sampling was performed but hidden material may still be present within portions of the structure which may not have been accessible, such as wall cavities or pipe chases. MTI cannot guarantee that hidden ACM is not still present in the area without complete deconstruction of the area.

Samples of materials suspected but not assumed to contain asbestos were collected in general accordance with the regulation and/or as outlined below:

- a) Scope of Services under this contract outlined this survey as follows.
  - 1) Identification and sampling of all suspect asbestos containing materials (ACM).
  - 2) A minimum of three samples of each material shall be obtained.
  - 3) Materials sampled shall include but not be limited to: Floor tile (each distinct type), wall texture materials, vinyl sheet coverings (floor and wall), stair treads, and riser materials, interior and exterior stucco materials, roofing, piping insulation and equipment isolation pads (interior and exterior).
- b) Friable Surfacing Material.
  - 1) At least three bulk samples from each homogeneous area that is less than 1,000 square feet.
  - 2) At least five bulk samples from each homogeneous area that is greater than 1,000 square feet but less than 5,000 square feet.
  - 3) At least seven bulk samples from each homogeneous area that is greater than 5,000 square feet.
- c) Thermal System Insulation.
  - 1) In a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to contain asbestos.
  - 2) At least one bulk sample from each homogeneous area of patched thermal system insulation that was not assumed to be ACM.
  - 3) In a manner sufficient to determine whether the material was ACM or not ACM, (generally three samples), bulk samples from each insulated mechanical system that was not assumed to be ACM where cement or plaster was used on fittings such as tees, elbows, or valves.
  - 4) Bulk samples were not required to be collected from any homogeneous area where the inspector determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-asbestos containing building material.
- d) Miscellaneous Material

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- 1) In a manner sufficient to determine whether material was ACM or not ACM, bulk samples were collected from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.
  
- e) Nonfriable Suspected ACM.
  - 1) If any homogeneous area of nonfriable suspected ACM was not assumed to be ACM, then in a manner sufficient to determine whether the material was ACM or not ACM, bulk samples were collected from the homogeneous area of nonfriable suspected ACM.

Friable surfacing insulation is collected in a statistically random manner, using the nine sub-area system and random number sampling method described in the EPA publication, "Asbestos in Buildings, Simplified Sampling Scheme for Friable Surfacing Materials", October, 1985. All other samples, as noted, are obtained in a strictly random manner. Sampling locations for all homogeneous areas are shown on the floor plans.

Samples were obtained by using techniques such as wet slicing, wet boring, or similar methods designed to limit contamination of the area during sampling. The sampled area was sealed using patching compounds, duct tape, or spray encapsulates as appropriate to the material being sampled.

## LABORATORY ANALYSIS

Bulk samples obtained during the building inspection were identified by description and location, date, or collection, type (surfacing, thermal, or miscellaneous), and friability on sample data sheets. Subsequent to the inspection, samples were transmitted to Materials Testing & Inspection, Inc. laboratory facility in Boise, Idaho. The MTI laboratory voluntarily participates in the American Industrial Hygiene Association (AIHA) Bulk Asbestos Quality Assurance Program under laboratory identification number 101571 and is currently rated as proficient.

When samples are received in the Boise MTI office, they are logged into the laboratory and assigned laboratory numbers. The analysis is performed in general accordance with EPA Method 600/R-93/116, which employs polarized light microscopic techniques with dispersion staining for identification of mineral forms of asbestos. The quantification of asbestos in the sample is intended to be an estimate only. The results of the analysis are reported on the report of bulk sample analysis for asbestos from MTI, Boise, Idaho. Any material containing >1% asbestos by visual estimate is considered ACM in accordance with EPA NESHAP regulations.

## BUILDING DESCRIPTION

The Prosthetics Lab is situated on the basement level of Building 27 on the VAMC Campus; it consisted of a main area, two offices, a storage area and a large therapy room. Building materials within the Prosthetics Lab include wallboard and joint compounds atop wood or metal studs, sheet vinyl flooring over concrete, cove base, ceiling tiles, ceramic tile over wall board, pipe insulation, batt insulation, and concrete masonry units (CMU). The interior walls of the space varied from concrete in the storage area to CMU on the dividing wall of the storage area and office from the main area, and wallboard elsewhere. The dividing wall between the main area and the therapy room was extremely wide and was overlaid with wallboard. The ceiling within the main area was a suspended grid system with fluorescent light fixtures and two-foot by four-foot ceiling tiles. The flooring within the main area was sheet vinyl over concrete flooring. The flooring within the storage area was bare concrete, and the in the therapy room was one inch tile and grout over concrete, ceramic tile did exist on the walls in the therapy room from the floor to approximately 5 feet in height.

## FINDINGS

### Asbestos Containing Materials (ACM)

The following ACM were identified:

- Sheet vinyl flooring and black mastic. The sheet vinyl flooring was tan in appearance and the mastic was black.
- 3” Thermal System Insulation (TSI) hard -mudded fittings.

MTI cannot guarantee that hidden ACM is not still present in the building without complete deconstruction of the structure. Additional sampling may be necessary if demolition or renovation activities expose previously unidentified ACM. During demolition or renovation activities, a National Emission Standard for Hazardous Air Pollutants (NESHAP) Competent Person must be on site in the event additional ACM is discovered and/or disturbed as outlined in Environmental Protection Agency (EPA) regulations 40 CFR Part 61.

### Lead Based Paint (LBP)

Our survey identified the following locations with either LBP or Lead within the building materials, please see the appendix for a schematic representation of these findings:

Date	#	Pass / Fail	Room	Component	Substrate	Color	Condition	Result	Regulatory Limit
22-Aug-11	1	<b>PASS</b>	<b>Standardization</b>						
22-Aug-11	4	<b>Positive</b>	entry	wall	concrete	white	intact	<b>1.0</b>	1.0 mg/cm <sup>2*</sup>
22-Aug-11	10	<b>Positive</b>	foyer	wall	concrete	beige	intact	<b>1.0</b>	1.0 mg/cm <sup>2</sup>
22-Aug-11	11	<b>Positive</b>	main room	wall	concrete	beige	intact	<b>1.0</b>	1.0 mg/cm <sup>2</sup>
22-Aug-11	15	<b>Positive</b>	main room	wall	wall board	white	intact	<b>1.0</b>	1.0 mg/cm <sup>2</sup>
22-Aug-11	16	<b>Positive</b>	outside	window sash	wood	pink	intact	<b>5.0</b>	1.0 mg/cm <sup>2</sup>
22-Aug-11	17	<b>Positive</b>	main room	wall	wall board	white	intact	<b>1.0</b>	1.0 mg/cm <sup>2</sup>
22-Aug-11	18	<b>Positive</b>	entry	wall siding	composite	yellow	intact	<b>5.0</b>	1.0 mg/cm <sup>2</sup>

EPA does have regulations that pertain to the disposal of the painted material, and disposal of leaded material a Toxicity Characteristic Leachate Procedure (TCLP) sample must be taken to characterize the waste prior to demolition/ renovation to determine proper handling, transport, and disposal protocols. OSHA does not recognize a particular threshold level of lead, therefore since lead is present, worker protection measures must be afforded in accordance with OSHA regulations. Please see the executive summary for an inventory of the building materials containing LBP or Lead.

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### *Inventory of Non-Asbestos Containing Materials Sampled*

All suspected materials in the building were sampled and tested, but were determined not to contain asbestos. These materials include the following:

Material	Location
Ceiling tiles	Throughout Prosthetic Lab Space
12x12 vinyl floor tiles	Entry adjacent to hall
Wallboard with joint compound	Throughout Prosthetic Lab Space
Cove base	Throughout Prosthetic Lab Space
Texture	Throughout Prosthetic Lab Space

### *Inventory of Non-Lead Based Paint Sampled*

All painted materials in the building were sampled and tested, but were determined not to contain lead above the threshold of **1.0 mg/cm<sup>2</sup>** or **5000 PPM** or **0.5%wt** to be considered LBP. These materials include the following:

Date	#	Pass / Fail	Room	Component	Substrate	Color	Condition	Result mg/cm <sup>2</sup>	Regulatory Limit
22-Aug-11	1	<b>PASS</b>	<b>Standardization</b>						
22-Aug-11	2	Negative	entry	door frame	metal	pink	intact	0	1.0 mg/cm <sup>2*</sup>
22-Aug-11	3	Negative	entry	wall	wall board	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	5	Negative	mech	wall	CMU	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	6	Negative	mech	wall	CMU	brown	fair	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	7	Negative	mech	wall	concrete	gray	fair	0.05	1.0 mg/cm <sup>2</sup>
22-Aug-11	8	Negative	mech	fire sprinkler	metal	red	fair	0.09	1.0 mg/cm <sup>2</sup>
22-Aug-11	9	Negative	mech	fire sprinkler	metal	red	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	12	Negative	room 2	window stool	wood	beige	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	13	Negative	room 2	Wind. casing	wood	beige	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	14	Negative	room 2	Wind. casing	wood	pink	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	19	Negative	room 2	wall	wall board	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	20	Negative	therapy	floor	composite	green	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	21	Negative	main	sprinkler pipes	metal	red	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	22	Negative	main	wall	wall board	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	23	Negative	main	wall	wall board	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	24	Negative	main	base board	concrete	yellow	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	25	Negative	main	Spkr. support	metal	red	fair	0.1	1.0 mg/cm <sup>2</sup>
22-Aug-11	26	Negative	foyer	wall	composite	tan	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	27	Negative	room 4	wall	wall board	white	intact	0	1.0 mg/cm <sup>2</sup>
22-Aug-11	28	Negative	room 2	door	wood	pink	intact	0.02	1.0 mg/cm <sup>2</sup>

## USEPA (NESHAP) REQUIREMENTS

40 CFR Part 61, Section 145, EPA National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule dated Tuesday, November 20, 1990, sets the Standard for Demolition and Renovation activities with regard to asbestos containing materials (ACM). The "Standard" requires Owners and Operators of a renovation or demolition operation to determine applicability of the standard as it may apply to them.

- a) To determine which requirements of Applicability, Notification, and Procedures For Asbestos Emission Control apply to the Owner or Operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of Notification and Procedures For Asbestos Emission Control of this section apply to each Owner or Operator of a demolition or renovation activity, including the removal or RACM as follows:

### Demolition

- 1) In a facility being demolished, all the requirements of Notification and Procedures For Asbestos Emission Control of this section apply, except as provided for structurally unsound buildings or buildings in danger of imminent collapse, if the combined amount of RACM is:
  - i) **At least** 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or
  - ii) **At least** 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.
- 2) In a facility being demolished, only the notification requirements of this section apply, if the combined amount of RACM is:
  - i) **Less than** 80 linear meters (260 linear feet) on pipes or less than 15 square meters (160 square feet) on other facility components, or
  - ii) **Less than** 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.
- 3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.

### Renovation

- 4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of Notification and Procedures For Asbestos Emission Control of this section apply if the combined amount of RACM to be striped, removed, dislodged, cut, drilled, or similarly disturbed is:
  - i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or
  - ii) At least 1 cubic meter (35 cubic feet) of facility components where the length or area could not be measured previously.

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- iii) To determine whether the requirements of (a)(4) above apply to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.
  - iv) To determine whether the requirements of (a)(4) above apply to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.
- b) Each Owner or Operator of a Demolition or Renovation activity to whom this paragraph applies, according to the Applicability of this section, shall comply with the procedures of notification as detailed in the following section.

### **Procedures for Asbestos Emission Control**

- c) Each Owner or Operator of a Demolition or Renovation activity to whom this paragraph applies, according to the Applicability of this section, shall comply with the following procedures:
- 1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:
    - i) It is Category I nonfriable ACM that is not in poor condition and is not friable.
    - ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
    - iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as asbestos containing waste material and adequately wet at all times until disposed of.
    - iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
  - 2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:
    - i) Adequately wet all RACM exposed during cutting or disjoining operations; and
    - ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.
  - 3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.
    - i) In renovation operations, wetting is not required if:
      - A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and
      - B) The owner or operator uses one of the following emission control methods:
        - I) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements for air cleaning equipment.
        - II) A glove bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

- III) Leak tight wrapping to contain all RACM prior to dismantlement.
- ii) In renovation operations where wetting would result in equipment damage or safety hazard, and the methods allowed in (c) (3) (i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c) (3) (i) of this section.
  - iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.
- 4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c) (2) of this section, it shall be stripped or contained in leak tight wrapping, except as described in paragraph (c) (5) of this section. If stripped, either:
- i) Adequately wet the RACM during stripping; or
  - ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements for air cleaners.
- 5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c) (2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:
- i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - ii) The component is encased in a leak tight wrapping
  - iii) The leak tight wrapping is labeled according to OSHA Standards (29 CFR 1926.58), during all loading and unloading operations and during storage.
- 6) For all RACM, including material that has been removed or stripped:
- i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with this section's standard for waste disposal; and
  - ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.
  - iii) Transport the material to the ground via leak tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.
  - iv) RACM contained in leak tight wrapping that has been removed in accordance with paragraphs (c) (4) and (c) (3) (i) (B) (3) of this section need not be wetted.
- 7) When the temperature at the point of wetting is below 0° C (32°F):
- i) The owner or operator need not comply with paragraph (c) (2) (i) and the wetting provisions of paragraph (c) (3) of this section.
  - ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.
  - iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.

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- 8) Effective 20 November 1991, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on site representative, such as a foreman or management level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them is present. Every 2 years, the trained on site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove bag procedures, and High Efficiency Particulate Absolute (HEPA) filters; waste disposal work practices; reporting and record keeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.
- 9) For facilities described as emergency demolition in this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- 10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.

### **Notification**

Included in the appendix of this document is the two-page form to be used to Notify USEPA of Renovation and Demolition projects as described above. The Notifications must be sent 10 working days prior to commencement of Renovation or Demolition activities. The Notification can be mailed or delivered to the following:

NESHAP Coordinator  
US Environmental Protection Agency  
1435 North Hilton Street, Boise, Idaho 83706

## **OSHA REQUIREMENTS**

The EPA's ASHARA requires that asbestos response actions in commercial and public facilities must be performed by certified personnel. OSHA regulations found in 29 CFR Part 1926, Section 1101 prescribes the training requirements and general removal procedures required to be followed. All activities necessary for complete removal of the regulated ACM are considered Class II work by OSHA.

## WARRANTY AND LIMITING CONDITIONS

MTI has completed the Hazardous Materials Survey for the Prosthetics Lab in Bldg 27 located at the VAMC Campus in Boise, Idaho. The report has been prepared as required by contract and in general accordance with the rules outlined in 40 CFR Part 61, EPA National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule dated Tuesday, November 20, 1990 and in general accordance with the scope and limitations of Guidelines For the Evaluation and Control of Lead-Based Paint Hazards in Housing pursuant to Title X of the Housing and Community Development Act of 1992. These environmental methods are necessarily limited to the conditions observed at the time of the inspection. The report is also limited to the information available at the time it was prepared. In the event additional information is provided to MTI following the report, it may, but is not required to, be forwarded to the client in the form received for evaluation by the client. There is a distinct possibility that conditions may exist which could not be identified within the scope of the assessment or which were not apparent during the inspection. MTI cannot warrant or guarantee that the information provided is complete or accurate. This report was prepared for the use of ZGA Architects and Planners (“Client”) and the conclusions and recommendations presented in this report are based upon the agreed upon scope of work outlined in the report and the Contract for Professional Services between Client and Materials Testing and Inspection, Inc. (“Consultant”). Use or misuse of this report, or reliance upon the findings hereof by any parties other than the Client, is at their own risk. Neither Client nor Consultant make any representation of warranty to such other parties as to the accuracy or completeness of this report or the suitability of its use by such other parties for any purpose whatever, known or unknown to Client or Consultant. Neither Client nor Consultant shall have any liability to, or indemnifies or holds harmless third parties for any losses incurred by the actual or purported use or misuse of this report. This report represents the opinion of Materials Testing and Inspection, Inc. and no other warranties are implied or expressed.

The Client acknowledges that any survey or estimations of quantity of asbestos containing materials (ACM) depends upon a variety of factors, including, but not limited to; access, available plans for the existing structure, occupancy needs, condition of the structure at the time of the inspection, safety factors involved in examining the building(s), and the dictates, rules and regulations of applicable authorities. As a result, Client recognizes and acknowledges that during the renovation or demolition of a structure, additional unidentified ACM may be found in the process. With respect to such materials, MTI makes no guarantee or warranty.

## APPENDIX

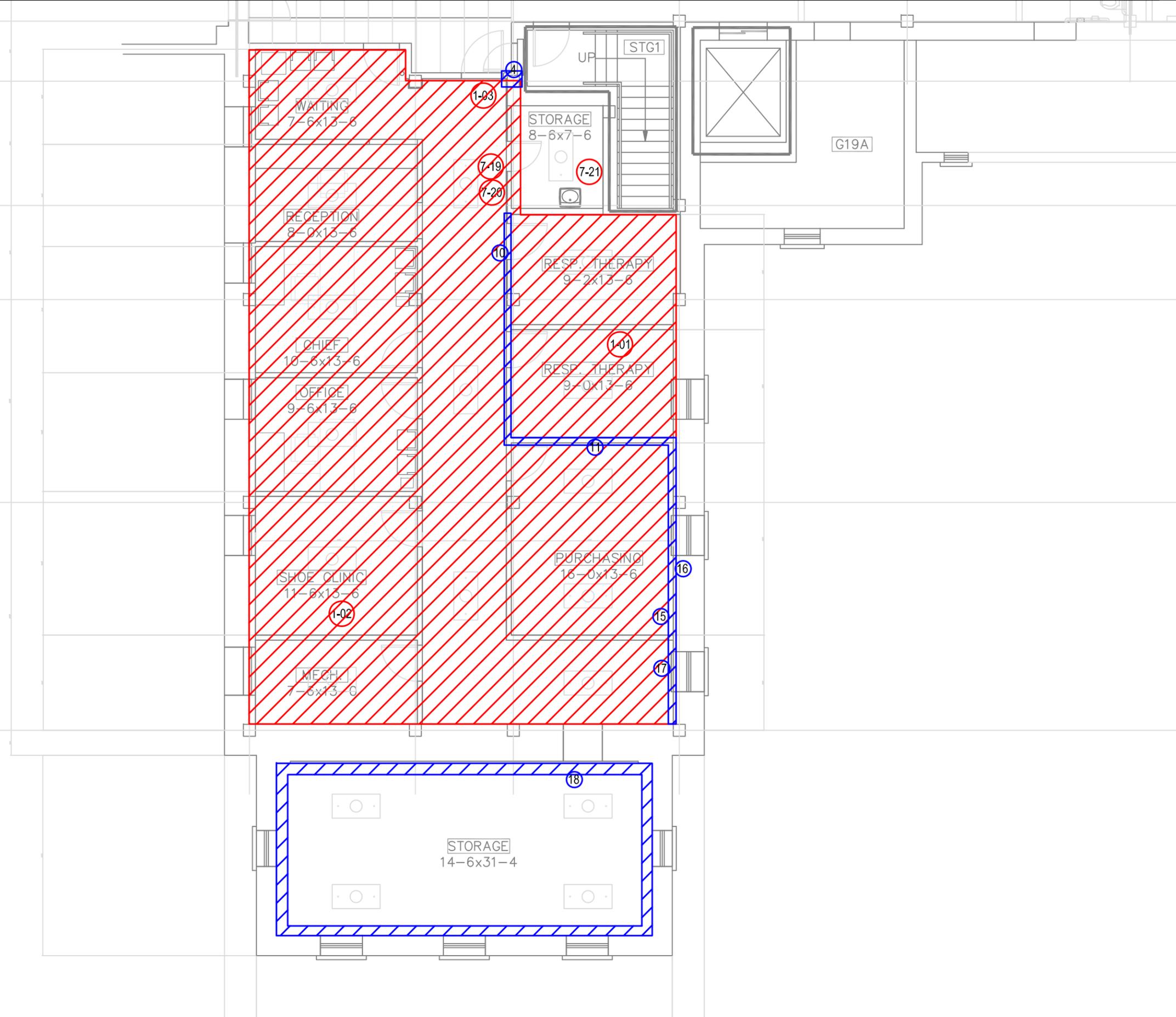
### SITE PLAN

#### ASBESTOS BULK SAMPLE ANALYSIS RESULTS

#### EPA ASBESTOS NOTIFICATION & INSTRUCTIONS

## SITE PLAN

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**NOTES:**  
 • Not to Scale  
 • Positive ACM Pipe Fitting Throughout Space

**LEGEND**

ASB Sample Number	#-#
Positive ACM Sheet Vinyl and Mastic	
XRF Sample Number	#
Lead in Paint or Ceramic Tiles on Walls	



Veterans Administration Medical Center  
 ASB and Lead-Based Paint Surveys  
 Building 27 Remodel  
 Boise, Idaho

Modified from ZGA by: SKL  
 07 September 2011  
 Drawing: B110785e

**MATERIALS TESTING & INSPECTION**

2791 S. Victory View Way  
 Boise, ID 83709-2835

208 376-4748  
 Fax: 208 322-6515  
 mt@mti-id.com

## ASBESTOS BULK SAMPLE ANALYSIS RESULTS



Environmental Services       Geotechnical Engineering       Construction Materials Testing       Special Inspections

**STEVE TURNEY**  
**ZGA ARCHITECTS & PLANNERS**  
**565 W. MYRTLE STREET, SUITE 225**  
**BOISE, IDAHO 83702**

**MTI FILE #: B110785e**

Project: VAMC Building 27, Prosthetics Lab  
P.O. Number: \_\_\_\_\_

Date Received: August 22, 2011  
Date Reported: August 30, 2011

## Asbestos Bulk Sample Analysis Report

SAMPLE NUMBER	LAB NUMBER	SAMPLE TYPE, LOCATION, and DESCRIPTION	% ASBESTOS FIBERS	% NON-ASBESTOS FIBERS	% NON-FIBROUS MATERIALS	COMMENTS
1-01	B102199	Sheet vinyl flooring and black mastic-tan compact layered fibrous	24% Chrysotile	16% Cellulose	58% Other 2% Mastic	AFB @ 60% AFM @ 2%
1-02	B102200	Sheet vinyl flooring and black mastic-tan compact layered fibrous				PP-NAR
1-03	B102201	Sheet vinyl flooring and black mastic-tan compact layered fibrous				PP-NAR
2-04	B102202	Cove base-brown compact resilient	NAD		95% Other 5% Mastic	NAD
2-05	B102203	Cove base-brown compact resilient	NAD		95% Other 5% Mastic	NAD
2-06	B102204	Cove base-brown compact resilient	NAD		95% Other 5% Mastic	NAD
3-07	B102205	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD
3-08	B102206	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD
3-09	B102207	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD
4-10	B102208	Wallboard/joint compound-pink/white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
4-11	B102209	Wallboard/joint compound-white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
4-12	B102210	Wallboard/joint compound-white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
5-13	B102211	Texture-pink/white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
5-14	B102212	Texture-white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
5-15	B102213	Texture-white semi-compact powdery with fibers	NAD	5% Cellulose	95% Other	NAD
6-16	B102214	Cove base-grey compact resilient	NAD		90% Other 10% Mastic	NAD
6-17	B102215	Cove base-grey compact resilient	NAD		90% Other 10% Mastic	NAD

*"Assuring the Strength, Safety, and Security of Your Future"*



Environmental Services       Geotechnical Engineering       Construction Materials Testing       Special Inspections

## Asbestos Bulk Sample Analysis Report

SAMPLE NUMBER	LAB NUMBER	SAMPLE TYPE, LOCATION, and DESCRIPTION	% ASBESTOS FIBERS	% NON-ASBESTOS FIBERS	% NON-FIBROUS MATERIALS	COMMENTS
6-18	B102216	Cove base-grey compact resilient	NAD		90% Other 10% Mastic	NAD
7-19	B102217	3" fittings, hard-light grey fibrous	5% Chrysotile	40% Glass fiber	55% Other	ACM
7-20	B102218	3" fittings, hard-light grey fibrous				PP-NAR
7-21	B102219	3" fittings, hard-light grey fibrous				PP-NAR
8-22	B102220	12x12 vinyl floor tile-entry-white hard compact	NAD		98% Other 2% Mastic	NAD
8-23	B102221	12x12 vinyl floor tile-entry-white hard compact	NAD		98% Other 2% Mastic	NAD
8-24	B102222	12x12 vinyl floor tile-entry-white hard compact	NAD		98% Other 2% Mastic	NAD
9-25	B102223	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD
9-26	B102224	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD
9-27	B102225	Ceiling tile-tan semi-compact fibrous	NAD	65% Cellulose 20% Glass fiber	15% Other	NAD

\*Sample components are identified using polarized light microscopy coupled with dispersion staining methods as determined by visual estimation. Individual layers with ACM are reported in the comment section of the report. Total percent asbestos fibers applies to all layers in the sample as submitted to the laboratory. This test report relates only to the items tested.

### Key To Comments

<b>ACM</b>	<b>Asbestos Containing Material</b>	<b>AFT</b>	<b>Asbestos Found in Tile</b>
<b>AFC</b>	<b>Asbestos Found As Contaminant</b>	<b>AFT&amp;M</b>	<b>Asbestos Found in Tile And Mastic</b>
<b>TRACE</b>	<b>Detectable but not quantifiable</b>	<b>AFM</b>	<b>Asbestos Found in Mastic</b>
<b>NAD</b>	<b>No Asbestos Detected</b>	<b>AFB</b>	<b>Asbestos Found in Backing</b>
<b>PP-NAR</b>	<b>Presume Positive-No Analysis Required</b>	<b>IS</b>	<b>Insufficient Sample -percentages may be inaccurate</b>

Sampled by: Karl Languirand \_\_\_\_\_

Analyzed by: Jennifer Babione Microanalyst

Reviewed by: Karl Languirand Karl Languirand, P.G., Environmental Services Asst. Manager

Analysis method: Polarized Light Microscopy (PLM) by EPA/600/R-93/116 with Central Stop Dispersion by NIOSH 9002 American Industrial Hygiene Association (AIHA) Performance Analytical Testing (PAT) Laboratory Number 101571

*"Assuring the Strength, Safety, and Security of Your Future"*

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## **EPA ASBESTOS NOTIFICATION & INSTRUCTIONS**

**U.S. ENVIRONMENTAL PROTECTION AGENCY - STATE OF IDAHO  
NOTIFICATION OF DEMOLITION AND RENOVATION**

Operator Project #	Postmark	Date Received	Notification #
--------------------	----------	---------------	----------------

**I. Type of Notification** (check one):     Original                     Revised                     Canceled

**II. Facility Description** (include building name, number, and floor or room number)  
 Building Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: **IDAHO** Zip Code: \_\_\_\_\_ County: \_\_\_\_\_  
 Site Location (specific): \_\_\_\_\_  
 Building Size (square feet): \_\_\_\_\_ # of Floors: \_\_\_\_\_ Age in Years: \_\_\_\_\_  
 Present Use: \_\_\_\_\_ Prior Use: \_\_\_\_\_

**III. Type of Operation** (check one):  Demo     Ordered Demo     Renovation     Emergency Renovation     Fire Training

**IV. Is Asbestos Present?** (check one):  Yes                     No

**V. Facility Information**  
**Owner Name:** \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_  
**Removal Contractor Name:** \_\_\_\_\_ License # \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_  
**Other Operator (demolition/general):** \_\_\_\_\_ License # \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

**VI. Procedure, including analytical methods, employed to detect the presence of and to estimate the quantity of RACM and Category I and Category II nonfriable ACM:**  
  
*AHERA Asbestos Building Inspection; analyzed by EPA Method 600/R-93/116, PLM using central-stop dispersion staining.*

**VII. Approximate Amount of Asbestos Materials:**

	RACM to be Removed	Nonfriable Asbestos Material to be Removed		Nonfriable Asbestos Material NOT to be Removed	
		Category I	Category II	Category I	Category II
Pipes (linear feet)					
Surface Area (square feet)					
Facility Components (cubic feet)					

**VIII. Scheduled Dates Demolition or Renovation:** Start: \_\_\_\_\_ Complete: \_\_\_\_\_

**IX. Dates for Asbestos Removal (MM/DD/YY)** Start: \_\_\_\_\_ Complete: \_\_\_\_\_

Days of the Week:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Hours of Operation:							

Complete all unshaded spaces, except demolitions which involve less than 260 linear feet, 160 square feet, or 35 cubic feet of RACM, need not complete spaces VII, XI,XII,XIII,XIV, and XV. Notifications for Emergency Demolition or Emergency Renovation must supply attachments.

--

**U.S. ENVIRONMENTAL PROTECTION AGENCY - STATE OF IDAHO  
NOTIFICATION OF DEMOLITION AND RENOVATION**

**X. Description of planned Demolition or Renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components:**

**XI. Description of work practices and engineering controls to be used to comply with the requirements, including asbestos removal and waste handling emission control procedures:**  
*Handle in accordance with National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.*

**XII. Waste Transporter #1**  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

**Waste Transporter #2**  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

**XIII. Waste Disposal**  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

**XIV. Emergency Demolition** (complete Item XIV and all other sections, only if this project is an Emergency Demo.)  
1. Attach a copy of the Order to this notice.  
2. Name of Authority Issuing Order: \_\_\_\_\_ Title: \_\_\_\_\_  
3. Authority of Order (Citation of Code): \_\_\_\_\_  
4. Date of Order (MM/DD/YY): \_\_\_\_\_ Date Ordered to Begin: \_\_\_\_\_

**XV. Emergency Renovation** (Attach separate sheet with the following information if project is Emergency Reno.)  
1. Date and Hour of the Emergency  
2. Description of the Sudden, Unexpected Event  
3. Explanation of how the event caused unsafe conditions or equipment damage or an unreasonable financial burden.

**XVI. Description of procedures to be followed in the event that unexpected RACM is found or nonfriable ACM becomes crumbled, pulverized or reduced to powder.**  
*Handle in accordance with National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations.*

**XVII. I certify that an individual trained in the provisions of NESHAP (40 CFR PART 61, SUBPART M) will be on-site during the Demolition or Renovation and evidence that the required training has been accomplished by this person will be available during normal business hours.**

Signature of Owner/Operator \_\_\_\_\_ Date \_\_\_\_\_ Type or Print Name and Title \_\_\_\_\_

**XVIII. I acknowledge the existence of laws prohibiting the submission of false or misleading statements and I certify that facts contained in this notification are true, accurate, and complete.**

Signature of Owner/Operator \_\_\_\_\_ Date \_\_\_\_\_ Type or Print Name and Title \_\_\_\_\_

Original Notification must be mailed or hand delivered at least ten working days (Monday-Friday excluding weekends) before demolition or renovation begins, except emergency demolitions and emergency renovations (see regulation) which must be submitted as soon as possible before operations begin. (Form Revised 3/24/99)

This information is provided as a service to our valued clients. The attached notification document must be completed and delivered (by hand or by mail) to the US Environmental Protection Agency (EPA) at least 10 working days prior to the commencement of a project involving the disturbance of asbestos containing material (ACM) or building demolition. Demolition is defined by the EPA as the removal of any load bearing structure. This can include exterior walls, foundations, or roof systems. By signing the completed notification form, the signatory attests that the information is correct and agrees to having a National Emission Standard for Hazardous Air Pollutants (NESHAP) trained Competent Person onsite during the project. This person's function is to assess the condition of Category I and II nonfriable material left with the building during demolition and/or stop work and implement the proper engineering controls in the event previously unidentified ACM is discovered. A person not capable of fulfilling or implementing this function should not sign the notification. The 10-day period begins on the date the notification is post-marked (either by metered postage or cancelled stamp). Mail the completed Notification form to: US EPA, Attn: Jim Greaves, 1435 North Orchard St., Boise, ID 83706.

Section	Description	Instruction
I.	Type of Notification	Indicate <b>Original</b> , <b>Revised</b> , or <b>Cancelled</b> (this refers to the notification document).
II.	Facility Information	Fill out completely the building owner name and information as well as the asbestos removal contractor and any other involved party, architect, consultant, demolition company, etc.
III.	Type of Operation	Indicate <b>Demolition</b> , <b>Ordered Demolition (condemned)</b> , <b>Renovation</b> , <b>Emergency Renovation</b>
IV.	Asbestos Present	Is asbestos present in the building? <b>Yes</b> or <b>No</b> (regardless of whether or not it will be disturbed by the project).
V.	Facility Description	Fill out completely all pertinent information pertaining to the building. Site Location means indicate a specific area within a larger site if appropriate, or the general area within a city.
VI.	Procedure used...	Before demolition or renovation may begin, an asbestos inspection (survey) must have been performed. What method was used during the asbestos analysis? This section typically reads, <i>Polarized Light Microscopy with Central Stop Dispersion Staining</i> , or similar method.
VII.	Approximate Amount...	The asbestos inspection or a contractor bid should identify the approximate quantities of asbestos to be removed during the project. These include RACM (friable) and Category I & II (non-friable) materials on Pipes, Surfaces, Volumes or Off Facility Components (ACM previously removed). Indicate the amounts in linear, square, and cubic feet or meters.
VIII.	Dates of Asbestos...	When will the asbestos removal project begin and how long will it last? (Must be at least 10-working days from the day the stamp is cancelled by the Post Office or received at EPA).
IX.	Dates of Demolition...	When will the building demolition or renovation begin and how long will it last? Asbestos material must be removed prior to work (10-working day waiting period also for demo/reno).
X.	Description of Planned...	Indicate what the project will involve. (i.e., building demolition, building move, removing interior partitions, selected renovation, practice burn, etc.)
XI.	Description of Work...	This section refers to the specific engineering controls and precautions to be taken during the removal of identified asbestos containing material in accordance with 40 CFR Part 61. Typically performed by a licensed asbestos abatement contractor.
XII.	Waste Transporter(s)	The contractor(s) that will be transporting asbestos waste and construction debris.
XIII.	Waste Disposal Site	Where will the asbestos and/or construction debris be taken? This typically depends on the county where the work will take place. Some counties will not accept asbestos debris from outside their area.
XIV.	If Demolition Order	Fill out only if emergency demolition of a condemned building or other such activity has been ordered by a local State or Federal agency. Otherwise indicate N/A.
XV.	For Emergency Renova...	Similar to section XIV. Fill out only if work has been ordered. Otherwise indicate N/A.
XVI.	Description of Procedure...	What actions will be taken in the event unidentified asbestos material is encountered during the work. This section should read, <i>Handle in accordance with NESHAP</i> . A NESHAP Competent Person (someone with special training) must be onsite to fulfill this requirement.
XVII.	Signature and Date	Attesting that a NESHAP competent person will be onsite during the course of the project.
XVIII.	Signature and Date	Attesting that the above information is correct.