# **Revised Removal Action Plan**

## Administration Building Demolition

#### **Final**

#### Prepared for:

#### The Confederated Tribes of Grand Ronde

April 17, 2024 Project No. M0496.02.004

Prepared by:

Maul Foster & Alongi, Inc. 3140 NE Broadway, Portland, OR 97232

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#### **Revised Removal Action Plan**

#### **Administration Building Demolition**

The material and data in this plan were prepared under the supervision and direction of the undersigned.

Maul Foster & Alongi, Inc.

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Project Engineer

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### **Abbreviations**

abatement supervisor DEQ-certified supervisor

ACM asbestos-containing materials BMP best management practice

the City City of Oregon City

CTGR Confederated Tribes of Grand Ronde

DEQ Oregon Department of Environmental Quality

Elder Demolition

HBM hazardous building materials

LBP lead-based paint

MFA Maul Foster & Alongi, Inc.

NRHP National Register of Historic Places

PCB polychlorinated biphenyl

The Property Building 1, referred to as the Administration Building, located at the former

Blue Heron paper mill site at 427 Main Street, Oregon City, Oregon

RAP removal action plan

## 1 Introduction

This revised removal action plan (RAP) for the demolition of Building 1, referred to as the Administration Building, located at the former Blue Heron paper mill site at 427 Main Street, Oregon City, Oregon (the Property) (Figure 1-1), was prepared by Maul Foster & Alongi, Inc. (MFA), for the owner of the Property, the Confederated Tribes of Grand Ronde (CTGR). The Administration Building is located on the northern portion of the Property on the southwest corner of the intersection of Main Street and Highway 99E (Figure 1-2).

#### 1.1 Purpose

This revised RAP provides a framework for the removal action at the Property, including the structural demolition and hazardous building materials (HBM) management for the Administration Building. This demolition is part of site-wide environmental work being completed by CTGR pursuant to a 2019 consent order with the Oregon Department of Environmental Quality (DEQ), DEQ No. 19-12.

#### 1.2 Scope of Work

This revised RAP will ensure the proper management and handling of demolition materials at the Property, including the following:

- Implementation of best management practices (BMPs) to contain debris, control fugitive dust, avoid track-off of solids or excess water applied during abatement and demolition activities, and manage stormwater or other water that may be generated (i.e., during wetting or misting).
- Removal and proper disposal of demolition material from the Administration Building per local, state, and federal guidelines.

# 2 Background

### 2.1 Property Description

The approximately 0.63-acre Property is located in section 31, township 2 south, range 2 east of the Willamette Meridian; the Property comprises tax lot 22E31BD00500.

The currently vacant Property was historically the site of various commercial operations, including a United States Post Office. By 1970 the existing Administration Building was used as the headquarters office of Publishers Paper Co. (later owned by Blue Heron Paper Company). The larger Blue Heron paper mill site ceased operations in 2011.

The geology of the Property consists primarily of basalt bedrock. Soil largely consists of pockets of fill, which is present to varying depths across the Property. Perched groundwater, present in natural basalt depressions or constructed utility corridors and footings, is intermittent across the Property.

#### 2.2 Administration Building

Administration Building construction began in 1967 and was completed by 1970. The two-story Administration Building encompasses 22,000 square feet of floor space and a basement. See Figure 1-2 for the Property layout. Photos of the structure are included in Appendix A.

In 2002, the Willamette Falls Industrial Area submitted a request for determination<sup>1</sup> to the Oregon State Historic Preservation Office asking that the area be added to the National Register of Historic Places. The Administration Building (referred to as "Corporate Offices [Former Post Office]" in the request for determination) was determined to be non-historic/non-contributing.

In 2012, the City of Oregon City (City) completed an updated determination of eligibility for the former Blue Heron site, including the Administration Building. The City determined the Administration Building was not eligible for listing on the National Register of Historic Places (NRHP). However, the Oregon State Historic Preservation Office did not agree with the City and stated the Administration Building was unevaluated.<sup>2</sup>

In 2023, Historical Research Associates, Inc. completed an Intensive-Level Survey<sup>2</sup> of the Administration Building to determine eligibility for registry on the NRHP. Based on their evaluation, Historical Research Associates, Inc. recommended that the Administration Building is not eligible for listing on the NRHP.

#### 2.3 Previous Investigations

Several site investigations have been conducted at the Property. In 2018, Environmental Specialties performed an asbestos survey (Appendix B) covering the Administration Building. In February 2024, IRS Environmental conducted additional asbestos sampling in the Administration Building (Appendix C). In March 2024, IRS Environmental performed a lead, polychlorinated biphenyl (PCB), and mercury survey covering the Administration Building (Appendix D). A summary of findings from these investigations is provided in Section 3.2.

<sup>&</sup>lt;sup>1</sup> Heritage Research Associates. 2002. Willamette Falls Industrial Area Request for Determination of Eligibility for Portland General Electric & the Blue Heron Paper Company. Heritage Research Associates, Inc.: Eugene, OR. May.

<sup>&</sup>lt;sup>2</sup> Historical Research Associates. 2023. *Intensive-Level Survey of the Blue Heron Administration Building*. Historical Research Associates, Inc.: Portland, OR. December.

## 3 Removal Action Activities

### 3.1 Project Team Organization and Responsibilities

This section provides the project team organizational structure, lines of authority, and responsibilities. Project activities will be performed within the framework of the organization and functions presented in this section. The organizational structure is presented in Figure 3-1. Contact information for key project individuals is provided in Section 4.1.

#### 3.1.1 Oregon Department of Environmental Quality

The DEQ will provide oversight of the demolition project through its Environmental Cleanup Program pursuant to the 2019 consent order.

#### 3.1.2 City of Oregon City

The City has jurisdiction for construction and demolition activities in the city limits and will issue a demolition permit and any other applicable City permits (i.e. right of way permit for temporary closures) for removal of the structure.

#### 3.1.3 CTGR

CTGR is the owner of the Property. CTGR is responsible for fiduciary, overall program management and administration, and for contracting with a demolition contractor.

#### 3.1.4 MFA

MFA is the environmental consulting firm representing CTGR. MFA is responsible for coordination with authorities that have jurisdiction, preparation of this revised RAP, demolition oversight, and preparation of a project completion report summarizing the completed removal action.

#### 3.1.5 Demolition Contractor Responsibilities

CTGR hired Elder Demolition (Elder) as the contractor for the Administration Building demolition. In this revised RAP, Elder will be referred to as the demolition contractor. The demolition contractor is responsible for installation and maintenance of demolition BMPs; fugitive dust control; and removal, management, and disposal of nonasbestos material. The demolition contractor will be required to warrant and guarantee that work was done in accordance with the contract documents in a manner consistent with the level of care and skill ordinarily exercised by members of the same industry and that the work is not defective. The contractor will have primary responsibility for the safety of its company personnel. It will maintain Property access and communications with CTGR and MFA throughout all phases of the project. During demolition, the demolition contractor will report to CTGR and MFA in cases of unexpected findings (items that potentially change the scope of work). MFA will communicate these findings to authorities having jurisdiction, as necessary.

#### 3.1.6 Abatement Contractor Responsibilities

Abatement is an anticipated component of the demolition project. The demolition contractor has subcontracted with DEQ-licensed asbestos abatement contractor IRS Environmental, to provide abatement services, including assigning a DEQ-certified supervisor (abatement supervisor) for HBM identification, management, and disposal. In this revised RAP, IRS Environmental will be referred to as the abatement contractor. The abatement contractor will be responsible for regulated HBM work including, but not limited to, air monitoring, asbestos identification and abatement, and asbestos containment and disposal. The abatement contractor will have primary responsibility for sample collection (as needed), safety for its company personnel, and asbestos and lead abatement. The abatement contractor will coordinate with an analytical testing laboratory (if needed) and will report directly to the demolition contractor. The abatement contractor also will notify and communicate with CTGR, MFA, and DEQ about any unexpected findings.

#### 3.1.7 Laboratory Responsibilities

If analytical testing of suspected HBM is required, the selected laboratory will be responsible for the following:

- Employing the methods and analytical procedures requested by the abatement contractor.
- Following the established laboratory-specific quality assurance and quality control requirements.

#### 3.2 Hazardous Building Material Surveys

In April and May 2018, Environmental Specialties completed an asbestos survey for the Administration Building. During the assessment, a total of 12 bulk samples were collected. The samples were submitted for asbestos analysis to CEI Labs in Cary, North Carolina. The following samples tested positive for asbestos:

- Beige 9 x 9 floor tile and black mastic (18,000 square feet)
- Mudded pipe joint insulation (300 units)

In February 2024, IRS Environmental completed an asbestos survey for the Administration Building. During the assessment, a total of 37 bulk samples were collected. The samples were submitted for asbestos analysis to Schneider Laboratories Global, Inc. in Richmond, Virginia. The following materials tested positive for asbestos:

- Black 9 x 9 floor tile and mastic (12,000 square feet)
- Tan 9 x 9 floor tile and mastic (12,000 square feet)
- Tan 12 x 12 floor tile and mastic (220 square feet)
- Pipe joint mud (300 linear feet)
- Tank insulation (200 square feet)
- Window panels (48 units)

In March 2024, IRS Environmental completed a lead, PCB, and mercury survey for the Administration Building. During the survey, fifteen paint chip samples were collected and visual observations were made for the presence of PCBs and mercury in light fixtures. The samples were submitted for lead

analysis to Schneider Laboratories Global, Inc. in Richmond, Virginia. Fourteen samples were identified as lead containing, and one sample was identified as lead-based paint (LBP). In addition, approximately 50 percent of the light fixtures contained PCBs or mercury.

#### 3.3 Utilities

All underground utilities that formerly served the Administration Building will be disconnected by CTGR prior to the start of demolition. The demolition contractor will cap utility lines and conduits per local codes and guidelines.

#### 3.4 Health and Safety Plan

The demolition contractor's health and safety plan, addressing health and safety related measures and air monitoring protocols, is provided in Appendix E.

#### 3.5 Hours of Work

The demolition work will comply with the City's Municipal Code Section 9.12.023 that regulates construction, demolition, alteration, or repair of buildings and the excavation of streets and highways. Work hours are restricted to between 7:00 a.m. and 10:00 p.m. Monday through Saturday, and (if necessary) between 9:00 a.m. and 8:00 p.m. on Sunday. Work will typically be performed during daylight hours.

#### 3.6 Stormwater and Sediment Control

The demolition contractor will be responsible for deployment and management of appropriate stormwater control measures, such as biobags and catch basin inserts, to prevent release of sediment or debris to stormwater facilities. The locations of stormwater inlets to be protected are shown in Figure 1-2. The demolition contractor will maintain and periodically sweep the paved construction entrance and work area to avoid sediment or debris track-off to the public roadways. A street sweeper may be employed to maintain roadways free of sediment and debris generated by the demolition work.

#### 3.7 Debris Containment

The demolition contractor will be required to implement work procedures to safely demolish the structure and prevent the unintended release of building debris to the surrounding area. Potentially hazardous areas will be marked and sealed off from the public or from the workers before demolition begins. MFA has coordinated with the Oregon Department of Transportation and the City Public Works department to temporarily close sidewalks and right of ways abutting the Property for demolition work. Appropriate safety and containment measures will be implemented along right of way frontage upon the Oregon Department of Transportation and the City's approvals.

The demolition contractor's site superintendent will make sure the building footprint is evaluated after building demolition to ensure that all materials generated through demolition have been removed.

Materials containing suspected LBP may be separated and tested at the request of the disposal facility. Separated materials will be stored in a designated location in the staging area until testing results are received, and disposal profiling is complete.

The demolition contractor's site superintendent will document the location and means of material storage and will verify compliance with the demolition plan.

#### 3.8 Demolition and Removal Action Activities

The demolition contractor will be responsible for installing and maintaining BMPs for containment of debris consisting of non-asbestos-containing materials (ACM), fugitive dust control, sediment control, and stormwater management.

#### 3.8.1 Asbestos-Related Work

Floor tile, mastic, mudded pipe joint insulation, tank insulation, window panels, and any other ACM, if identified during demolition, will be handled by the abatement contractor and/or a demolition contractor's certified supervisor. The following measures will be taken if the abatement/demolition contractor identifies suspect ACM through exploratory investigation during demolition activities:

- The abatement contractor will be responsible for following applicable asbestos work practices
  and procedures outlined in Oregon Administrative Rules 340-248-0270 and 1926.1101. The
  abatement contractor will provide the ten-day and five-day asbestos work notifications to the
  DEQ and conduct the compliance monitoring for ACM abatement.
- The abatement contractor or an accredited Asbestos Hazard Emergency Response Act inspector will collect samples of the suspect ACM and submit to a laboratory for testing or will assume that the suspect material is ACM and conduct abatement per DEQ rules and regulations.
- If the material is confirmed or assumed to be ACM, notification will be provided to the demolition contractor, CTGR, MFA, and DEQ.
- The abatement contractor will provide an abatement plan appropriate to the nature and extent of the material. The plan will specify the procedures for containment, worker protection, monitoring, abatement, post abatement quality assurance, and waste disposal.
- The abatement contractor will provide a closeout letter to the demolition contractor once abatement activities are complete. The closeout letter will be submitted to CTGR and MFA and will be attached to the project completion report. Once the closeout letter is issued, the demolition contractor can start to demolish the building. An abatement supervisor will be present during demolition to monitor for and identify suspect materials.

#### 3.8.2 Lead-Based Paint Material Handling

Materials with LBP will be disposed at a landfill with other demolition debris. LBP materials will be handled to minimize dust generation and separation of LBP coatings from surfaces. Testing is generally not required as demolition generates large quantities of mixed materials with a low risk of

exposure;<sup>3</sup> however, toxicity characteristic leaching procedure or other testing may be performed at the request of the landfill accepting the waste.

#### 3.8.3 PCB- and Mercury-Containing Material Handling

PCB- and mercury-containing light fixtures/bulbs and fluorescent lights will be disposed of or recycled at a permitted PCB and mercury disposal or recycling facility. PCB- and mercury-containing light fixtures/bulbs and fluorescent lights will be handled with care to prevent breakage.

#### 3.8.4 Structure Demolition

CTGR will obtain a building demolition permit from the City to start the demolition work. The structure will be removed down to the existing basement concrete slab, and the basement will be partially backfilled with crushed demolition concrete debris.

Non-ACM will be handled by the demolition contractor. Non-ACM that can be reclaimed for reuse (e.g., wood) may be separated out of the waste stream. Other materials, such as steel or nonferrous metals, will be recycled. Non-ACM that is not reclaimed or recycled will be transported to a landfill or other approved location.

If other hazardous wastes or other wastes not suitable for disposal in a landfill are discovered during structure demolition, the demolition contractor will coordinate with the abatement contractor to set the waste aside and notify CTGR and MFA. MFA will provide direction for management and disposal of the identified waste off site consistently with local, state, and federal guidelines.

The contractor will cut and remove recyclable materials from the inside of the building before starting demolition. High-reach lifts or an excavator operated by the demolition contractor will be used to remove exterior panels of the building before cutting and removing structural steel elements. The demolition contractor will manage, haul, and dispose of the non-ACM demolition debris. The demolition contractor will identify a debris storage area and will stockpile demolition debris over a lined storage area.

#### 3.8.5 Fugitive Dust Control BMPs

Water spraying will be employed as necessary to prevent fugitive dust emissions during abatement and demolition. Water is available from a fire hydrant adjacent to the site entrance. The demolition contractor's superintendent will evaluate the site conditions and arrange for water trucks if additional water is needed. Water applied for dust suppression will be contained and prevented from entering the site stormwater system.

Wind conditions will be monitored, and work will be stopped if the wind speeds are expected to exceed safe levels. For workers' safety and debris management the wind speed threshold is defined by Occupational Safety and Health Administration 1926.968 as corresponding to 30 miles per hour. All loose debris will be covered and secured after work stops.

<sup>&</sup>lt;sup>3</sup>DEQ. 1997. Management of Building Demolition Waste. Guidance Number: 1997-P0-002A. Oregon Department of Environmental Quality Hazardous Waste: Portland, OR. November 21. Updated 2017.

#### 3.8.6 Nonhazardous Waste Management

The demolition contractor will handle nonhazardous waste and contain the debris in drop boxes for disposal at a permitted landfill. Should nonhazardous (suspected ACM) waste that is different from the previously sampled or profiled material be encountered, the abatement contractor will analyze it for asbestos and will segregate, rinse, and remove the material to a drop box with a lid. CTGR, MFA, and the DEQ will be notified of this material immediately, and an appropriate sampling plan will be discussed.

The material storage and staging area, shown in Figure 1-2, will be managed and modified by the demolition contractor as needed.

Waste-disposal documentation will be provided in the project completion report.

#### 3.8.7 Site Restoration

The structure will be removed to the existing basement concrete slab, the basement will be partially backfilled with crushed demolition concrete debris, and adjacent paved areas will remain in place. Perimeter areas will be cleaned of debris and other materials, and equipment will be cleaned before demobilizing from the Property. The demolition and removal action will not change the impervious surface area on the Property.

#### 3.9 Project Schedule

The anticipated project schedule is presented below.

Description	Date
Submit revised RAP	April 2024
DEQ approves revised RAP	April 2024
Community outreach	April 2024
Start demolition activities	May 2024
Complete demolition and abatement activities	June 2024
Project finalization and reporting	September 2024
NOTES  DEQ = Oregon Department of Environmental Quality.  RAP = removal action plan.	

# 4 Records and Reporting

#### 4.1 Work Progress Communication

MFA and CTGR will routinely communicate with the project stakeholders during removal activities. A preconstruction meeting will be scheduled before major removal activities begin. Weekly progress reports and emails will be provided to the DEQ starting with the onset of removal activities for the duration of the removal work. Contacts for the project are as follows:

Organization	Name	Phone	Email
DEQ—Project Manager	Mark Pugh	(503) 229-5587	Mark.Pugh@state.or.us
City of Oregon City—Senior Planner	Christina Robertson- Gardiner, AICP	(503) 496-1564	crobertson@orcity.org
City of Oregon City—Senior Inspector	Chris Long	(503) 496-1543	clong@orcity.org
CTGR—Project Manager	Ryan Webb, PE	(503) 879-2404	Ryan.Webb@grandronde.org
Elder—Contractor	Jason Samek	(503) 515-8326	JasonSamek@ElderDemolition.com
IRS Environmental— Abatement Supervisor/ Subcontractor	Nancy Nguyen	(971) 470-5160	nancy@irsenvironmental.com
MFA—Environmental Consultant	Krysta Krippaehne- Stein, EIT	(503) 828-8961	kstein@maulfoster.com

NOTES:

AICP = American Institute of Certified Planners.

CTGR = The Confederated Tribes of Grand Ronde.

DEQ = Oregon Department of Environmental Quality.

Elder = Elder Demolition.

MFA = Maul Foster & Alongi, Inc.

PE = Professional Engineer.

#### 4.2 Project Completion Report

Removal activities will be documented in a project completion report that will be prepared after the removal action is complete and subsequently submitted to the DEQ in electronic format for its records. The report will be signed by an Oregon-registered professional engineer and a project manager certifying that the removal action associated with the Administration Building has been completed consistent with this revised RAP. The report will summarize the work performed, including any abatement work, demolition materials management, transportation, and disposal, and will include supporting documentation.

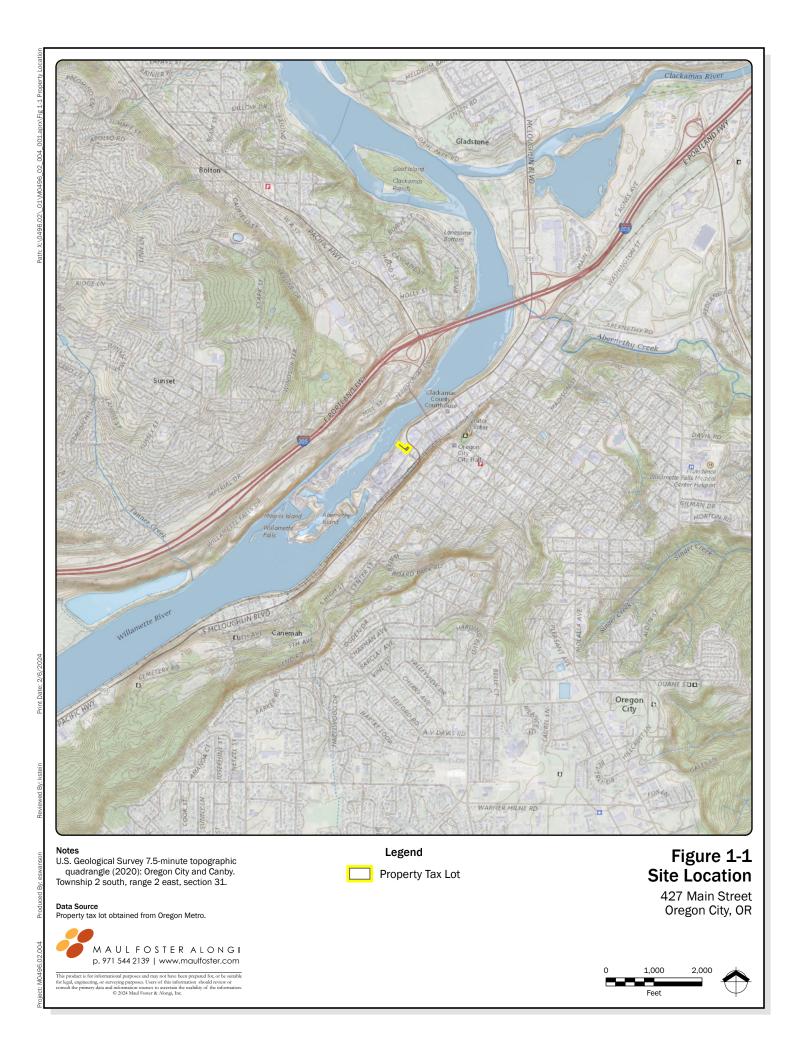
### Limitations

The services undertaken in completing this plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This plan is solely for the use and information of our client unless otherwise noted. Any reliance on this plan by a third party is at such party's sole risk.

Opinions and recommendations contained in this plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this plan.

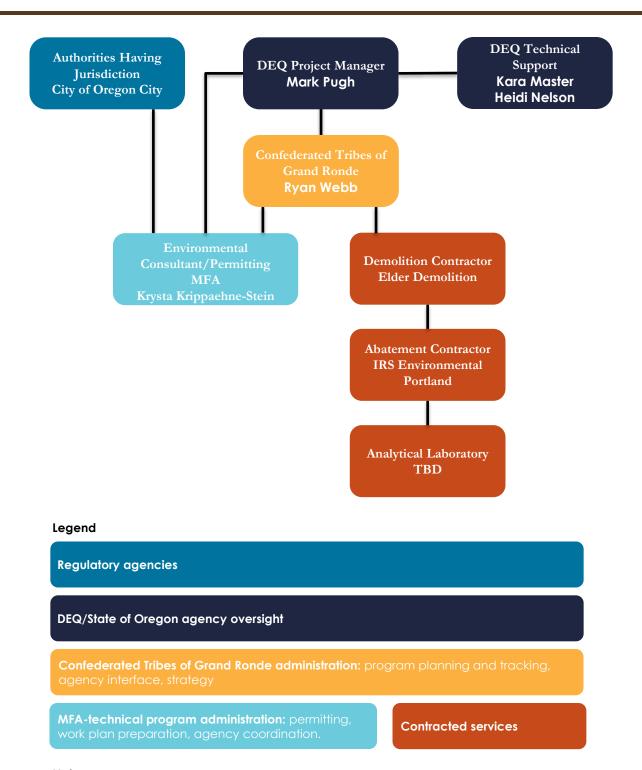
# **Figures**







# Figure 3-1 Blue Heron Administration Building Removal Action Organization Chart



#### **Notes**

DEQ: Oregon Department of Environmental Quality.

MFA: Maul Foster & Alongi, Inc.

TBD: To be determined.

## Appendix A

**Photographic Log** 





# Photo No. 1. Description

Administration Building, southwest elevation looking northeast.

# **Photographs**

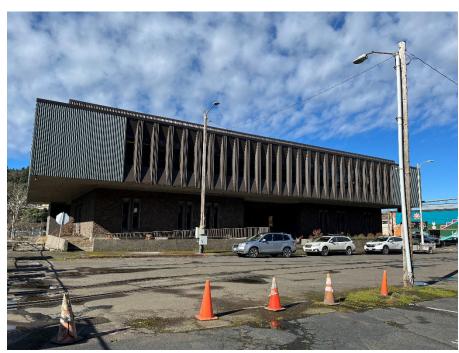
Project Name: Administration Building RAP

Project Number: M0496.02.004
Location: Oregon City, Oregon



# Photo No. 2. Description

Administration Building, southeast elevation looking northwest.





# **Photographs**

Project Name: Administration Building RAP

Project Number: M0496.02.004
Location: Oregon City, Oregon

# Photo No. 3. Description

Administration Building, northeast elevation looking southwest.



# Photo No. 4. Description

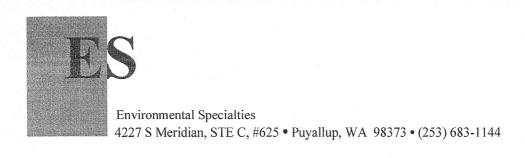
Administration Building, northwest elevation looking southeast.



## Appendix B

**Asbestos Survey by Environmental Specialties** 





## **Asbestos Survey**

Blue Heron Mill

Office Building 427 Main Street Oregon City, OR

**Performed For** 

Falls Legacy LLC 3408 S Union Street Tacoma, WA 98409-4701

Consultant Environmental Specialties 4227 S Meridian, Ste C, #625 Puyallup, WA 98373



#### **Introduction**

On April 2, 2018 and May 24, 2018 Environmental Specialties surveyed the Blue Heron Mill Main Office for asbestos materials.

This inspection report specifically targeted areas and materials that may be affected by remodeling and tenant improvement. The report includes data that describes the type of materials found, their quantities, where appropriate, and their asbestos content. The report can also be used as a planning aid for remodeling, maintenance, abatement and general repair work associated with the structure.

#### **Facilities Description**

This office building was built in the late 1960's or 1970's. It covers 22,000 square feet on two main floors and a basement. The basement and main floor are concrete. The upper two stories are a wood structure with a semi-flat roof. There is a band of cement stucco on the exterior under the wood and just above the foundation. Interior walls and some ceiling finishes are smooth gypsum wallboard. A dropped ceiling is used throughout with only storage areas having hard ceilings. Exterior siding is wood over the wood framing. Aluminum framed windows are set in the wood structure. There is heat and ventilating ductwork throughout the building with the fans and a boiler found in the basement. Hot water coils provide heat through radiators in the ductwork generally found above the suspended ceilings. Floors are generally covered with carpet on the upper two stories. 9x9 inch floor tiles cover the concrete and wood floors throughout the building and are generally under carpet. Ceramic tiles are found under the carpet in the Lobby. Bathrooms have both ceramic tiles and newer 12x12 inch floor tiles on the floors. Tube lighting is generally used throughout the building. Electrical distribution panels are in the basement. The roof originally was a rock ballasted asphalt roof that was replaced last year.

#### **Inspection & Sampling Procedures**

Workplace asbestos regulations require an inspection of all buildings for the presence of asbestos containing materials prior to renovation and/or demolition. Asbestos containing materials are defined as those building materials containing one percent or more of asbestos as verified by laboratory analysis.

Asbestos containing materials are sub-divided into three types: surfacing materials, thermal system insulation, and miscellaneous materials. Surfacing materials are defined as those materials that are sprayed-on, troweled-on or otherwise applied to surfaces including, but

# ES

not limited to, acoustical plaster on ceilings, paints, fireproofing materials on structural members, or other materials on surfaces for decorative purposes. Thermal system insulation indicates material applied to pipes, fittings, boilers, tanks, ducts, or other structural components to prevent heat loss or gain. All other materials are considered to be miscellaneous materials. All surfacing materials, thermal system insulation and flooring installed in structures prior to 1980 are presumed to contain asbestos unless proven otherwise by a licensed building inspector.

The number of samples collected depends on the type of material and its quantity. In order to prove that suspect or presumed surfacing materials do not contain asbestos at least three samples of each homogeneous area are required. Five samples are required for areas greater than 1,000 square feet and seven are required for areas greater than 5,000 square feet. Thermal system insulation requires at least three samples be collected. One sample of each suspect miscellaneous material must also be collected.

Each sample was collected and placed into a separate, sealed, plastic bag. They were then individually numbered. When possible, samples were collected from areas or materials that Were previously damaged. Sampling equipment was decontaminated after each sample was collected.

Once collected, the samples were delivered to an accredited laboratory, accompanied by a chain of custody describing each sample. The samples were then analyzed using Polarized Light Microscopy (PLM) Stain Dispersion technique in accordance with EPA Method 600/R-93/116. Additional treatment and tests may have been used as required to define a sample's composition.

#### **Non-Asbestos Containing Materials**

The following material has been shown by a laboratory to be non-asbestos:

Material Type	Location	Quantity	Description
Gypsum Wallboard	Throughout	35,000 sq/ft	Wallboard on walls and some ceilings
Suspended Acoustic Ceiling Tiles	Offices throughout	20,000 sq/ft	SACT tiles, most office spaces
12x12 Floor Tiles	Locker Rooms	2,000 sq/ft	Newer replacement for old 9x9 inch
Cove Base Mastic	Base throughout	3,000 ln/ft	Throughout the building



#### **Asbestos Containing Materials**

These materials have been shown by a laboratory to contain asbestos:

Material Type	Location	Quantity	Description
Floor Tiles & Black Mastic	Throughout	18,000 sq/ft	Under carpet generally. Top floors on wood. Basement on concrete. Some 12x12 VCT replacement in basement
Mudded Pipe Joint Insulation	Throughout	300 units	Straight run fiberglass, on all domestic water and HVAC hot water and return lines. Some MPJF's non-asbestos but can't be defined.

#### Conclusion

There were three asbestos materials found during this inspection. They will impact future remodeling plans that include floor and HVAC modifications. 9x9 inch floor cream patterned floor tiles and the associated black mastic found throughout the building do contain asbestos. Both of these materials are non-friable under current conditions.

Hand packed pipe fitting insulation (mud) found throughout on the HVAC and domestic water piping contains asbestos. One sample did not but all are assumed to contain asbestos since it is very difficult to differentiate asbestos from non-asbestos.

Each area undergoing demolition or renovation should be thoroughly checked before general work begins to see if asbestos remains and/or if asbestos materials will be impacted by the scheduled work.

If additional suspect materials are found, another inspection by a certified inspector is recommended.

#### **Inspector Endorsement**

Robert F. Simons

Inspector:

Certified AHERA Building Inspector,

SP-AP Inspector # AP166438, Expires 3-21-19

Attachments: Laboratory Analysis

<sup>\*</sup> Reviewed by JLS



May 12, 2015

CMSI - Environmental Specialties 4227 South Meridian, Suite C #625 Puyallup, WA 98373

**CLIENT PROJECT:** 

Blue Heron; Office Bldg. 4/2/15

CEI LAB CODE:

B15-2381

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on May 11, 2015. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

Tianbao Bai, Ph.D., CIH

Laboratory Director





### ASBESTOS ANALYTICAL REPORT By: Polarized Light Microscopy

#### Prepared for

### **CMSI - Environmental Specialties**

CLIENT PROJECT: Blue Heron; Office Bldg. 4/2/15

CEI LAB CODE: B15-2381

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 05/12/15

TOTAL SAMPLES ANALYZED: 3

# SAMPLES >1% ASBESTOS: 2

TEL: 866-481-1412

www.ceilabs.com



# Asbestos Report Summary By: POLARIZING LIGHT MICROSCOPY

PROJECT: Blue Heron; Office Bldg. 4/2/15

**CEI LAB CODE:** B15-2381

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer Lab ID	Color	Sample Description	ASBESTOS %
1	B32398	Beige,White	Ceiling Tile	None Detected
2	B32399	Beige	Ceiling Tile	None Detected
3	B32400A	Beige	Floor Tile	Chrysotile 2%
	B32400B	Black	Mastic	Chrysotile 5%



#### **ASBESTOS BULK ANALYSIS**

By: POLARIZING LIGHT MICROSCOPY

Client: CMSI - Environmental Specialties

4227 South Meridian, Suite C #625

Puyallup, WA 98373

CEI Lab Code: B15-2381

**Date Received:** 05-11-15 **Date Analyzed:** 05-12-15

Date Reported: 05-12-15

Project: Blue Heron; Office Bldg. 4/2/15

#### ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous Non-Fibrous			ASBESTOS %	
<b>1</b> B32398	Ceiling Tile	Heterogeneous Beige,White Fibrous Loosely Bound	40% 15% 15%	Cellulose Fiberglass Mineral Wool	10% 20%	Paint Perlite	None Detected
<b>2</b> B32399	Ceiling Tile	Heterogeneous Beige Fibrous Loosely Bound	55% 20%	Cellulose Fiberglass	25%	Perlite	None Detected
<b>3</b> B32400A	Floor Tile	Homogeneous Beige Fibrous Bound	5%	Cellulose	58% 35%	Vinyl Calc Carb	2% Chrysotile
B32400B	Mastic	Homogeneous Black Fibrous Bound	5%	Cellulose	55% 35%	Mastic Calc Carb	5% Chrysotile



LEGEND:

Non-Anth

= Non-Asbestiform Anthophyllite

Non-Trem

= Non-Asbestiform Tremolite

Calc Carb

= Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**LIMIT OF DETECTION: <1%** by visual estimation

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:

and the second

APPROVED BY:

Tianbao Bai, Ph.D., CIH Laboratory Director

NVLAP Lab Code 101768-0



CHAIN OF CUSTODY 3

LABS			LAB USE ONLY:						
	107 New Edition Court, Cary, NC 27511				CEI Lab Code: 1915 3386				
Tel: 866-481-1412; Fax: 919-4	181-1442		CEI Lab I.D. Range: 133339 X						
COMPANY INFORMATION		PROJECT INFORMATION							
CEI CLIENT #: 2 464	EI CLIENT #: 24546				Job Contact: Robert Siviery				
Company: CMSI									
44	57.5		***************************************	- ~		***************************************			
Address:	-uyaliup,WA-38373		Project Na		<u>ce Heus</u>	2-1	7 1 _		
			Project ID#	+ Office	18/cla	41	2/15		
Email: YSCVNS160	not unceil com		PO #:						
Tel:	Fax:		STATE SA	MPLES CC	LLECTED I	N: 0 R	) 		
	TAT IS NOT MARKE	DSTAND	ARD 3 DA						
				TURN AR	OUND TIME				
ASBESTOS	METHOD	4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY		
PLM BULK	EPA 600								
PLM POINT COUNT (400)	EPA 600								
PLM POINT COUNT (1000)	EPA 600								
PLM GRAV w POINT COUNT	EPA 600								
PLM BULK	CARB 435								
PCM AIR	NIOSH 7400								
TEM AIR	EPA AHERA								
TEM AIR	NIOSH 7402								
TEM AIR	ISO 10312								
TEM AIR	ASTM 6281-09								
TEM BULK .	CHATFIELD	100		. П					
TEM DUST WIPE	ASTM D6480-05		Ш						
TEM DUST MICROVAC	ASTM D5755-09	П	П						
TEM SOIL	ASTM D7521-13 ·						П.		
TEM VERMICULITE	CINCINNATI METHOD					<u> П</u>			
OTHER:					П				
REMARKS / SPECIAL IN	STRUCTIONS:				<b></b>	ccept Sampl			
Relinquished By:	Date/Time		Recei	ved By:		Date/Time			
All to dance the			I K	7	5:11:1	< 11	:10		

Samples will be disposed of 30 days after analysis

AUPLUIUU

### **SAMPLING FORM**



B13231

COMPANY CONTACT INFORMATION	
Company: CMSIES	Job Contact: Robert Sinway
Project Name: Blue Heron	
Project ID#: Office Blda	Tel: 263-683-1144

SAMPLE ID#	DESCRIPTION/LOCATION	VOLUME/ AREA	πε	ST .
/	2XH sact DINhole Trough	<b>3</b> 2.	PLM 💢	TEM
2	12X12 sact Karter, Brissing 12X12 sact Karter, Brissing 12X12 FT, Tour black reces	1	PLM 🖒	TEM
(3	12X12 FT Jan black rect	Mateurl 1565	PLM _	TEM
			PLM 📄	TEM
			PLM	TEM
		17	PLM	TEM
			PLM	TEM 🔲
			PLM [	TEM
			PLM	TEM
		Automotive	PLM	TEM
		and the second	PLM	TEM
			PLM	TEM
			PLM	TEM
		-	PLM	TEM
			PLM	TEM
			PLM [	TEM

Page \_\_\_\_of \_\_\_\_



#### EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com

EMSL Order: 511801421 Customer ID: EVSP42

**Customer PO:** Project ID:

> (253) 683-1144 Phone:

> > Fax:

Received Date: 05/24/2018 1:05 PM

Analysis Date: 05/24/2018

**Collected Date:** 

Attention: Robert Simons

**Environmental Specialties** 

4227 S. Meridian S Suite C # 625

Puyallup, WA 98373

Project: Blueheron, Office Bldg.

#### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Asbestos			
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
511801421-0001	GWB, 2nd mid	Brown/White Fibrous Heterogeneous	10% Cellulose	65% Gypsum 25% Non-fibrous (Other)	None Detected
511801421-0002	GWB, main floor mid	Brown/White Fibrous Heterogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
3 511801421-0003	GWB, 2nd send	Brown/White Fibrous Heterogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
4-Wallpaper 511801421-0004	Cove mastic, foyer wallpaper	Tan Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
4-Mastic 511801421-0004A	Cove mastic, foyer wallpaper	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 511801421-0005	Cove mastic, brn base foyer	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected
6 511801421-0006	ACT, 12x12 Kerfed, basement	Gray/White Fibrous Homogeneous	40% Cellulose 50% Min. Wool	10% Non-fibrous (Other)	None Detected
7 511801421-0007	Sact, 2nd mid	Gray/White Fibrous Homogeneous	30% Cellulose 50% Min. Wool	10% Perlite 10% Non-fibrous (Other)	None Detected
511801421-0008	Sact, main	Gray/White Fibrous Homogeneous	60% Cellulose 20% Min. Wool	10% Perlite 10% Non-fibrous (Other)	None Detected
9-Wrap 511801421-0009	MJF, muddled pipe joint, boiler basement room	Gray Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
9-Insulation 511801421-0009A	MJF, muddled pipe joint, boiler basement room	Gray Fibrous Homogeneous	40% Min. Wool	56% Non-fibrous (Other)	4% Chrysotile

Analyst(s)

Jason Stuhr (11)

Lauren Kerber, Laboratory Manager

or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613

Initial report from: 05/25/2018 14:11:22

rderID: 511801421



# Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

#511801421

EMSL ANALYTICAL, INC. 3317 3<sup>RD</sup> AVE S., SUITE D SEATTLE, WA 98134

> PHONE: (206) 269-6310 FAX: (206) 900-8789

							<u> </u>		
Company: Enovormental Specialties				EMSL-Bill to: Same Different If Bill to is Different note instructions in Comments**				Market Constitution of the	
Street 227 5 Mevidian stee # 625				Third Party Billing requires written authorization from thir				,	
City: Puralley State/Province: WA				ostal Code	<b>a</b>	Country:			
Report To (Name): Relient Simons				Telephone #:					
Email Address: YECIMS @ notwail com				Fax #: Purchase Order					
Project Name/Number: Duefferon, office Byla				Please Provide Results:  Fax Email					
U.S. State Samples Taken: CT Samples: Commercial/Taxable Residential/Tax								xempt	
3 Hour	П	6 Hour 24 Hour 48 Hou		72 Hour	Se Check	1 Week	2 W	leek	
*For TEM Air 3 hr through 6 hr, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.									
dii di	<del></del>	VI - Bulk (reporting limit)	TEM - Bulk						
ZFRLM EPA 600/R-93/116 (<1%) WF				☐ TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1					
☐ PLM EPA NOB (<1%)				☐ NY ELAP Method 198.4 (TEM)					
Point Count				Chatfield Protocol (semi-quantitative)					
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)				TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2					
☐ NIOSH 9002 (<1%)				☐ TEM Qualitative via Filtration Prep Technique					
NY ELAP Method 198.1 (friable in NY)				☐ TEM Qualitative via Drop Mount Prep Technique  Other					
☐ NY ELAP Method 198.6 NOB (non-friable-NY) ☐ OSHA ID-191 Modified				<u>Other</u>					
☐ Standard Addition Method									
☐ Check For Positive Stop - Clearly Identify Homogenous Group Date Sampled: 5/24   8								-	
Samplers	Name:	Robert Simons	Sa	mplers Sig	nature: Kolici	It Simo	7	W	
Sample #	ole # HA # Sample Location				N.	laterial Description			
1	GWB, 2nd wid								
2	2 GOB, Main Fly will								
3	3 GWB, 2nd-send				The second secon			***************************************	
4 Covernastic Foger va				4)		-		****************************	
5 Covernastic-Bun base Foyer									
6									
7	7 sact, and mid							-	
8 sact main									
a	9 MJF, mudder sive joint Bourker								
		140 F. mudden proed	ואים	DSVICIN					
Client Sample # (s): 1-9 Total # of Samples: 9								market some and the sound of th	
Relinquished (Client): Relient & Sunny Date: 5/25/18 100 Time: 1:05									
5/201/20									
Received (Lab): Market Julyan Date: 0/24/18 Time: /00 p								$m_{-}$	
Johnneitz	peuid								
Controlled Documer	it - Asbestos C	OC - R2 - 4/9/2013							

# Appendix C

**Asbestos Survey by IRS Environmental** 





ASBESTOS LEAD ENVIRONMENTAL SERVICES CCB#155646 WA.# IRSENI\*972N5

# ASBESTOS SURVEY REPORT FOR:

Elder Demolition Blue Heron Mill – Office Building 427 Main Street Oregon City, OR 97045

# 1. EXECUTIVE SUMMARY

On Tuesday, February 20th, 2024, IRS Environmental of Portland, Inc. AHERA Inspector, Bruce Korum, performed a visual inspection and Survey of The Blue Heron Paper Mill office building located at the above address per the request of Jason Samek at Elder Demolition.

The purpose of the Survey was to inspect and test for asbestos containing material throughout the building prior to a complete demolition.

Sample locations were random throughout, which consisted of bulk samples placed into re-seal-able plastic bags and marked with a sample ID number. A chain of Custody including the sample ID number as well as material descriptions, approximate quantities, and location.

Bruce Korum, an AHERA Accredited Building Inspector, IR-23-6467A, performed the asbestos bulk sampling. Samples were analyzed using Polarized Light Microscopy with Dispersion Staining according to EPA and OR-OSHA Methodology.

Of the **37** samples that were collected **Nine (9)** tested positive for asbestos. Asbestos containing materials (ACM) is defined as any material that contains more than 1% asbestos. Below is a list of asbestos containing materials, along with the location of the sampling:

Sample	Matl Type	Location	Homogeneous	Qty (Est)	Condition	Friable/ Non-Friable
ID D 1	D11-0-0 F1	Enter Hillian	Area(s)	12 000 CE	Cont	
B-1	Black 9x9 Floor	Entry Utility	Various rooms	12,000 SF	Good	Non-Friable
	Tile/Mastic	closet	under carpet			
B-2	Tan 9x9 Floor	Storage rm	Various rooms	66	Good	Non-Friable
	Tile/Mastic	near entry	under carpet			
B-3	Tan 9x9 Floor	Basement	Various rooms	"	Good	Non-Friable
	Tile/Mastic	Hallway	under carpet			
B-4	Tan 9x9 Floor	Under Carpet	Various rooms	"	Good	Non-Friable
	Tile/Mastic	2 <sup>nd</sup> floor	under carpet			
B-14	Tan 12x12 Floor	Basement	Water heater	220 SF	Good	Non-Friable
	Tile/Mastic	shower room	Room			
B-21	Pipe Joint mud	Water Pipe in	All Pipe joints	300 LF	Good	Friable
	•	Boiler room				
B-22	Tank Insulation	On cooling	HW Tank	80 SF	Good	Friable
		tank in boiler				
		room				
B-26	Tank Insulation	Boiler Room		120 SF	Good	Friable
				120 01	Jood	1114010
B-31	Window Panels	Below		40.15		N 5111
		Windows on		48 Ea	Good	Non-Friable
		2 <sup>nd</sup> floor				
		Interior				

# 2. RECOMMENDATION

Current regulations require that asbestos-containing materials (ACM) be removed from the structure if the material would be disturbed by remodeling, demolition, or other building maintenance activities. The asbestos-containing materials must be removed by a DEQ licensed asbestos abatement contractor.

When performing demolition activities, the owner should use caution as concealed materials may be encountered during the demolition project. ACM may be located between walls, above ceilings, underneath floors, in pipe chases or other inaccessible or hidden areas.

A copy of the asbestos survey must be kept on site during all demolition activity.

# 3. LIMITATIONS OF THE REPORT

The information contained in this report is based on one site survey, visual observations, laboratory analytical results and limited investigative inquiry. Architectural plans were not available for review at the time of the Survey. The survey was limited to areas normally accessible to tenants or maintenance personnel, except where otherwise noted. Bulk samples were obtained using destructive sampling methods. Other asbestos containing materials may exist but were not observed during the survey due to physical barriers such as walls, ceilings, exterior materials covering other materials and etc. Every effort was made to sample all suspect materials that could be safely accessed.

#### PREPARED BY:

IRS Environmental of Portland, Inc. Bruce Korum -AHERA Accredited Inspector Certification #IR-23-6467A

Bruce Korum	<u>March 1, 2023</u>
BRUCE KORUM	DATE

# IRS ENVIRONMENTAL OF PORTLAND, INC

777 SW Armco Ave, Hillsboro OR 97123 PHONE: 503-693-6388 FAX: 503-693-7221

# **BULK SAMPLES**

LAB#

Min - office

V:15511551891

kfinnemore UPS

2/22/2024 9:19:13 AM 1Z2E28998469555743

DATE: 2

STATE:

ASBESTOS [< ] LEAD [ ]

SITE ADDRESS: 427

SAMPLED BY: BRUCE KORUM

Heron

MAIN

**SAMPLE TURNAROUND:** 

3 DAY [X]

5-DAY [ ]

DAYS [ ]

0 37

SAMPLE ID#	MATERIAL DESCRIPTION	SAMPLE LOCATION	HOMOGENEOUS AREA(S)	APPROX SQ. FT.	MAT'L CONDITION	FRIABLE NON-FRIABLE
B-1	FLOOF TILL TOWN MASTIC (BLACK)	ENTRY UTILITY closet	UARIOUS Rooms	12,000	GOOD POOR	F /Non-F
B2	U U TAN	STORAGE From NEAR ENTRY	10 (1	1 (	GOOD/POOR	F/Non-F
B3	TAN	BASEMENT/ HALLWAY	14 61		GOOD/POOR	F Non-F
B4	(1 TAN	UNDER Carpet	In les Il	1	GOOD/POOR	F Non-F
BS	STAIR TREAD BLACK	EAST + West STAIRWAY		1200	GOOD/POOR	F Non-F
BL	Cove BASE + MASTIC (GRAY)	1st FLOOR SE Rooms	Throughour	1200	GOOD/POOR	F Non-F
B.7	MASTIC (TAN)	2 - FLOOR	7 FLOOR TAROUGHOUT	1800	GOOD/POOR	F Non-F
B8	Sheet POCK +	South West Han	Throughout	38000 SF.	GOOD/POOR	F/ Non-F
B9	te 19	west stairway	(c 4	1	GOOD/POOR	Fy Non-F
Blo	c <sub>1</sub> /1	Lunch Room SOFFIT - 2nd floor	·c 4		GOOD/POOR	F/ Non-F
BII	te le	HANWAY WAN	K 11	. (	GOOD/POOR	Fy Non-F
812	u 11	WALL- 2 Ilon	h a		GOOD/POOR	F)/ Non-F
B13	n (1	BASEMENT WALL	ll u	V	GOOD/POOR	F)/ Non-F
314	FLOOR TILE 12×12 (TAN)	SHOWER ROOM BSmt.	WATER HTR Room	220	GOOD/POOR	Non-F
B15	CELLING TILE + MASTIC (BROWN)	1st FLOOR 12x12 STAIRWAY	MISC Rooms		GOOD/POOR	F/ Non-F

SENT TO:	SLGi			RELINGUISHED BY:	BRUCE KORUM	` .
		*	- 1			
RECEIVED BY:				DATE RECEIVED:		

EMAIL RESULTS TO: BRUCEK@IRSENVIRONMENTAL.COM CC: NANCY@IRSENVIRONMENTAL.COM

# IRS ENVIRONMENTAL OF PORTLAND, INC

777 SW Armco Ave, Hillsboro OR 97123 PHONE: 503-693-6388 FAX: 503-693-7221

# **BULK SAMPLES**

SAMPLED BY: BRUCE KORUM

	NAME: BLUCE KORUM	MILL - OFFice			ATE: 2/2	1/24
	RESS: 427 MAIN S		17		' /	
	S[] LEAD[]	SAMPLE TURN	/		TATE: Q	R / WA
	,				S-DAY-PC	DAYS [ ]
SAMPLE ID#	MATERIAL DESCRIPTION	SAMPLE LOCATION	HOMOGENEOUS AREA(S)	APPROX SQ. FT.	MAT'L CONDITION	FRIABLE NON-FRIABI
B16	Ceiling The 2x4 (Rust)	NE. Corner		2012	GOOD/POOR	
B17	2×4 (DAN)	unch Poom	87		GOOD POOR	F/ Non-F
B 18	2x4 (GRAY)	South Rooms			GOOD/POOR	F) Non-F
B19	2x4 (TAN)	BASEMENT			GOOD/POOR	(F)/ Non-F
320	2x4 (GRAY)	Rest Rooms	1	350	GOOD/POOR	F/Non-F
321	PIPE JOINT	IN BOILER ROOM	An pipe	250.300	GOOD/POOR	(F)/ Non-F
322	TANK INSULATION	ON GOLING TANK IN BOILER Room	HW TANK	80 TD	600D/POOR	F/ Non-F
323	EXPANSION JOINT	BOILER ROOM		55F.	600D/POOR	F /Non-F
324	Boiler Flue INSWATION	Bour Room	up to Roof	60'	GOOD/POOR	F Non-F
325	(( ((	10 01		1	GOOD/POOR	F) Non-F
326	TANK INSULATION	11 11.		120	GOOD/POOR	F/ Non-F
27	WAN PAPER Cementous	St. CORNER OFFICE	L Serect Rooms	2000	GOOD/POOR	(F) Non-F
28	Texture	UNDER OVERHANG EXTERIOR			GOOD POOR	F/ Non-F
29	11 'lı	11	1		GOOD/POOR	F)/ Non-F
30	11 11	10 (1	34	5	GOOD/POOR	F/ Non-F
NT TO:_	SLGi	RELINGUISHE	D BY: BRUCE KO	RUM		
CEIVED	BY:	DATE RECEI	VED:			
IAIL RES	ULTS TO: BRUCEK@IRSENVIR	ONMENTAL.COM CC: NANC	Y@IRSENVIRONMEN	ITAL.COM	<u>R</u> 1	- <b>***</b> * * * *

# IRS ENVIRONMENTAL OF PORTLAND, INC

777 SW Armco Ave, Hillsboro OR 97123 PHONE: 503-693-6388 FAX: 503-693-7221

# **BULK SAMPLES**

	BY: BRUCE KORUM	LAB#			_/	1-10
PROJECT (	NAME: Blue Heror	MILL - OFFICE	BLDG	_ DA	TE: 2/20	124
SITE ADDI	RESS: 427 MAIN S	f. opegon ci	ty	ST	ATE: O	R) WA
ASBESTOS	EAD [ ]	SAMPLE TURN	AROUND: 3 DAY	[X] 5	-DAY[]	DAYS [ ]
SAMPLE ID#	MATERIAL DESCRIPTION	SAMPLE LOCATION	HOMOGENEOUS AREA(S)	APPROX SQ. FT.	MAT'L CONDITION	FRIABLE NON-FRIABLE
B 31	WINDOW PANELS	BELOW WINDOWS 2 Strook Interior		EACH	COOD/POOR	F Non-F
B32	INSULATION (BROWN)	ATTIC BELOW ZME FLOOR		8000 5E	8000/P00R	F) Non-F
B33	INSULATION (GRAY)	ATTIC BELOW 2 mil	nns	24EA	GOOD/POOR	F) Non-F
B34	PIPE INSULATION	IN 2 ml Hoo ATTIC		300 LF	GOOD/POOR	F / Non-F
B35		3 Tessed on 2 ml FLOOR		500 5F	GOOD/POOR	F) Non-F
B36	Cereing Tree (GRAY)		mental supplies and supplies an	V	GOOD/POOR	- Non-F
B37	BLACK MASTIC	Penetration on		15 EA	GOOD/POOR	F / Non-F
B38	2				GOOD/POOR	F / Non-F
				. 8	GÖOD/POOR	F / Non-F
					GOOD/POOR	F / Non-F
					GOOD/POOR	F / Non-F
					GOOD/POOR	F / Non-F
	9.5				GOOD/POOR	F / Non-F
					GOOD/POOR	F / Non-F
	2		*	10	GOOD/POOR	F / Non-F
SENT TO:	SLGi	RELINGUISHE	D BY:BRUCE KO	RUM		
RECEIVED	BY:	DATE RECE	IVED:			
EMAIL RE	SULTS TO: BRUCEK@IRSENVI	RONMENTAL.COM CC: NANC	Y@IRSENVIRONMEN	TAL.COM	*	

# **Analysis Report**



# Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

**Customer:** 

IRS Environmental of Portland Inc (5044)

Address:

777 SW Armco Ave

Hillsboro, OR 97123

Order #:

551891

Received Analyzed 02/22/24

Reported

02/25/24 02/26/24

Project:

Attn:

Blue Heron Mill Office Bldg

Location:

427 Main St Oregon City

Number:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
551891-001	02/20/24	B1	Entry Utility Closet		
Layer 1:	Floor Tile			<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
Tan, Or	ganically Bo	ound			
Layer 2:	Mastic			3% CHRYSOTILE	97% NON FIBROUS MATERIAL
Black, B	Bituminous				
551891-002	02/20/24	B2	Storage Rm Near E	ntry	
Layer 1:	Floor Tile			<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
Tan, Or	ganically Bo	ound			
Layer 2:	Mastic			3% CHRYSOTILE	97% NON FIBROUS MATERIAL
Black, B	Bituminous				
551891-003	02/20/24	В3	Bsmt Hallway		
Layer 1:	Floor Tile			<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
Tan, Or	ganically Bo	ound			
Layer 2:	Mastic			3% CHRYSOTILE	97% NON FIBROUS MATERIAL
Black, E	Bituminous				
551891-004	02/20/24	B4	Under Carpet 2nd F	L	
Layer 1:	Floor Tile			<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
Tan, Or	ganically Bo	ound			
Layer 2:	Mastic			2% CHRYSOTILE	98% NON FIBROUS MATERIAL
Black, E	Bituminous				

Project:

Blue Heron Mill Office Bldg 427 Main St Oregon City

Location:
Number:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

Method: EPA 600/R-93/116 & 40	CFR App. E Sub. E Pt	. 763 PLM	Analysis
Sample ID Collected Cust. ID	Location	Asbestos Fibers	Other Materials
<b>551891-005</b> 02/20/24 B5	East & West Stain	way	
Layer 1: Stair Tread		No Asbestos Detected	100% NON FIBROUS MATERIAL
Black, Rubbery			
Layer 2: Adhesive		No Asbestos Detected	100% NON FIBROUS MATERIAL
Brown, Brittle/Soft			
<b>551891-006</b> 02/20/24 B6	1st FL SE Rms		
Layer 1: Cove Base		No Asbestos Detected	100% NON FIBROUS MATERIAL
Gray, Rubbery			
•			
Layer 2: Cove Base Mastic		No Asbestos Detected	100% NON FIBROUS MATERIAL
Brown, Brittle/Soft			
<b>551891-007</b> 02/20/24 B7	2nd FL		
Layer 1: Cove Base		No Asbestos Detected	100% NON FIBROUS MATERIAL
Tan, Rubbery			
Layer 2: Cove Base Mastic		No Asbestos Detected	100% NON FIBROUS MATERIAL
Brown, Brittle/Soft			
<b>551891-008</b> 02/20/24 B8	1st FL SW Hall		
Layer 1: Sheetrock		No Asbestos Detected	4% CELLULOSE FIBER
White, Powdery			96% NON FIBROUS MATERIAL
Layer 2: Mud		<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
White, Granular			
<b>551891-009</b> 02/20/24 B9	W Stairway		
Layer 1: Sheetrock	vv Staliway	No Asbestos Detected	4% CELLULOSE FIBER
White, Powdery		No Assesses Detected	96% NON FIBROUS MATERIAL
wine, i owdery			30% NON IBROOF WITERING
Layer 2: Mud		<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
White, Granular		The Grace Corner	100% HORT IBROOD WATERIAL
Time, ordinadi			
<b>551891-010</b> 02/20/24 B10	Lunch Rm Soffit 2	nd FL	
Layer 1: Sheetrock		No Asbestos Detected	4% CELLULOSE FIBER
White, Powdery			96% NON FIBROUS MATERIAL
Layer 2: Mud		<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
White, Granular			
*** * * * ***			

Project:

Blue Heron Mill Office Bldg

Location:

427 Main St Oregon City

LNumber:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

Method:	-PA 600/R-	93/116 & 40 (	SFR App. E Sub. E Pt. 76	o PLM	Analysis
Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
551891-011	02/20/24	B11	Hallway Wall 2nd FL		
Layer 1:	Sheetrock			No Asbestos Detected	4% CELLULOSE FIBER
White, Po	owdery				96% NON FIBROUS MATERIAL
Layer 2: White, G	Mud ranular			<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
551891-012	02/20/24	B12	N Office Wall 2nd FL		
Layer 1:	Sheetrock			No Asbestos Detected	4% CELLULOSE FIBER
White, Po	owdery				96% NON FIBROUS MATERIAL
Layer 2: White, G	Mud ranular			No Asbestos Detected	100% NON FIBROUS MATERIAL
551891-013	02/20/24	B13	Compuer Rm Bsmt		1700,000000 100,00000 000
Layer 1:	Sheetrock			No Asbestos Detected	3% CELLULOSE FIBER
White, Po	owdery				97% NON FIBROUS MATERIAL
Layer 2:	Mud			No Asbestos Detected	100% NON FIBROUS MATERIAL
White, G	ranular				
551891-014	02/20/24	B14	Shower Rm		
Layer 1: Tan, Orga	Floor Tile anically Bo	und		<1% CHRYSOTILE	100% NON FIBROUS MATERIAL
Layer 2: Black, Bit	Mastic tuminous			2% CHRYSOTILE	98% NON FIBROUS MATERIAL
551891-015	02/20/24	B15	1st FL Stairway		
Layer 1:	Ceiling Til	е	aport.	No Asbestos Detected	20% CELLULOSE FIBER
White, Fi	brous				70% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL
Layer 2: Brown, B	Mastic rittle/Soft			No Asbestos Detected	100% NON FIBROUS MATERIAL
551891-016	02/20/24	B16	NE Corner		
Layer 1:	Ceiling Til	е		No Asbestos Detected	15% CELLULOSE FIBER
White, Fi	brous				75% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL

Project: Blue Heron Mill Office Bldg
Location: 427 Main St Oregon City

LNumber:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

			CFR App. E Sub. E Pt.		Analysis
Sample ID	Collected	Cust. ID	Location	Asbestos Fibers	Other Materials
551891-017	02/20/24	B17	Lunch Rm		
Layer 1:	Ceiling Ti	le		No Asbestos Detected	20% CELLULOSE FIBER
Tan, Fib	rous				70% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL
551891-018	02/20/24	B18	S Rooms		
Layer 1:	Ceiling Ti	le		No Asbestos Detected	15% CELLULOSE FIBER
Gray, Fi	brous				75% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL
551891-019	02/20/24	B19	Bsmt Hallway		
Layer 1:	Ceiling Ti	le		No Asbestos Detected	10% CELLULOSE FIBER
White/T	an, Fibrous				80% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL
551891-020	02/20/24	B20	Bsmt Restrooms		
Layer 1:	Ceiling Ti	le		No Asbestos Detected	15% CELLULOSE FIBER
Gray, Fi	brous				75% MINERAL/GLASS WOOL
					10% NON FIBROUS MATERIAL
551891-021	02/20/24	B21	Boiler Rm		
Layer 1:	Mud			5% CHRYSOTILE	10% CELLULOSE FIBER
Gray, Po	owdery				85% NON FIBROUS MATERIAL
551891-022	02/20/24	B22	Boiler Rm		
Layer 1:	Insulation			5% CHRYSOTILE	15% CELLULOSE FIBER
Gray, Po	owdery				80% NON FIBROUS MATERIAL
551891-023	02/20/24	B23	Boiler Rm		
Layer 1:	Cloth			No Asbestos Detected	35% CELLULOSE FIBER
White/B	lack, Fibrou	IS			10% NON FIBROUS MATERIAL
					55% SYNTHETIC FIBER
551891-024	02/20/24	B24	Boiler Rm		
Layer 1:	Insulation			No Asbestos Detected	25% MINERAL/GLASS WOOL
White, F	Powdery				75% NON FIBROUS MATERIAL
551891-025	02/20/24	B25	Boiler Rm		
Layer 1:	Insulation			No Asbestos Detected	100% NON FIBROUS MATERIAL
Gray, G					
•					
551891-026	02/20/24	B26	Boiler Rm		
Layer 1:	Insulation			5% AMOSITE	83% NON FIBROUS MATERIAL
•	Powdery/Fib	roue		12% CHRYSOTILE	

Project:

Blue Heron Mill Office Bldg

Location:

427 Main St Oregon City

<sup>L</sup>Number:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

Method:	EPA 600/F	k-93/116 & 40	CFR App. E Sub. E P	t. 703 PLM	Analysis	
Sample ID	Collected	Cust. ID	Location	Asbestos Fibers		Other Materials
551891-027	02/20/24	B27	SE Corner Office			
Layer 1:	Wallpape	er		No Asbestos Detected	90%	CELLULOSE FIBER
White, F	Fibrous				10%	NON FIBROUS MATERIAL
551891-028	02/20/24	B28	Exterior			
Layer 1:	Cementit	ious Mtrl		No Asbestos Detected	100%	NON FIBROUS MATERIAL
Gray, G	ranular					
551891-029	02/20/24	B29	Exterior			
Layer 1:	Cementit	ious Mtrl		No Asbestos Detected	100%	NON FIBROUS MATERIAL
Gray, G	ranular					
551891-030	02/20/24	B30	Exterior			
Layer 1:	Cementit	ious Mtrl		No Asbestos Detected	100%	NON FIBROUS MATERIAL
Gray, G	ranular					
551891-031	02/20/24	B31	2nd FL Int			
Layer 1:	Panel			10% CHRYSOTILE	90%	NON FIBROUS MATERIAL
Dark Gr	ay, Hard					
551891-032	02/20/24	B32	Attic Below 2nd F	L		AND THE COMMISSION
Layer 1:	Insulation	1		No Asbestos Detected	90%	MINERAL/GLASS WOOL
Brown/G	Bray, Fibrou	ıs			10%	NON FIBROUS MATERIAL
551891-033	02/20/24	B33	Attic			
Layer 1:	Insulation	า		No Asbestos Detected		CELLULOSE FIBER
Gray, G	ranular				90%	NON FIBROUS MATERIAL
551891-034	02/20/24	B34	2nd FL Attic		- Geographic con a sea	
Layer 1:	Pipe Insu	ılation		No Asbestos Detected		CELLULOSE FIBER
Tan/Wh	ite, Fibrous	;				NON FIBROUS MATERIAL
					35%	SYNTHETIC FIBER
551891-035	02/20/24	B35	2nd FL			
Layer 1:	Ceiling T	ile		No Asbestos Detected	10%	CELLULOSE FIBER
Red, Fit	rous				80%	MINERAL/GLASS WOOL
					10%	NON FIBROUS MATERIAL
551891-036	02/20/24	B36	2nd FL	No Adhesto - Detected	4501	OFILLIA COE SIDED
Layer 1:	Ceiling T	ile		No Asbestos Detected		CELLULOSE FIBER
Gray, Fi	prous					MINERAL/GLASS WOOL
					10%	NON FIBROUS MATERIAL

Project:

Blue Heron Mill Office Bldg

Location:

427 Main St Oregon City

Number:

Method: EPA 600/R-93/116 & 40 CFR App. E Sub. E Pt. 763

**PLM Analysis** 

Sample ID Collected Cust. ID Location Asbestos Fibers Other Materials

551891-037 02/20/24 B37 Roof

Layer 1: Roof Mastic

No Asbestos Detected

100% NON FIBROUS MATERIAL

Black, Bituminous

**EPA Regulatory Limit: 1%** 

Total layers analyzed on order: 52

551891-02/26/24 07:19 PM

Reviewed By: Mohammed Hashim

Microscopy Supervisor/Analyst

Analyst Elsamani Abdelfadiel

# THIS IS TO CERTIFY THAT

# **BRUCE KORUM**

# HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE for ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 04/06/2023

Online,

Certificate: IR-23-6467A

Course Location:

Portland, OR 97239

**PBS** 

# CCB #SRA0615 4-Hr Training

4-Hour AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

**Expiration Date:** 04/06/2024

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue

Andy Fridley, Instructor

andew Fridley

# **Appendix D**

Lead, PCB, and Mercury Survey by IRS Environmental





ASBESTOS LEAD ENVIRONMENTAL SERVICES CCB#155646 WA.# IRSENI\*972N5

# LIMITED LEAD, PCB and MERCURY REPORT FOR: Blue Heron Admin. Bldg. - 427 Main St, Oregon City, Or.

# 1. EXECUTIVE SUMMARY:

On March 15,2024, IRS Environmental of Portland, Inc. AHERA Inspector, Bruce Korum, performed a visual inspection and took Lead samples of random materials and tested a representative number of light fixtures at the address referenced above per the request of Jason Samek of Elder Demolition. 503-515-8326

The purpose of the Survey was to sample suspect materials to be impacted in the structure prior to demolition.

Sample locations were random and consisted of bulk samples placed into re-seal-able plastic bags and marked with sample ID numbers. A chain of Custody document included the sample ID numbers as well as material descriptions, approximate quantities and locations.

Bruce Korum, an AHERA Accredited Building Inspector, Certificate #IR-23-6467A, performed the Lead bulk sampling. Samples were analyzed using Polarized Light Microscopy with Dispersion Staining according to EPA and OR-OSHA Methodology.

Of the One (15) sample that were collected, all samples tested positive for some amount of lead. Lead Containing Materials is defined as any material that contains more than 0.5% lead by weight.

# 3. LIMITATIONS OF THE REPORT:

The information contained in this report is based on one site survey, visual observations, laboratory analytical results and limited investigative inquiry. Architectural plans were not available for review at the time of the Survey. The Survey was limited to areas normally accessible to tenants or maintenance personnel, except where otherwise noted. Bulk samples were obtained using destructive sampling methods. Other asbestos containing materials may exist but were not observed during the survey due to physical barriers such as walls, ceilings, exterior materials covering other materials and etc. Every effort was made to sample all suspect materials that could be safely accessed.

PCB's and MERCURY LIGHT FIXTURES.

Random Light fixtures were tested for PCB ballasts and mercury in light tubes. About 50% of the fixtures tested contain PCB or mercury.

## PREPARED BY:

IRS Environmental of Portland, Inc.
Bruce Korum -AHERA Accredited Inspector
Certification #IR-23-6467A

Bruce Korum	DATE: 3/ 26/2023
BRUCE KORUM	

# O 15

# IRS ENVIRONMENTAL OF PORTLAND, INC

777 SW Armco Ave, Hillsboro OR 97123 PHONE: 503-693-6388 FAX: 503-693-7221

gbenu

V:\555\555345 3/18/2024 9:42:26 AM

**BULK SAMPLES** 

SAMPLED	BY: BRUCE KORUM	LAB#	/	UPS	1Z2E28998	468090587
PROJECT I	NAME: BLUE HERO	, office BCOG/	ELDER	DA	TE: 3/15	124
SITE ADDF	RESS: 427 MAIN 2	St. opegon city	Î	Sт.	ATE: O	R)/ WA
ASBESTOS		SAMPLE TURN	AROUND: 1 DAY	[] 5	-DAY DX	DAYS[]
SAMPLE ID#	MATERIAL DESCRIPTION	SAMPLE LOCATION	HOMOGENEOUS AREA(S)	APPROX SQ. FT.	MAT'L CONDITION	FRIABLE NON-FRIABL
41	PAINT (TAN)	on HVAC Duct			GOOD/POOR	F / Non-F
12	CERAMIC TIE	BSMT BATH WALLS			GOOD/POOR	F / Non-F
L3	PAINT (GRAY)	1St FLOOP WALLS		(	GOOD/POOR	F / Non-F
4	DARK GRAY	DOOR FRAME 15# FLOOR			GOOD POOR	F / Non-F
15	white	u le	,		GOOD/POOR	F / Non-F
46	11 (1	" FURNACE ROOM	and the property of the second	ni Taybora voy.	GOOD/POOR	F / Non-F
L7	(GRAY)	BOX 2 FLOOR			GOOD/#OOR	F / Non-F
18	a C. TAN	WAN ON 2ª FLOOR			GOOD/POOR	F / Non-F
49	TAN	WINDOW FRAME			GOOD/POOR	F / Non-F
210	CERAMIC THE	FLOOR OF PR			GOOD/POOR	F / Non-F
411	41 (1	WALLS OF PR 2 ST FLOOR			GOOD POOR	F / Non-F
112	(MAROON)	2 mg Floor			GOOD/POOR	F / Non-F
213	"BROWN / Red	DOOR FRAME EXTERIOR COLUMNS	BEAMS IN ATTIC	÷	GOOD/POOR	F / Non-F
614	LOAD PAINT (BROWN)	BASE of Blog on			GOOD POOR	F / Non-F
L15	BROWN	Ext metal SIDING	-		GOOD/POOR	F / Non-F
SENT TO:	SLGi	RELINGUISHE	D BY: BRUCE KO	ORUM		

SENT TO: SLGI		RELINGUISHED BY:	BRUCE KOKUM	
RECEIVED BY:	:	DATE RECEIVED:		

EMAIL RESULTS TO: BRUCEK@IRSENVIRONMENTAL.COM CC: NANCY@IRSENVIRONMENTAL.COM

# **Analysis Report**



# Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: IRS Environmental of Portland Inc (5044)

Address: 777 SW Armco Ave

Hillsboro, OR 97123

Attn:

Project: Blue Heron Office Bldg/Elder 427 Main St Oregon City

-Location: 427 Main St Oregon Cit

**Order #:** 555345

Matrix Bulk, Paint Received 03/18/24

**Analyzed** 03/19/24 **Reported** 03/25/24

PO Number:

-Number:				PO Nui	nber:		
Sample ID Parameter	Cust. Sample ID	Location Method	Sample Date	Weight Total µg	% / Wt.	Conc.	RL*
555345-001	L1	Paint Tan	03/15/24	339 mg			
Lead		EPA 7000B		1200 µg	0.353 %	3530 mg/kg	147 mg/kg
555345-002	L2	Ceramic Tile	03/15/24	540 mg			
Lead		EPA 7000B		536 µg	0.0993 %	993 mg/kg	37.0 mg/kg
555345-003	L3	Paint Gray	03/15/24	314 mg			
Lead		EPA 7000B		620 µg	0.197 %	1970 mg/kg	63.7 mg/kg
55345-004	L4	Paint Dark Gray	03/15/24	107 mg			
Lead		EPA 7000B		33.4 µg	0.0312 %	312 mg/kg	93.5 mg/kg
		Sample weight below pro %.	otocol guidelines;	contains sul	strate which ma	ay affect calculat	ion of weight
555345-005	L5	Paint White	03/15/24	226 mg			
Lead		EPA 7000B		13.0 µg	0.00574 %	57.4 mg/kg	44.2 mg/kg
55345-006	L6	Paint Tan	03/15/24	334 mg			
Lead		EPA 7000B		26.0 µg	0.00778 %	77.8 mg/kg	29.9 mg/kg
		Sample contains substra	te which may affe	ct the calcul	ation of weight p	ercent and mg/k	g.
555345-007	L7	Paint Gray	03/15/24	285 mg			
Lead		EPA 7000B		291 µg	0.102 %	1020 mg/kg	35.1 mg/kg
55345-008	L8	Paint Tan	03/15/24	201 mg			
Lead		EPA 7000B		1120 µg	0.558 %	5580 mg/kg	249 mg/kg
55345-009	L9	Paint Tan	03/15/24	334 mg			
Lead		EPA 7000B		1520 µg	0.455 %	4550 mg/kg	150 mg/kg
		Sample contains substra	ite which may affe	ct the calcul	ation of weight p	ercent and mg/k	g.
555345-010	L10	Ceramic Tile	03/15/24	524 mg			
Lead		EPA 7000B		18.8 µg	0.00358 %	35.8 mg/kg	19.1 mg/kg
555345-011	L11	Ceramic Tile	03/15/24	547 mg			
Lead		EPA 7000B		1560 µg	0.286 %	2860 mg/kg	91.4 mg/kg
555345-012	L12	Lead Paint Maroon	03/15/24	313 mg			
Lead		EPA 7000B		564 µg	0.180 %	1800 mg/kg	63.9 mg/kg
		Sample contains substra	nte which may affe	ct the calcul	ation of weight p	ercent and mg/k	g.
555345-013	L13	Lead Paint Brown/Red	03/15/24	318 mg			

Minimum reporting limit: 10.0  $\mu$ g. \*RL indicates Reporting Limit. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Values are reported to three significant figures. PPM = mg/kg | PPB =  $\mu$ g/kg. The test results apply to the sample as received. AIHA LAP, LLC accredited for Lead (Lab ID 100527).

# **Analysis Report**



Attn:

# Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Order #:

**Customer:** IRS Environmental of Portland Inc (5044)

Address: 777 SW Armco Ave

Hillsboro, OR 97123

Matrix Received

**Analyzed** Reported

Blue Heron Office Bldg/Elder Project: 427 Main St Oregon City Location:

LNumber: PO Number:

Sample ID	Cust. Sample ID	Location	Sample Date	Weight			
Parameter		Method		Total µg	% / Wt.	Conc.	RL*
Lead		EPA 7000B		857 µg	0.270 %	2700 mg/kg	62.9 mg/kg
555345-014	L14	Lead Paint Brown	03/15/24	348 mg			
Lead		EPA 7000B		39.0 µg	0.0112 %	112 mg/kg	28.7 mg/kg
		Sample contains substrate	which may affe	ct the calcul	ation of weight p	percent and mg/k	g.
555345-015	L15	Lead Paint Brown	03/15/24	516 mg			
Lead		EPA 7000B		28.5 ua	0.00552 %	55.2 ma/ka	19.4 mg/kg

Analyst: DM

555345-03/25/24 05:20 PM

Federal Lead Paint Statute as of 2/1/24

Location Level Unit 0.50 Lead in paint by wt. % Lead in paint PPM 5000 mg/kg Reviewed By: Ben Wood

**Laboratory Director** 

555345

Bulk, Paint

03/18/24

03/19/24

03/25/24

# **Appendix E**

**Elder Demolition Health and Safety Plan** 





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Elder Demolition, Inc. is dedicated to the safety and well being of our employees. It is our policy to provide a safe environment for everyone to work in. Statistics and our experience show that most injuries are costly and preventable. With a joint worker/management safety committee we can help prevent loss of time due to injuries by making recommendations for change. The best prevention of accidents is by education. With the help of all individuals we can educate not only new employees but those around us as well. We have established a program that will adapt fundamental occupational safety and health concepts that will help us prevent injuries due to hazards. Its purpose will be to bring workers and management together in a non-adversarial, cooperative effort to promote safety and health in the workplace. Employee involvement at all levels of the company is critical for us to be successful in this effort. Elder Demolition, Inc. shall conform with all OSHA laws applicable as well as Oregon 29 CFR 1926 and WAC 296-155 construction codes.

# 1.0 INJURY and ILLNESS PREVENTION RESPONSIBILITIES

#### 1.1 PROJECT MANAGER

Project Managers responsibility is the prevention of injury and accidents, because management is held accountable for all issues under their span of control. Management provides direction and full support to Superintendents, Forman, and employees regarding all safety and health procedures, job training, and hazard elimination practices. We must be kept fully informed on safety and health issues throughout the company in order to constantly review the effectiveness of our safety and health program. The Project Managers responsibilities include, but are not limited, to the following.

- Inspect work areas and operations to identify work hazards and document any unsafe work practices or conditions.
- Implement actions to correct any unsafe work areas or operations.
- Communicate with customers, clients and other authorities on safety-related matters.

#### 1.2 SAFETY DEPARTMENT

Safety Coordinator will provide assistance to Project Mangers and Project Superintendents/Forman in an advisory capacity and will monitor and enforcement of this safety policy. The Safety Departments responsibilities include, but not limited to, the following

• Inspect work areas and operations to identify work hazards and document any unsafe work practices or conditions.



- Implement actions to correct any unsafe work areas or operations.
- Organize and monitor weekly and monthly safety meetings and provide documentation regarding safety issues.
- Coordinate safety responsibilities.
- Communicate with customers, clients and other authorities on safety-related matters.
- Pre job hazard assessment.
- Investigate all accidents, regardless of severity, to determine cause and take corrective measures.
- Plan and develop any additional jobsite accident prevention requirements recognized during demolition
- Assist Superintendent/Forman with JHA's

#### 1.3 SUPERVISOR/SUPERINTENDENT/FORMAN

Supervisors are directly responsible for supervising and job training their workers. This includes proper procedures, work practices and safe methods to do the job. Supervisors must enforce company rules and take immediate corrective action to eliminate hazardous conditions and practices. They will not permit safety to be sacrificed for any reason. In addition, they will be held accountable to all safety and health issues. The responsibilities include, but are not limited to the following:

- Hold and participate in weekly toolbox safety meetings held on Mondays.
- Implement and monitor the safety policy.
- Train and teach any new employees on safe practices
- Conduct daily inspections of job site to identify and correct unsafe work practices or unsafe conditions.
- Encourage employees to report any unsafe conditions or unsafe work practice.
- Investigate accidents, and near misses.
- Actively use JHA's for every new task on the job.
- Safety orientation for employees new to the job site.

# 1.4 SAFETY COMMITTEE



The safety committee consists of management and employee representatives who have an interest in the general promotion of safety and health for Elder Demolition, Inc. The committee is responsible for making recommendation on how to improve safety and health in the workplace. They have been charged with the responsibility to define problems and remove obstacles to accident prevention; identify hazards and recommend corrective actions; help identify employee safety training needs; update safety procedures and programs; establish accident investigation procedures for our company.

#### 1.5 EMPLOYEES

Each employee, regardless of their position within the company, is expected to cooperate in all aspects of the company's safety and health program. All employees are expected to; report immediately to a supervisor of any accidents or hazardous conditions; wear required personal protective equipment at all times (NO Exceptions); participate and support the safety committee activities. The responsibilities include, but are not limited to:

- Obey all safety procedures, rules and regulations.
- Use all required PPE and safety devices provided or required
- Report any unsafe conditions and or unsafe work practices to the Forman, or Supervisor
- Actively participate in toolbox safety meetings held Mondays at 7:00am.
- Report all injuries to the Forman, or Supervisor.

## 1.6 EMPLOYEE CONDUCT & DISCIPLINARY ACTION

# **Employee Conduct and Work Rules**

To ensure orderly operations and provide the best possible work environment, Elder Demolition, Inc. expects employees to follow rules of conduct that will protect the interests and safety of all employees and the organization.

It is not possible to list all the forms of behavior that are considered unacceptable in the workplace. The following are examples of infractions of rules of conduct that may result in disciplinary action, up to and including termination of employment:

- Theft or inappropriate removal or possession of property
- Falsification of timekeeping records
- Working under the influence of alcohol or illegal drugs
- Possession, distribution, sale, transfer, or use of alcohol or illegal drugs in the workplace, while on duty, or while operating employer-owned vehicles or equipment
- Fighting or threatening violence in the workplace
- Boisterous or disruptive activity in the workplace
- Negligence or improper conduct leading to damage of employer-owned or customer-owned property
- Insubordination or other disrespectful conduct
- Violation of safety or health rules
- Smoking in prohibited areas



- Sexual or other unlawful or unwelcome harassment
- Possession of dangerous or unauthorized materials, such as explosives or firearms, in the workplace
- Excessive absenteeism or any absence without notice
- Unauthorized absence from work station during the workday
- Unauthorized use of telephones, mail system, or other employer-owned equipment
- Unauthorized disclosure of business "secrets" or confidential information
- Violation of personnel policies
- Unsatisfactory performance or conduct

Employment with Elder Demolition, Inc., is at the mutual consent of Elder Demolition, Inc. and the employee, and either party may terminate that relationship at any time, with or without cause, and with or without advance notice.

# **Progressive Discipline**

The purpose of this policy is to state Elder Demolition, Inc.'s position on administering equitable and consistent discipline for unsatisfactory conduct in the workplace. The best disciplinary measures are the one that does not have to be enforced and comes from good leadership and fair supervision at all employment levels. Superintendents, Project Managers and Executive Management are ultimately responsible for disciplinary measures.

Elder Demolition, Inc.'s own best interest lies in ensuring fair treatment of all employees and in making certain that disciplinary actions are prompt, uniform, and impartial. The major purpose of any disciplinary action is to correct the problem, prevent recurrence, and prepare the employee for satisfactory service in the future. Management shall conduct periodic workplace inspections to ensure safety rules are being followed.

Although employment with Elder Demolition, Inc., is based on mutual consent and both the employee and Elder Demolition, Inc., have the right to terminate employment at will, with or without cause or advance notice, Elder Demolition, Inc., may use progressive discipline at its discretion.

Disciplinary action may call for any of four steps -- verbal warning, written warning, suspension with or without pay, or termination of employment -- depending on the severity of the problem and the number of occurrences. There may be circumstances when one or more steps are bypassed. Once a safety violation has been issued (unless it requires immediate dismissal), the violation is filed in the employee file. Depending on the situation a follow up meeting will be scheduled to ensure no future repeat occurs.

Progressive discipline means that, with respect to most disciplinary problems, these steps will normally be followed: a first offense may call for a verbal warning; a next offense may be followed by a written warning; another offense may lead to a suspension; and, still another offense may then lead to termination of employment.

Elder Demolition, Inc. recognizes that there are certain types of employee problems that are serious enough to justify either a suspension, or, in extreme situations, termination of employment, without going through the usual progressive discipline steps.

While it is impossible to list every type of behavior that may be deemed a serious offense, the Employee Conduct and Work Rules policy includes examples of problems that may result in immediate suspension or termination of employment. However, the problems listed are not all necessarily serious offenses, but may be examples of unsatisfactory conduct that will trigger progressive discipline.

By using progressive discipline, we hope that most employee problems can be corrected at an early stage, benefiting both the employee and Elder Demolition, Inc.



# 2.0 TRAINING AND EDUCATION (Prior to initial assignment and yearly)

It is our policy and responsibility to ensure that every employee is properly trained and educated to perform the work necessary safely. Training shall be done prior to initial assignment and shall be documented including the employee name, dates of training and subject. Each employee must be educated for every task that they undertake. It is the supervisor's responsibility for ensuring that their workers are able and capable of performing each task safely. The following are guidelines towards achieving this task.

- All new employees are to receive a new employee packet containing a written safety plan, a policy book and an employee safety manual test.
- New employees should be shown how to perform their tasks in a safe manner. Initially they should be actively supervised by either their direct supervisor or an experienced employee to make certain that they can perform any assigned task safely.
- No employee is to be assigned to any task that the employee is not qualified to perform until that employee is properly trained and is made aware of the hazards associated with the assigned task. This training and certification must be documented and turned in the office weekly.
- No employee is to perform any task which cannot be made safe and which places the employee in danger of injury.

## 2.1 STOP WORK AUTHORITY

Should an employee feel they are put into a situation that they have not been properly trained or they feel is unsafe in any way they may exercise a Stop Work Authority with their immediate supervisor. All employees at some point may be in a supervisory roll and not just management, therefore all employees must be prepared to honor a direct stop work incident. Together with managements support of stop work initiatives we can create a culture that stop work authority is exercised freely.

- Stop work authority should be covered in the initial employee orientation.
- No work shall resume until the issue at hand has been resolved or the employee has received proper training.
- No employee shall be reprimanded for exercising a stop work authority.
- If a stop work authority is exercised, the following steps shall be taken:
  - 1) Notify the Project Manager/ Safety Director / Management
  - 2) Correct the issue or education.
  - 3) Resume work
  - 4) Document the stop work
  - 5) Review the documentation with Supervisor, Safety Department or Management for additional corrective recommendation
  - 6) Follow up with employee by Management to ensure actions have been sufficient.

# 3.0 GENERAL SAFETY RULES

We have developed these safety rules patterned after the Federal OSHA requirements. Read and become familiar with these rules and other safety rules that apply to your job.



- 1. An approved hard hat and safety glasses and footwear must be worn at all times.
- 2. Fall protection equipment is required whenever there are openings in floor or walls.
- 3. You may be assigned certain personal protective safety equipment, this equipment should be available for use on the job everyday and be maintained and in good condition.
- 4. Lead paint can be present on any project. You must know the location of any lead containing material on each and every site. You also need to know what trigger tasks are for each condition (torching metal is most hazardous, grinding metal or lead painted walls for instance).
- 5. A hazardous material survey will contain the locations of lead and asbestos on every jobsite we work. A hazardous material survey needs to be on site for access of all employees to read. Our Foremen will go over the locations of all of the hazards on the job site. Know the exact location at all times where there are hazardous materials on your job.
- 6. Fluorescent light tubes are to be handled with care and disposed of properly.
- 7. You should not perform any tasks unless you are trained to do so and are aware of the hazards associated with that task.
- 8. Learn safe work practices. When in doubt about performing a task safely contact your supervisor for instruction and training.
- 9. Scissor lifts are very handy but very dangerous if not properly used. You are required to be trained in the proper use of scissor lifts and follow the RENDER IT DEAD, HIT THE RED program. This program requires that every time you are in a scissor lift and you get to the working height, you must push the safety button to disable the lift. Also whenever you leave the platform you should hit the button as well to prevent any accidental movement of the lift.
- 10. Always perform your assigned task in a safe and proper manner, do not take shortcuts. The taking of shortcuts and the ignoring of established safety rules is the leading cause of injury.
- 11. Be alert to hazards that could affect you and your fellow employees.
- 12. Each job site should have a written emergency response plan.
- 13. First aid training is required for at least one employee designated on each job site. Generally it will be the Foreman.
- 14. If you do not have current certified first aid training do not move or treat an injured person unless there is an immediate peril such as profuse bleeding or immediate fire danger.
- 15. Horseplay is prohibited at all times.
- 16. Report any injury to your supervisor immediately
- 17. Fighting will not be tolerated.
- 18. Report any unsafe conditions to your supervisor.
- 19. The use of alcohol or drugs on the job will not be tolerated. Any employee discovered under the influence of alcohol or drugs will be terminated.
- 20. The riding of a hoist hook or other equipment not designed for such purposes is prohibited at all times
- 21. Do not approach operating machinery from the blind side make sure the operator sees you.
- 22. Locate all fire extinguishers and first aid kits.
- 23. Maintain a general condition of good housekeeping in all work areas at all times
- 24. When operating and riding in company vehicles or using your personal vehicle for business purposes a seatbelt must be worn.
- 25. Obey safety signs and tags

# 4.0 PRE JOB SURVEY & COMMON JOB SITE HAZARDS 29 CFR 1926.850 (a) / WAC 296-155-775



Prior to beginning a project the project Superintendent / Forman or qualified individual shall complete an engineering survey of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure as well as our Site Specific Hazard Analysis (JSA) form. The JSA shall identify all potential hazards on the site and address the protective measures to be taken to avoid injury. All personnel including sub-contractors brought onto the job site shall read and be trained as necessary for the specific hazards present. All employees and sub-contractors shall have the opportunity to be actively involved in the hazard identification process. Risks/hazards are classified or ranked by severity and shall be placed on the form accordingly. Once trained the form shall be signed. Employees shall be trained in identifying risks and hazards as well as the process in order to ensure the JSA's are a working plan for all projects.

#### **4.1 EXAMPLES OF JSA:**

# PERSONAL PROTECTIVE EQUIPMENT

HEAD PROTECTION	Must
	wear hard hats anytime there is an overhead hazard.
	Barricade off area under hazardous activity
EYE PROTECTION	100% When you enter the job you must be wearing
	your safety glass, and leave on until you leave the
	job site. Safety glasses, goggles or a face shield
	must be worn whenever; grinding, drilling, cutting,
	nailing, pouring concrete, chipping, performing
	overhead work, using compressed air, etc.
HEARING PROTECTION	Must use earplugs or ear protectors if noise level is
	above 80db for an 8-hour project. If no testing has
	been done then using the gauge of raising your
	voice to a shout level constitutes ear protection.
RESPIRATORS	Must use in dusty conditions or in other hazardous
	areas.
GLOVES	Employees should wear gloves whenever handling
	sharp edged metal, treated or splintered wood,
	cables etc.
BOOTS	Should be worn at all times on the job.

# **FALL PROTECTION**

OPEN SIDED FLOORS	Use a standard guardrail, tie off using a full body harness, or place caution tape 5 feet back From edge. Toe boards must be used if workers are walking underneath.
OPENINGS IN FLOORS	Cover hole and write, "hole" on cover or place a guardrail around it. You also should nail the cover to the floor.
OPENINGS IN WALLS	Place a guardrail across it of use caution tape 6 feet in front of opening.
STAIRS	Guardrails/handrails are required on all stairs

# **WARNING SIGNS**

DANGER TAPE	Red Danger tape shall be placed at barriers to keep



	workers and other trades out of the area of falling objects and hazards. A sign with the specific hazard, individual to contact for entry, and the expiration of the hazard shall be affixed to the tape.
RED ROPE	Red Rope shall be used as a more sturdy or permanent replacement for Danger Tape. The same signage requirements shall be in place.
FALLEN TAPE	All Danger Tape shall be keep in place and any tape on the ground shall be picked up and disposed of immediately to avoid confusion.
YELLOW CAUTION TAPE	Caution tape is used to warn against potential hazards when there is work in the area but not immediate danger of injury to other workers.

# **MISCELLANEOUS**

SCAFFOLDS	Must be full planked, have guardrails, access ladder,
	cross braces, and pins.
STEP LADDERS	Must be full spread open, not leaned against wall or
	other object. Do not stand on top two steps
EXTENTION LADDERS	Bottom and top must be tied off, must extend 3 feet
	past landing, good feet support.
EQUIPMENT GUARDS	All rotating parts on equipment must be guarded.
ELECTRICAL	All electrical tools and cords must be checked and
	marked with appropriate colored tape.
FIRE PROTECTION	Fire extinguishers must be kept near all sources of
	flame, torches and welders.
EXCAVATIONS	Must slope or use shoring if over 4 feet deep,
	provide access in and out, use caution tape as a
	barrier around excavation.

# **4.2 BLANK COPY OF ENGINEERING SURVEY:**

# **ENGINEERING SURVEY**

29CFR1926.850 / WAC 296-155-775

DESCRIPTION OF STRUCTURE TO	(Include separte page for each structure)			
Name of Structure				
Original Function				
Length of Structure	Width	Height	Basement Depth	
Structural Framing type or material				
Foundation material and description				_
Roof Framing and description				
Wall Framing				



Floor Framing				
KNOWN STRUCTURAL HAZARDS				
Physical Damage	Yes	No	Locations	
Structural Damage	Yes	No	Locations	
•			<del>-</del>	
Fire Damage	Yes	No	Locations	
<b>G</b>	-		-	
ADJACENT STRUCTURES				
Describe structure and conditions				
Location to project				
STRUCTURAL STABILIZATION REQUIREMENTS				
Temporary Structural Stabilization Required		Yes		No
If Yes please describe:				
Describe the Demolition sequence planned to safely remove the building while preventing				
structural collapse or damage.				
_				

# 5.0 LEAD PAINT EXPOSURE

**SCOPE** 



This Program Is intended to apply to all Elder Demolition, Inc., jobsites in all states we are currently working in. All employees at Elder Demolition, Inc., are subject to the requirements of this Program.

# **PURPOSE**

The purpose of the Elder Demolition, Inc., Lead Program is to prevent lead exposure, to employees, other trades on the job, visitors, and to help prevent the potential for building contamination from lead during demolition activities. It is also the intent to comply with OROSHA 1926.62 Lead and WAC 296-155-176 Lead.

## **HEALTH EFFECTS**

Common health effects from lead exposure include; impaired kidney function, high blood pressure, nervous system and neurobehavioral effects. In addition to these there are serious side effects for children under the age of 6 if dust is transmitted home with you post work shift.

## EMPLOYEE INFORMATION AND TRAINING

- Elder Demolition, Inc. shall assure that employees are trained, by AGC, in a 2 hour lead awareness. All training as well as refresher training shall be documented and logged into the appropriate record keeping system. The employees will be re trained every 12 months.
- Employees shall be knowledgeable of the potential places lead can be contained in the construction area. Painted surfaces being the most common that we encounter.
- Employees shall not disturb lead containing material without proper protective clothing, engineering controls and lead plan in effect.

# **MULTI-CONTRACTOR WORKSITES**

• Elder Demolition, Inc. shall assure that employees are protected on jobsites that involve multi-contractor conditions. Elder Demolition, Inc. shall ensure coordination with all ongoing as well as potential lead operations with other sub-contractors and contractors to ensure no employee exposure.

#### WAC DEFINITIONS

- Action Level means employee exposure, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 ug/m3) calculated as an 8-hour time weighted average (TWA).
- **Competent Person** means one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.
- **Director** means the director of labor and industries, or his/her designated representative.
- Lead means metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.
- **This Section** means WAC 296-155-176 through 296-155-17656.

# **OROSHA DEFINITIONS**



- Action Level means employee exposure, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 ug/m3) calculated as an 8-hour time weighted average (TWA).
- **Assistant Secretary** means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department Of Labor, or designee.
- **Competent Person** means one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.
- **Director** means the Director, National Institute for Occupational Safety and Health and Human Services, or designee.
- Lead means metallic lead, all inorganic lead compounds, and organic lead soaps.
   Excluded from this definition are all other organic lead compounds.
- This Section means this standard.

# PERMISSIBLE EXPOSURE ASSESSMENT

- Elder Demolition, Inc., will assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air (50 ug/m3) averaged over an 8-hour period. Referred to as PEL (permissible exposure limits).
- Any employee exposed over 8 hours in any work day shall be reduced according to the following formula:
  - Allowable employee exposure (in ug/m3)=400 divided by hours in the day.
- Respirators may be used to limit employee exposure. Every employee that uses a respirator must be cleared by Elder Demolition, Inc. safety department. The following is a general usage summary of respirators.
  - Half face respirator- Use in dusty conditions when engineering controls will not suffice. Supplied air respirator- This is used in the exposure assessment or initial air monitoring. Also used in the torching of steel with lead paint if necessary.

# EXPOSURE ASSESSMENT

- On all projects, Elder Demolition, Inc. will presume lead is present until written proof has been provided or established. When written proof cannot be provided an initial air monitoring will be conducted.
- Initial air monitoring is required for all trigger tasks associated on our projects. Trigger tasks include torching of steel, power tools cutting or grinding walls with lead paint, cutting metal with sawsall. During initial air monitoring we have to set it up with worst case results in mind. For that we need to have protective, removable clothing, supplied air respirators, changing room and wash station present.

## PROTECTIVE WORK CLOTHING AND EQUIPMENT

Provisions and use. Where an employee is exposed to lead above the PEL without regard
to the use of respirators, where employees are exposed to lead compounds which may
cause skin or eye irritation and as interim protection for employees performing exposure
assessment. Elder Demolition, Inc., shall provide at no cost to the employee and assure



that the employee uses appropriate protective work clothing and equipment that prevents contamination of the employee and the employee's garments such as, but not limited to:

- Coveralls, Tyvek Suits, or similar full-body work clothing;
- Gloves, hats or hoods, and shoes or disposable shoe coverlets; and
- Face shields, vented goggles, or other appropriate protective equipment which complies with eye protection

# **CLEANING AND REPLACEMENT**

- Elder Demolition, Inc. shall provide the protective clothing required in a clean and dry condition at least weekly, and daily to employees whose exposure levels without regard to a respirator are over 200 ug/m3 of lead as an 8-hour TWA.
- Elder Demolition, Inc. shall provide for the cleaning, laundering, and disposal of protective clothing and equipment required.
- Elder Demolition, Inc. shall repair or replace required protective clothing and equipment as needed to maintain their effectiveness.
- The employer shall assure that all protective clothing is removed at the completion of a work shift only in change areas provided for that purpose.
- Elder Demolition, Inc. shall assure that contaminated protective clothing which is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area which prevents dispersion of lead outside the container.
- Elder Demolition, Inc. shall inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.
- All containers that contain lead contaminated protective clothing and equipment are labeled as follows:

Caution: Clothing contaminated with lead. Do not remove dust by blowing or shaking. Dispose of lead contaminated wash water in Accordance with applicable local, state, or Federal regulations.

# **HOUSEKEEPING**

- All surfaces shall be maintained as free as practicable of accumulations of lead.
- Clean-up of floors and other surfaces where lead accumulates shall wherever possible, be cleaned by vacuuming or other methods that minimize the likelihood of lead becoming airborne.
- Shoveling, dry or wet sweeping, and brushing may be used only where vacuuming or other equally effective methods have been tried and found not to be effective.
- Where vacuuming methods are selected, the vacuums shall be equipped with HEPA filters and used and emptied in a manner which minimizes the reentry of lead into the workplace.
- Compressed air shall not be used to remove lead from any surface unless the compressed air is used in conjunction with a ventilation system designed to capture the airborne dust created by the compressed air.

# **HYGIENE FACILITIES AND PRACTICES**



• Elder Demolition, Inc. will assure that in areas where employees are exposed to lead above the PEL without regard to the use of respirators, food or beverages is not present or consumed, tobacco products are not present or used, and cosmetics are not applied.

#### **CHANGE AREAS**

- Elder Demolition, Inc. will provide clean change areas for employees whose airborne exposure to lead is above the PEL, and as interim protection for employees performing exposure assessment.
- Elder Demolition, Inc. will assure that change areas are equipped with separate storage facilities for protective work clothing and equipment and for street clothes which prevent cross-contamination.
- Elder Demolition, Inc. will assure that employees do not leave the workplace wearing any protective clothing or equipment that is required to be worn during the work shift

#### **SHOWERS**

- Elder Demolition, Inc. shall provide shower facilities, where feasible, for use by employees whose airborne exposure to lead is above the PEL.
- Elder Demolition, Inc. will assure, where shower facilities are available, that employees shower at the end of the work shift and shall provide an adequate supply of cleansing agents and towels for use by affected employees.

## **EATING FACILITIES**

- Elder Demolition, Inc. will provide lunchroom facilities or eating areas for employees
  whose airborne exposure to lead is above the PEL, without regard to the use of
  respirators.
- Lunchroom facilities or eating areas are as free as practicable from lead contamination and are readily accessible to employees
- Employees whose airborne exposure to lead is above the PEL, without regard to the use of a respirator, wash their hands and face prior to eating, drinking, smoking or applying cosmetics.
- Employees do not enter lunchroom facilities or eating areas with protective work clothing or equipment unless surface lead dust has been removed by vacuuming, downdraft booth or other cleaning method that limits dispersion of lead dust.

# **HAND WASHING FACILITIES**

- Elder Demolition, Inc. shall provide adequate hand washing facilities for use by employees exposed to lead.
- Where showers are not provided Elder Demolition, Inc. shall assure that employees wash their hands and face at the end of the work shift.

## MEDICAL SURVEILLANCE

Elder Demolition, Inc.shall make available initial medical surveillance to employees
occupationally exposed on any day to lead at or above the action level. Initial medical
surveillance consists of biological monitoring in the form of blood sampling and analysis
for lead and zinc protoporphyrin levels.



- Any employee exposed at or above the action level for more than 30 days in any consecutive 12 months must be tested every 2 months for the first 6 months and every 6 months thereafter. Advent Health/Occupational Medicine Clinic will be Elder Demolition, Inc. licensed physician.
- Any employee whose last blood sampling and analysis indicated a blood lead level at or above 40 ug/dl, at least every 2 months. This frequency shall continue until two consecutive blood samples and analyses indicate a blood lead level below 40 ug/dl. Also for each employee who is removed from exposure to lead due to an elevated blood lead level at least monthly during the removal period.
- Any employee with level at or above 50ug/dl will be removed from jobs that have an exposure to lead.

#### **SIGNS**

• Elder Demolition, Inc. shall post the following warning signs each work area where an employees exposure to lead is above the PEL. The sign will read as follows:

WARNING LEAD WORK AREA POISON

NO SMOKING OR EATING

• The signs will be in a highly visible area and kept cleaned at all times. The area will have red barricade tape that says *DANGER*.

# 6.0 FIRST AID AND EMPLOYEE HEALTH

In the absence of medical assistance that is reasonably accessible in terms of time and distance to the worksite, a person who has a valid certificate in first aid shall be available to render first aid. All projects regardless of the number of individuals shall have at least one person that is certified in first aid. The individual should have a valid multimedia first aid card and know CPR. The certificate shall be obtained from the US Bureau of Mines, American Red Cross, or equivalent training that can be verified by documentary evidence. All projects shall have a written rescue or emergency action plan with phone numbers and directions to the nearest hospital along with proper address and directions to the project should 911 need to be notified.

Each location and each crew vehicle should be equipped with a first aid kit that is approved by a physician. It should be highly visible inspected and replenished on a regular basis.

Where chemical hazards exist, eye or eye/face wash station and showers should be available. These facilities should be inspected on a monthly basis. Units, which contain water, have a useful shelf life and require replacement on a periodic basis. There is generally an expiration date on the container. All injuries, regardless of size, must be reported to a supervisor immediately.

#### 6.1 BLOOD BORNE PATHOGENS

It is our policy and responsibility to ensure that every employee is properly trained and educated to perform the work necessary safely. Training shall be done prior to initial assignment and shall be documented including the employee name, dates of training and subject. Each employee must be educated for every task that they undertake and on a yearly basis. It is the supervisor's responsibility for ensuring that their



workers are able and capable of performing each task safely. Employees shall have access to a copy of each and every exposure control plan. They may also request a copy of such plan and be assured it will arrive in a reasonable time, place and manner to them.

A **Pathogen** is any microscopic organism, specifically a bacteria, virus, or parasite that is able to cause disease in a human being. The term **Blood Borne** infers being contained or carried in blood, blood-contaminated material, or other body fluids. Universal precautions shall be observed and under circumstances in which differential between body fluids is difficult or impossible; all body fluids will be considered potentially infectious. Hand washing facilities are readily available at all work locations or we shall ensure antiseptic solutions or wipes will be available for use. Appropriate PPE shall be worn at all times depending on the task and shall be provided at no cost to the employee.

The most common event when you might encounter true Blood Borne Pathogens in the work-place would be while rendering first aid to a co-worker. The HIV and the hepatitis B and C viruses ar the most dangerous pathogens in these instances. Only employees that are trained shall administer CPR. Proper hand and mouth protection shall be utilized in any situation of this nature. Any exposure to blood shall be reported and followed up with checkup from a Dr. If a situation occurs where blood has been present the areas shall be properly cleaned prior to work commencing. Hepatitis B vaccine shall be made available to all employees with occupational exposure at no cost.

Any employee exposure shall be documented and training records kept for no less than 3 yrs and Medical records for 30 years past employment.

Specifically in demolition we can also encounter needles. Needles shall be properly disposed of and never attempt to put a cap back on a needle found on a construction site as this is a leading cause of injury with needles.

#### 6.2 HEAT ILLNESS PREVENTION

In order to work effectively in hot conditions, certain precautions must be taken. Over-exposure to high temperature and humidity levels during prolonged physical exertion may result in heat disorders such as Heat Cramps, Heat Exhaustion or Heat Stroke. Common sense and thoughtful scheduling is the best way to prevent heat related illnesses. Supervisors will be trained in preventing heat related illnesses prior to supervising employees. The following are measures to be in place to control the effects of environmental factors contributing to heat related illnesses:

- Employees shall be provided with potable drinking water.
- Employees shall be provided access to or company provided shade to get out of the heat when necessary.
- Work schedules shall be varied as necessary in extreme weather.
- Clothing shall be evaluated in extreme weather.
- Supervisors will be trained in emergency response procedures related to heat illnesses.

Physical & Personal factors can affect and contribute to heat related illness and should be taken into consideration by supervisors when assigning tasks.

Supervisors will have the authority to adjust work schedules and methods and personnel to ensure
that high heat related illnesses are prevented including the use of mechanical means instead of
physical labor if at all possible.

# 7.0 SUBCONTRACTORS

As a subcontractor you are required to comply with the Elder Demolition, Inc. general safety rules as well as applicable OSHA standards. In order to accomplish our goal of an accident free workplace all



subcontractors are expected to perform his of her work in a safe manner. The Elder Demolition, Inc. safety program was developed to create a safe work environment for everyone.

All subcontractors shall be pre-qualified by the Elder Demolition, Inc. safety team including checking said subcontractors EMR and safety program prior to commencing work or on a yearly basis. If subcontractors work on a specific project is considerable then they shall be invited to the pre-job meetings for planning. All subcontractors shall attend Elder Demolition, Inc. tailgate safety and pre-task meetings while on site. Formen are to report any post job safety performance issues to the safety department on a regular basis.

No employee should be allowed to work alone in the field without processing a means of two-way communication. Those employees working alone should check in at regularly scheduled times.

If employees are exposed to noise levels above 80 decibels they should be wearing ear protection.

## 8.0 SAFETY PROCEDURES FOR SPECIFIC TASKS

## 8.1 LIFTING

Lifting injuries are one of the most common industrial accidents. Limiting the need to bend by storing loads off the floor can reduce your risks. Always do an assessment before manual lifting occurs, listing the potential hazards and mechanical options or alternatives if possible. All employees shall be properly trained in lifting as to prevent musculoskeletal injuries. These tips are designed to show you how to lift heavy odd shaped loads with a minimum risk of injury.

- Never lift more than you can comfortably handle, reduce the size of the load or get help.
- Position feet firmly with one foot beside the load and the other foot slightly behinds the load.
- Pick the lifting position that feels most comfortable with or without a straight back.
- Get a grip on the load with your fingers under it if possible.
- Prepare your back, legs, hips and arms to take the load.
- Lift slowly and gradually; do not make any sudden jerking or twisting motions.
- Walk slowly without twisting, do not turn with your waist, and use your feet.
- Put the load down slowly.
- Keep the load close to you; avoid reaching as you lift and lower.
- The company shall provide any manual lifting equipment and engineering controls necessary to safely complete manual lifts.

Should an injury occur while lifting an investigation by the safety team shall be completed and assessing the options to avoid such injuries in the future. If there is a situation of repeated lifting a supervisor will periodically evaluate the process and employee's technique to assess the potential for and prevention of injury.

#### 8.2 SCAFFOLDING

Prior to using scaffolding, you must be trained in the safe use of the scaffold by a certified individual. Training shall include any hazards near the scaffolding such as fall, electrical, falling objects, proper use / load capacity and personal fall protection requirements. Training shall be completed and renewed on a yearly basis as well as when conditions change and require more training.

Prior to the initial use and on a daily basis the scaffolding shall be inspected by a competent person. Should any portion of the scaffold be found to be unsafe then a lock out tag shall be installed and used to keep employees off of and safe.



In other words written TAGS shall be used when defective equipment or unsafe conditions are found to ensure employee awareness.

Guardrails should be used at all times, never stand on the rails.

Use pins in scaffolding at each joint and wheels.

Use the locks on all four wheels.

The scaffolding needs to be checked daily for loose pins and braces.

#### 8.3 ELECTRICAL SAFETY

Electrical current will flow to ground by the path of the least resistance whether it is through the employee or a wire. All employees shall be trained in general electrical safety as well as any projects or conditions that have specific electrical hazards. The following rules are to keep employees from becoming a path of least resistance:

- Whenever working near deenergized parts they are to be treated as live until the employee has
  confirmation they are safe. Employees are not authorized to work near exposed energized
  parts or equipment without a specific written plan by the safety director. This plan would
  include apparel that is non-conductive or covering such materials if necessary.
- Proper illumination is required in all areas work is to occur. No employee shall enter a room with energized parts or equipment that is not properly illuminated.
- No employees shall work on/repair energized parts or equipment ever.
- We do not utilize qualified employees for adherence to table S5. Only licensed Electricians will be hired should this work need to be done.
- In the case of confined or enclosed spaces the permit shall include any protective or insulating measures necessary if working around electrical hazards.
- All extension cords should be inspected for defects before use, damaged cords are not to be used. They are to be taken out of service and reported to a supervisor.
- All extension cords and temporary wiring must be three wire conductor and connected only to a properly grounded outlet connection.
- Know whether circuit wires are energized before beginning work near any exposed electrical wiring or components.
- Do not make electrical repairs, connections or installations unless you are qualified to do so.
- Protect extension cords and wiring from damage by being run over, sharp corners and pinching.
- Do not wear metal or conductive hard hats when working near exposed overhead wires or other exposed electrical wiring and components.
- Do not use any electrical power tools that are not properly grounded or double insulated.
- Do not use any electrical power tools that have the electrical prong missing. Any tool that has the prong missing or has been damaged needs to be Tagged out for non-use. Either danger tage tied to the cord, complete a tag with the description of the issue wired to the cord.
- Do not use any extension cords smaller than 12 gauge.
- Similar to aerial lifts, employees must maintain a minimum distance of 10' while working around power lines either on the ground, lift or vehicles/equipment.
- Portable ladders shall have non-conductive side rails should the circumstance require.

## 8.4 AERIAL LIFTS

Working from aerial lifts can cause serious harm if not used in the correct way. Under no circumstances shall a lift be modified from its factory condition. Only authorized persons are allowed to operate equipment and aerial lifts. All employees shall be properly trained in the use of aerial lifts prior to



ascending. Training shall include at a minimum the expectation to know how to lower a basket from the ground controls in the case of an emergency. A pre-use inspection including testing the controls before use. During pre-use inspection include the calculations to ensure that the load limits are not exceeded and that all alarms are in full working order. Employees shall stand firmly on the deck of an aerial lift and used approved fall restraint and arrest systems that are attached to the appropriate location on the basket, boom or required location. Equipment and aerial lifts will have working back up alarm or spotter when backing. Vehicle has reverse signal audible above surrounding noise level.

Aerial lifts shall only be used on smooth, firm, level surfaces and maintain a minimum clearance between electrical lines of 10' at all times.

#### 8.5 LADDERS

Ladders are one of the most common causes of injury in the construction and can get taken for granted since they are so prevalent. All employees shall be trained in the proper use of ladders prior to using. All ladders shall be inspected prior to each use for damage.

- Each ladder must be the proper size and strength of construction for its intended use and load limits shall not be exceeded.
- All ladders must be free from cracks, splits or damage. Damaged ladders shall be removed from the site.
- Extension ladders must extend 3 feet above the top edge and be secured at top and bottom.
- Extension ladders should be placed at a safe angle for use. The ultimate angle is 4:1 ratio.
- Tools or heavy materials shall be hoisted up with a rope vs. carried up the ladder.
- All ladders shall meet OSHA/ANSI standards for uniform spacing etc.
- Ladders shall only be used as intended and not for platforms or other tasks not intended during the design of ladders.

## 8.6 CRANES

Most of our crane work is subcontracted out to professional crane companies but applies to hoisting of equipment and building components with our excavators as well. All ground conditions shall be able to support the equipment and any supporting materials. During pre-task or lift plan address all hazard areas by marking swing radius with warning lines or barriers. Operators must be qualified per state regulations prior to operating cranes. All manufacturer instructions and prohibitions must be followed when assembling equipment and during any lifts and shall be directed or supervised by a competent and qualified person. Operator's manual shall be readily available in the cab at all times during lifts. No modifications to factory equipment are allowed.

All lifts shall constitute a pre-task plan or lift plan ensuring work zone is clear of at least 20' to nearest power lines, proper conditions and sizing of crane has been done. If required to work closer than 20' to a power line then proper precautions shall be required including flagging and potentially protecting or removing line depending on the situation. All rigging equipment shall be visually inspected prior to each shift. Any company owned rigging equipment shall be inspected by a competent person on a monthly basis and documented. All safety devices must be in proper working order before operation begins. Follow all manufacturers procedures recommended and have procedures available in the cab at all times.

All operators (company employed or subcontracted) have the right to stop and refuse to handle loads if they feel it is a safety concern. The signal person must be in unobstructed view or have constant communication with the operator and properly trained.



## 8.7 RIGGING / MATERIAL HANDLING

Only qualified persons should ever perform hoisting and lifting operations. Riggers work with hoisting tackle and gear that consists of hooks, blocks, eye-rings, webbed netting, slings and many more. Before starting any lifting operations a meeting should be had by all involved personnel to review the "LIFT PLAN". This plan should include a detailed process and sketch if necessary to serve as a visual guide.

All rigging personnel shall be properly trained prior to initial assignment. They should inspect all rigging equipment prior to each shift and any defective or damaged equipment must be removed from the site immediately or at a minimum tagged out. During rigging operations all rigging equipment shall be inspected as necessary to ensure that it is safe prior to each pick. All rigging shall be clean and free from grease and oils as well as all load tags in place and able to read. No rigging shall be loaded beyond the safe working load recommended on the tag. Slings are not to be shortened during picks by wrapping or in other ways reducing the capacity. All hooks shall be equipped with and in proper working condition a latch to prevent the sling from slipping off the hook in flight. When not in use the rigging equipment shall be stored in a clean environment or removed from the job until needed again. Any custom design grabs, hooks or other lifting accessories must be proof tested to 125 percent of their rated load and marked to indicate such. Custom design items are not permitted to be done by Elder Employees and must be done by a third party engineer.

We recommend the use of tag lines attached to loads to help guide in the air. Ensure tag line is long enough so that the rigger does not get underneath the load while guiding it. No employees shall pass under a load while a lift is in motion.

## 8.8 TRENCHING / SHORING EXCAVATIONS

Job-sites can change on a daily basis and excavations are made quickly with the use of modern machinery. Even before there is a hazard from excavating we need to ensure the utilities have been located and identified by the proper people. Open trenches and excavations are especially hazardous if not properly marked, barricaded or shored. The following are guidelines for working around open trenches and excavations on the job:

- Prior to creating a trenching or soils shoring plan the soils engineer must be consulted and soil samples be tested to ensure the protection system is being properly used.
- Any excavation or trench must be properly barricaded or flagged to alert personnel to the hazard.
- Spoil piles are to be stored a minimum 2 feet from the edge of the excavation.
- Daily inspection of excavations and protective systems must be made by a competent person.
  The competent person shall be responsible for inspecting the soils condition looking for any
  changes due to weather or additional work that has been completed near the excavation as
  well as the shoring and flagging to ensure workers safety.
- Do not operate vehicles adjacent to any open trenches or excavations to avoid collapse.
- Employees are not to work underneath buckets as excavation is occurring to avoid falling objects.
- Employees are required to wear reflective garments for protection from vehicular traffic.
- If an excavation becomes a confined space then tests will be conducted to ensure air quality and confined space training will kick in.
- If water is accumulating in the excavation, then a dewatering plan will be created to ensure employees are not at risk.



- If an excavation requires a ramp down in the hole then a maximum travel distance of 25' will be allowed for safe egress.
- If walkways are needed then the proper guardrails will be installed.
- All major excavations and shoring operations shall be coordinated with the soils engineer of record and review all of the soil types to ensure protection systems are adequate. This shall include classifying and stabilizing of the soils.
- Each excavation plan shall include provisions for rescue in the event of a collapse.

## 9.0 ASSURED EQUIPMENT GROUNDING PROGRAM

We have established and implemented assured equipment grounding conductor program on our construction sites covering all cord sets, receptacles that are not a part of the permanent wiring of the building or structure, and equipment connected by cord and plug, which are available for use by our employees. Each jobsite shall have a designated competent person or the site supervisor to oversee the Assured Grounding Program.

Each cord set, attachment cap, plug and receptacle of cord sets and any equipment connected by cord Ground Fault Circuit Interrupter (GFCI) plug except cord sets and receptacle which are fixed and not exposed to damage, shall be visually inspected before each days' use for external defects. Defects such as deformed or missing pins or insulation damage and for indication of possible internal damage. Equipment found damaged or defective may not be used until repaired.

- All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.
- Each receptacle and attachment cap or plug shall be tested for contact attachment of the equipment-grounding conductor. The equipment-grounding conductor shall be connected to its proper terminal.

All required tests shall be performed:

- Before first use.
- Before equipment is returned to service following repairs.
- Before equipment is used after any incident which can be reasonably suspected to have caused damage (i.e. cord is ran over.)

A copy of the description of our program is available on each jobsite and in our main office for inspections by the Department of Insurance and Finance and any affected employee.

## 10.0 POWER TOOLS AND EQUIPMENT

Working on a construction project you will be required to operate and work around power tools and equipment. These tools and equipment must be operated in a safe manner as well as kept in a safe condition. When you are assigned to operate a power tool make sure you are familiar with its safe operation. Do not operate it until you understand the operations manual and a foreman has explained how to use it safely.

Make sure all required guards are on equipment.



- Ensure you have the proper PPE for the specific power tool.
- Render it dead, Hit the red. Always push the red safety button on a scissor lift once you are at your working height or once you leave the platform to avoid any accidental movement.
- Make sure hand operated power tools have been marked "safe" by an Electrical Equipments Testing program.
- Make sure the tool has a trigger release that will not lock the tool in a continuous operation mode.
- Power actuated tools, forklifts, cranes and lift unite require a special operator card. Have the appropriated certification card before operating this equipment.
- It is the responsibility of the company of supplying the tool or equipment to assure it is in safe working condition when it arrives on the project.
- Anything found not to be in safe working condition must immediately be tagged out of service and returned to the tool supply area or removed from the project.
- Only authorized personnel handles the equipment maintenance.
- Tools and equipment must be disconnected whenever you are involved in maintenance even changing a saw blade.
- To prevent a hazard, any equipment requiring service that would put a worker in jeopardy of being pinched or crushed, must be blocked up.

## 11.0 SKID STEER/HEAVY EQUIPMENT SAFETY

All personnel operating heavy equipment shall be properly trained before operating. They will also be certified by a competent person on a yearly basis. As an operator for Elder Demolition, Inc. the employee should perform a daily inspection of the equipment. This procedure will help identify any mechanical or other potential hazards before operation.

- After completing the daily inspection of the equipment walk through the work area and inspect all debris containers before loading. Identify potential hazards and notify a supervisor.
- When operating skid steer, a clean path for load out is extremely important. A clean path will eliminate tripping hazards and be more efficient.
- Avoid tunnel vision. Situations in demolition areas are constantly changing, keep your eyes working peripherally, seeing all potential hazards before they are accidents.
- Never fuel or oil equipment near storm or sewer drains.
- Employees working around equipment must wear a reflective vest.
- While unloading equipment or vehicles, employees must ensure that the trailer chocks or dock plates are in place and proper prior to unloading.

Should the competent person or an incident warrant retraining, the company may choose at any point to have the operator attend some additional training or revise their operator certificates.

## 11.1 FORK LIFT

Forklifts are a very useful machine but can be involved in many job-site injuries and accidents. All employees shall be properly trained and certified yearly by a qualified/certified instructor in order to operate a forklift and refresher training on a yearly basis. All forklift operators shall also be subject to reevaluation every 3 years. Training may include formal classroom instruction as well as practical training and operator evaluation in the workplace. Training shall include critical activities such as load capacity ratings, machine specific instructions, distances around machines and above ground, refueling, navigating



ramps, visibility and counterbalances. As with all heavy equipment, Forklifts shall be inspected daily before each shift or first use of the day if they are used round the clock.

- Always ensure that the load capacity is rated correct for the load you are attempting to lift.
- Never tilt the load forward while the load is elevated or the forklift is moving downhill.
- All manufactures guarding including an overhead guard must remain in place and unaltered.
- Always operate on solid and level ground.
- Never use a forklift as a man-lift.
- Do not allow other personnel to stand underneath the load as it is suspended.
- Always wear your seatbelt as roll over incidents are extremely dangerous.
- Maintain good visibility or employ a spotter to assist you.
- While unloading trucks, use trailer chocks or dock plates.

## 12.0 PERSONAL PROTECTIVE SAFETY EQUIPMENT

Proper usage of company-supplied equipment is necessary for safety on all Elder Demolition, Inc. job sites. All employees will be trained in the proper use of PPE including when to wear certain PPE, what should be worn, how to put on and take off/adjust certain PPE. Training will also cover the proper sizing and fitting of PPE as well as the sanitary maintenance of PPE. All PPE shall be provided by the company, used, and maintained in a sanitary and reliable condition. Any defective equipment that is in disrepair must be discarded or removed from service. Employee owned PPE is not allowed. Should there be any reason or suspicions that an employee does not understand or is using PPE incorrectly the employee shall be retrained. All training shall be refreshed on a yearly basis and documented. Retraining shall be conducted when the workplace changes, making the earlier training obsolete; the type of PPE changes' or when the employee demonstrates lack of use, improper use, or insufficient skill or understanding.

Prior to the project beginning the PPE requirements specific to the project will be assessed as a part of the job hazard analysis. The certified hazard analysis shall be in writing and signed by all employees present on the job.

The following equipment is required at all times:

- Hard Hat
- Safety Glasses
- Leather Boots
- Noise Control (Always use ear plugs or muffs when you have to raise your voice to talk to other workers.)

Additional requirements for specific tasks are as follows:

- Skid Steer Operation
  - o Ear Plugs
  - o Respirator when necessary
- Electric or Pneumatic Hammers/Drills
  - o Ear Plugs
  - Respirator
  - o Gloves



- Electric or Gas Saws
  - o Ear Plugs
  - Respirator
  - Leather Chaps
  - o Fire Extinguisher
  - Gloves
  - o Respirator when necessary
- Acetylene Cutting Torch
  - Welding Gloves
  - Dark Goggles
  - Leathers
  - o Fire Extinguisher
  - Respirator when necessary
- Work Above Six Feet
  - Full Body Harness
  - Appropriate Tie Offs
  - o Refer to Fall Protection section for addition details.
- Abrasive cut off saws
  - o Full face shields are required when using cut off saws
  - o Leather chaps are required when using cut off saws.
- Breaking glass
  - o Full face shields are required when breaking glass,
  - o Leather chaps and full arm sleeve protective devise (leather or Kevlar).
  - Only break glass by hand as a last resort if no safer ways are able to be employed.
  - Ensure that the tool being used is longer that the area behind the glass so that your hand and arm will not be able to reach through the frame and risk serious cut injury.

## 13.0 HEARING CONSERVATION PROGRAM

## WHAT IS OCCUPATIONAL NOISE EXPOSURE

Sound consists of pressure changes in a medium (usually air), caused by vibration or turbulence. These pressure changes produce waves emanating away from the turbulent or vibrating source. Exposure to high levels of noise causes hearing loss and may cause other harmful health effects as well. The extent of damage depends primarily of the intensity of the noise and the duration of the exposure.

Noise-induced hearing loss can be temporary or permanent. Temporary hearing loss results from short-term exposures to noise, with normal hearing returning after period of rest. Generally, prolonged exposure to high noise levels over a period of time gradually causes permanent damage.



OSHA's hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes.

## WHAT MONITORING IS REQUIRED

OSHA requires Elder Demolition, Inc. monitor noise exposure levels in a way that accurately identifies employees exposed to noise at or above 85 (dB) averaged over 8 working hours, or an 8-hour time-weighted average (TWA).

Employees are entitled to observe monitoring procedures and must receive notification of the results of exposure monitoring. Elder Demolition, Inc. will notify employees with company memos.

Evaluation of hearing protector attenuation shall be done as part of the pre task planning and as needed should the environment and or situation change. All evaluations shall be in writing and available to employees. Should employees want protection above and beyond it shall be provided at no additional cost.

## **BASELINE AUDIOGRAM**

The baseline audiogram is the reference audiogram against which future audiograms are compared. Elder Demolition, Inc. will provide baseline audiograms within 6 months of an employee's first exposure at or above an 8-hour TWA of 85 dB. All employees are required to wear hearing protectors whenever they are exposed to noise levels above a TWA of 85. All hearing protectors are available to employees at no cost and will be provided by the company.

Employees should not be exposed to workplace noise for 14 hours before the baseline test or wear hearing protectors during this time period.

## **ANNUAL AUDIOGRAMS**

Elder Demolition, Inc. will provide annual audiograms within 1 year of the baseline. It is important to test workers' hearing annually to identify deterioration in their hearing ability as early as possible. This enables Elder Demolition, Inc. to initiate protective follow up measures before hearing loss progresses. Elder Demolition, Inc. will compare annual audiograms to baseline audiograms to determine whether the audiogram is valid and whether the employee has lost hearing ability or experienced a standard threshold shift (STS). An STS is an average shift in either ear of 10 dB or more at 2,000, 3,000 and 4,000 hertz. Records of these tests will be kept at the office and available to employees for a period of at least 7 years.

## FOLLOWING AN AUDIOGRAM EVALUATION

Elder Demolition, Inc. will fit or refit any employee showing an STS with adequate hearing protectors, show the employee how to use them, and require the employee to wear them. Elder Demolition, Inc. will notify employees in writing within 21 days after the determination that their audiometric test results show an STS. Some employees with an STS may need further testing if the professional determines that their test results are questionable or if they have an ear problem thought to be caused or aggravated by wearing hearing protectors. If the suspected medical problem is not thought to be related to wearing hearing protection, Elder Demolition, Inc. must advise the employee to see a physician. If subsequent audiogram is not persistent, employees whose exposure to noise is less than a TWA of 90dB may stop wearing hearing protectors.



## **TRAINING**

Employee training is very important. Training will be done on an annual basis in conjunction with the annual audiogram and shall be updated to be consistent with changes in the PPE and work environment or process. Workers who understand the reasons for the hearing conservation programs and the need to protect their hearing will be more motivated to wear their protectors and take audiometric tests. Required training consists of: the purpose, advantages, and disadvantages of various types of hearing protectors. Also the selections, fit, and care of protectors; and the purpose and procedures of audiometric testing. The training program may be structured in any format, with different portions conducted by different individuals and at different times, as long as the required topics are covered. All records of annual testing as well as exposure assessment shall be available for review in the main office.

## 14.0 SAFETY, TOOL BOX AND SAFETY COMMITTEE MEETINGS

## 14.1 TOOL BOX MEETINGS

To promote job specific safety, toolbox safety meetings should be held with all employees on a regular basis. The minimum frequency of these meetings should be once a week. Those locations that have a higher hazard potential should be held on a daily basis.

Besides discussing safety in general, a specific relevant topic should be chosen and discussed. The selection of the topic is the responsibility of the supervisor and or project manager. The topic chosen should be relevant to past accidents, loss prevention, current activities, etc. Employees are encouraged to bring attention to their safety concerns as topics for discussion.

Location supervisors should lead toolbox safety meeting, all employees are required to attend and their active participations are encouraged.

A record of each toolbox safety meetings should be retained at the jobsite. The safety meeting form found in the form section of the safety manual should be used for this purpose. A copy of this, needs to be turned into the office.

Items brought up during toolbox meetings that require corrective action should be documented on the safety meeting form. A procedure should be established to make certain that any required corrective action is carried out. These items shall be brought up in the safety committee meeting to ensure they were taken care of.

#### 14.2 SAFETY COMMITTEE MEETINGS

The safety committee consists of equal members from the office and the field. The safety committee shall meet monthly do discuss areas of concern and make appropriate recommendations. There shall be a new topic discussed at each of these meeting. It shall be the responsibility of the corporate safety director to determine what will be discussed. Whenever possible there will be a guest speaker or video on certain topics. All employees are welcome to attend and participate in these meetings.

## 14.3 RECORD KEEPING



All safety and toolbox meeting minutes shall be made available in the corporate office to all employees. Each employee will be reviewed and evaluated by the safety committee to combat recurring problems.

## 15.0 ACCIDENT PROCEDURES

The goal of the Elder Demolition, Inc. Safety Program is to prevent accidents and promote a safe work environment for all employees. We strive to learn from similar operations or situations to help prevent incidents or reoccurrence. Should an accident occur on the job we must be prepared to handle it effectively. An emergency medical plan must be posted in the project office. In the event of a very serious or fatal on the job accident, the following procedures must be followed.

- Immediate first aid, transportation or professional medical treatment must be provided. Stabilize the victim and call for help.
- Contact emergency medical transportation and the hospital listed on the Project Emergency Medical Plan.
- Clear a path and help direct emergency vehicles to the appropriate area(s).
- Secure the accident area for a thorough investigation.
- Immediately notify the Elder Demolition, Inc. Safety Department. New rules require notification of OSHA within four hours of serious and/or fatal accidents.
- The superintendent or foreperson will accompany or follow the injured worker to the hospital.
- The foreman and superintendent will fill out an accident report form and Elder Demolition, Inc. report of accident form. These forms must me submitted to the Elder Demolition, Inc. office by the end of the shift.
- Arrangements should be made by the foreperson or co-workers to secure the injured workers tools and personal belongings.
- Work will not continue in the area of work involved in the accident until cause has been identified and corrective action to prevent reoccurrence has been taken.
- The project superintendent will notify appropriate family members of the accident victim.
- All incident's (accident or near miss) will be investigated and documented by the safety team and
  any corrective actions will be documented and implemented as a result. Any new personnel
  tasked with investigating an incident will be properly trained in doing so and any equipment
  necessary.
- Major accidents will be investigated by a third party consultant and consist of in depth identification and assessment, collection and preservation of evidence. They will conduct witness interviews and gather statements.
- Reporting accidents to the appropriate regulatory agencies (State, Federal and workman's comp) shall be within 8 hours and to the host facility within 24 hours.

## 16.0 ASBESTOS POLICY

The purpose of this program is to ensure the safety of Elder Demolition, Inc. employees and compliance with the OSHA Asbestos Standard. Employees may be exposed to "Asbestos Containing Materials" (ACM) in building mechanical rooms, crawl spaces, or attics. As a result, this program is designed to ensure the health and safety of our employees. Health effects of Asbestos include respiratory disease and have caused various types of cancer. A Hazardous Material survey is required to be present on all projects. All ACM shall be removed prior to our demolition and the Asbestos company will have done clearance testing



prior to work beginning so we do not require exposure monitoring. At onset of project, Superintendent or Forman shall review the Hazardous Material Survey with all employees so they know what material is either present or what material was removed so that they can keep an eye out for any potential hazards. All employees shall be properly Asbestos trained prior to initial assignment. Training shall be documented and include name and subject. All training materials will be available to employees upon request. **Prior to beginning any project we require proof of Asbestos testing in writing.** 

## **Ongoing Abatement Activity**

Should there be Asbestos removal ongoing in any portion of the building or site we are working on, Supervisor shall ensure that the area is properly marked and sealed off from public or from our workers prior to our demolition crews working on site. All Asbestos removal is done within air tight containment to prevent outside exposure.

## **RESPONSIBILITIES**

**Project Manager** - Will request an asbestos site survey when considering performing work on any structure regardless of the date built. A copy of this survey will be sent to the main office before dispatching of employees to the job. The survey will be available to any employee asked to work on the project.

**Site Supervisor** – Will communicate the results of the site-specific survey with all employees on site. The Site Supervisor will ensure that if ACM is present, all on-site employees have received the required Asbestos Awareness training and applicable annual refreshers prior to being dispatched to the jobsite. When working on multi-contractor sites, supervisors shall ensure that employees are protected from exposure from others.

**Employee Responsibility** – Employees will make certain they are familiar with the site-specific ACM survey and all locations where they may come into the proximity of ACM. Employees will be familiar with the identification of ACM and will be trained yearly in awareness. In the event employees aere working in the same building or site that active asbestos removal is occurring, they shall abide by warning signs and labels and will not disturb the Asbestos Containing Materials or areas.

Employees will report to their supervisor immediately upon identification of any material they presume to be ACM.

## **17.0 FALL PROTECTION** (OSHA 1926.501, 1926.503, & 1926.503) (WAC 296-155-24601-24624)

Fall protection at Elder Demolition, Inc. is accomplished by a thorough analysis and pre-planning before work begins. Each site specific Fall Hazard analysis (potential falls over 6') shall be completed by a qualified person. Fall protection pre-task plans shall include specifically the prompt rescue of employees in the event of a fall including the prior planning of such anchor locations or rescue lifts etc. Due to the seriousness of fall injuries employees must exercise extreme caution. If for any reason you are uncomfortable working at heights notify your supervisor immediately. If you have not been trained by a qualified person on how to wear and use fall protection, you are not to use fall protection or be in a situation that requires fall protection. Use of fall protection systems and equipment is mandatory on our projects. Any employee found in violation of the Elder Demolition, Inc. Fall Protection Requirements is



subject to termination. Any accidents or near miss situations involving fall protection shall be investigated by management or third party consultant to evaluate the fall protection plan for potential updates and training.

<u>Fall Protection system</u> Means personal fall arrest system, fall restraint system, positioning device system, guardrail system, safety net system, warning line system, or slide guard system. All systems and equipment shall meet ANSI, ASTM, or OSHA requirements including raw materials for anchoring etc. All equipment shall be inspected prior to use and recertified as required by the manufacturer on a yearly basis.

## Fall protection that Elder Demolition, Inc., uses

- Body Harness
- Lanyard
- Safety-Retracting Lifeline/Lanyard
- Rope Grab
- Anchors

## **Site Specific Fall Protection Plan:**

• Each project shall have a site specific safety plan created by a qualified individual. Should the site specific hazard analysis indicate a fall hazard then a site specific fall protection plan shall be created by qualified individual.

#### Holes:

- Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet above lower levels, by personal fall protection or guardrail system, fencing or barricading dangerous areas.
- Each employee on a walking/working surface shall be protected from tripping in or stepping into or through holes (including skylights) by covers or toe boards.
- Each employee on a walking/working surface shall be protected from objects falling through holes (including skylights) by covers or toe boards.
- Smoke domes or skylights fixtures are not considered covers unless they meet the strengths requirements.

#### Wall Openings:

• Each employee working on, at, above, or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inched above the walking/working surface, shall be protected from falling by the use of personal fall protection, or guard rail system.

## Establish floors, mezzanines, balconies and walkways:

• Each employee on established floors, mezzanines, balconies and walkways, with an unprotected side or edge 6 feet or more above a lower level, shall be protected from falling by the use of personal fall protection or guardrail systems.

## **Excavations:**



- Each employee at the edge of an excavation 6 feet or more in depth shall be protected from falling by guardrail systems, fences, or barricades when the excavation is not readily seen because of plant growth or other visual barrier.
- Each employee at the edge of a Well, pit, shaft, and similar excavation 6 feet or more in depth shall be protected from falling by guardrail systems, fences, barricades, or covers.

## **Dangerous Equipment:**

• Each employee shall be protected from falls into or onto dangerous equipment by personal fall protection, guardrail systems, or equipment guards.

## **Inspection Considerations:**

 Any component with any significant defect, such as cuts, tears, abrasions, mold, or undue stretching; contact with fire, acids, or other corrosives; distorted hooks or faulty hook or faulty hook springs; tongues unfitted to the shoulder of buckles; loose or damaged mountings; nonfunctioning parts; or wearing or internal deterioration in the ropes must be withdrawn from service immediately, and should be tagged or marked as unusable or destroyed. Fall protection must be inspected before each and every use.

#### **Proper Usage:**

- The body harness must be properly adjusted so that the harness is not loose but also not tight. The ring on your back should be in-between your shoulder blades. There should not be any loose straps hanging from your harness. Check and see that the harness has a factory tag that is readable.
- The yo-yo should be pulled out and checked for damage to wire and check to see if break works properly. The D ring should snap close and lock in a closed position. The tag should be readable on the case. The yo-yo must be off the ground when it is being used.
- The anchor point must be able to hold a 5000 lbs. minimum tensile strength. The anchor must have a label on it or be engineered and have paper work.
- The anchor point shall be placed as to limit the distance of free fall. This free fall distance shall be no more than 6 feet.
- Positioning of Anchor point shall be considered to avoid any potential swing fall hazard as well.
   Making sure in the instance of a fall the employee will not swing into an additional hazard based on placement of the anchor.

## **Training:**

- A qualified person will do training on the job. The person learning must demonstrate that he or she understands when and how to use the equipment. Training shall be documented and include the date of training, who was trained, signature of employee and trainer.
- Fall protection classes will be held periodically as needed as well as refreshing on a yearly basis.
- Job specific training will take place as conditions or work place changes occur.
- Retraining shall occur when fall protection systems or equipment changes from the manufacturer are updated or old ones become obsolete. Retraining shall also occur when deficiencies in training are found & when the work place changes.

## **Rescue Procedures:**



- Rescue during a fall is a critical procedure that needs to be prioritized on an equal level during the
  fall protection plan. When creating a fall protection plan you must look at the potential for rescue
  during each decision to place an anchor.
- Limiting suspension time to avoid suspension trauma knowing that the employee may not be able to help in the rescue. Each case is different and may involve a lift or ladder access or additional tie off point with rescue devise pre-installed.
- Workers shall be trained in rescue procedures and training shall be documented.

## 18.0 HOUSEKEEPING

Housekeeping is an important issue on our projects. A neat clean job reflects directly on workmanship of the employees and the contractor. Many times housekeeping is the first thing that people observe and it creates a lasting impression. We are a service-oriented business, if the people we are serving observe that our projects are in disarray it reflects directly on our ability as a contractor. We cannot afford this; good housekeeping directly affects safety, quality and production.

It is the responsibility of every worker on the job to keep his or her work area neat, clean and organized. When this happens every employee and contractor has a safer area to work in. Never rely on others to maintain your work area. Good housekeeping is especially critical in general access areas. Aisles, passageways, stairs, floor perimeters, entrances and exits must be kept clear of debris/tripping hazards.

All floors, roof holes and/or other openings must be securely covered with ¾" min plywood and marked, "HOLE DO NOT REMOVE". Guardrail systems with toe boards are required on all projects. Loose material should not be thrown off a floor or through an opening. Use trash chutes and skip boxes for moving loose materials. Barricade off areas and post safety monitors.

## 19.0 FIRE PROTECTION AND HOT WORK

A fire on any of our projects would be devastating; fire prevention is a function of planning, organization, housekeeping and safe work practice by all employees. All employees shall be trained in the proper use of fire extinguishers and prevention associated with fire prior to initial assignment and at least annually thereafter. A hot work permit generated by the onsite supervisor or the facility we are working in prior to performing hot work. It shall be in the form of a written plan and used to authorize welding and cutting operations and prevent fire.

The most common elements that cause fires on jobsites are:

- Combustible Materials
- Heat Sources
- Oxygen

The most important element under our control is ignition sources. Any work that could be an ignition source such as welding and cutting will require a Hot Work Plan before cutting or welding can commence. All personnel performing welding or torch cutting shall be trained in the proper use of the devise as well as the fire prevention methods mentioned below. If welding or cutting cannot be conducted safely it should



not be done and another method shall be employed. If a fire watch is necessary then a competent or trained employee shall stand fire watch. Fire extinguishers will be provided throughout the project and in special hot work area. Employees should be trained to identify the appropriate fire extinguisher and when to call for professional assistance. Fire extinguishers are subjected to monthly visual inspections (signing and dating the back of the tag) and an annual maintenance check by a third party certified company. Defective hot work equipment shall be immediately removed from the site. Emergency fire procedures and medical services will be posted at the project office.

The next element under our control is good housekeeping. If the object being cut or welded can be moved to a secure non-flammable location then keep combustible material picked up and stored in a dedicated area away form ignition sources. Loose materials or debris will not be tolerated. If the element can't be moved and there is still ignition source present then it shall be guarded against fire with protective measures relative to the source. Do not torch or weld in any dusty environment or confined area that can result in a dust explosion. Proper ventilation and respiratory equipment shall be employed when hazardous fumes/ gases or dust may be present.

Personal protective equipment such as clothing and respiratory protection shall be employed as needed to protect against fumes, burns and other hazards. If such conditions evolve, supervisor shall assist in creating a new hot work plan specific to the fumes or other hazards present before continuing. Should any equipment become defective, operators shall report immediately and discontinue to use until it has been repaired or replaced. Repairs will only be made by a qualified person or third party company certified to do repairs.

All welding or torching shall stop 30 min prior to the end of shift or a fire watch person is assigned to stay a minimum of 30 minutes and ensure the area is free from fire danger. Fire watch is required when any welding cutting or torching is performed near combustible materials or locations where fire may develop. Employees shall report any equipment defects and remove them from service until repairs are made.

Local fire service providers should be contacted during the initial phase of the project. They should be familiar with the location of the project. If a fire occurs, one person should attempt to extinguish and control while the second person calls for help.

When working in existing facilities, project safety plans and protocols specifically relating to the project must be developed in conjunctions with the facilities personnel.

# 20.0 HAZARD COMMUNICATION PROGRAM (Global Harmonized System 29 CFR 1910.1200)

The following Hazard Communication Program has been developed for Elder Demolition, Inc. The written program is available at the main office for employee review.

#### CONTAINER LABELING / HAZARD IDENTIFICATION

The superintendent will verify that all containers received for usage at the job site will:

- Be clearly and properly labeled as to hazardous chemical content.
- Labels will list applicable hazards and necessary work practice warnings and guidelines.



- Labels will list the product name and address of the manufacturer, the Chemical identity, Hazard pictograms, a warning statement, message or symbol along with safe handling procedures. Secondary contains, not for immediate use will also be properly labeled.
- Key signal words in identifying hazardous materials: CAUTION, MODERATE RISK, WARNING, DANGER, SERIOUS RISK, MAJOR RISK.
- Labels shall not be defaced or removed.
- Employees must understand from training the picture and hazard of each material as shown below.



## **SAFETY DATA SHEETS (SDS'S)**

For each substance brought on site by employer, employees shall obtain SDS's from the manufacturer. Copies of the SDS'S for all hazardous chemicals on the job sites will be maintained at each job site location and at the main office. These are readily available for employees to review upon request. SDS'S will be updated when new products are used and old products discontinued.

## **EMPLOYEE TRAINING**

Employees that are assigned to any job site where hazardous chemicals may be involved will be given the following information and the Superintendent will provide training.

- Overview of the Hazardous Communication Standard
- Hazardous chemicals in the work area.
- Work practices and personal protective equipment to prevent adverse exposure to these chemicals
- Warning properties and types of exposure (i.e. odor, welding smoke, skin contact, ventilation).
- Emergency procedures to follow if adverse exposure occurs.
- Emergency procedures for spills or non-routine tasks such as confined space entry.

## **TOOL BOX TALKS AND JOB SITE ORIENTATION**

Tool box will be conducted at least one a week. On certain jobs there may be a safety meeting done daily. In these meetings Hazard Communication will be discussed and reviewed. Every day before lunch there is a five to ten minute meeting called the HazCom Huddle. This meeting discusses any new hazards found during the first half of the shift, and what will take place during the second half of the shift. On certain jobs the general contractor will have a job site orientation. This orientation is specific to that job and may



include, but not limited to, fall hazards, Lead, Asbestos, overhead work, and other hazards. The Elder Demolition, Inc. foreman will also have an orientation that will discuss any hazards on the job site and any site specific safety rules, like smoking on the owners property. All information on chemicals present shall be consistent across multiple worksites or if employees are working for multiple employer worksites.

## **NON-ROUTINE TASKS**

Employees who undertake duties not normally addressed in their day to day routine will be instructed regarding labeling, SDS, and notified that Hazardous Communications Notebooks are kept at each job site and a master copy at the main office.

## **CHEMICAL IN PIPES**

Employees in areas where chemicals are transferred through pipes often perform work activities. Prior to starting work in these areas the employees shall contact the Superintendent for information regarding:

- The chemical in the pipes, or the insulation material on the pipe.
- Potential hazards.
- Safety precautions, which should be taken.

## **SUBCONTRACTORS/SUPPLIERS**

Subcontractors, suppliers or other who may come in contact with hazardous material on the project site will be notified prior to move in by mail or Project Manager with SDS on the particular material they may be exposed to.

#### HAZARDOUS CHEMICAL LIST

A complete list of hazardous chemicals that are used on the job site is located in the front of the SDS binder. Questions regarding this information should be addressed to the safety personnel at the main office.

## 21.0 EMERGENCY PREPAREDNESS

Each location should have a written emergency response plan. The emergency response plan should identify the different types of emergencies that could occur at the location, what responses will be taken for each of theses emergencies, who is responsible to notify needed emergency response services, and those who are assigned to oversee and administer the emergency response program. The plan should be placed and maintained in an emergency response plan folder in the main office for a period on at least 18 months.

Emergency numbers posted should include police, fire, and medical/ambulance. A periodic emergency drill should be held so that employees will know how to respond to various emergencies. The minimum period between drills should not be more than six months. A written record of all drills should be kept for a period of at least eighteen months.

Management on a periodic basis to keep current with job operations should review the emergency response plan.



Should an evacuation take place an accounting of all personnel should be determined. If a response to an emergency requires the shutting down of equipment previously determined employees should carry out the required shut down task.

Where practical an emergency response team should be formed and trained. Needed equipment for such a response should assembled and maintained at the location.

## **22.0 CONFINED SPACES** (OSHA 29 CFR 19.10.146)

Confined Spaces tend to compound existing hazards that may create dangerous situations. The leading cause of fatalities in confined spaces is asphyxiation but there are many others so confined space training is required in all such instances.

Classification of Confined Space:

Supervisor and/or safety director shall walk project to identify and classify any areas as confined space prior to work beginning.

Training:

All employees shall be properly trained and proficiency documented prior to entering a confined space and prior to initial assignment as well as prior to a change in assigned duties or if a new hazard has been created including deviations from original plan. The confined space plan shall be reviewed on a yearly basis and revised as necessary.

No one is to enter a confined space (manhole, boiler, pipeline, pits, trenches, etc.) without a permit being posted at the entry. Confined spaces shall be barricaded to prevent accidental or unauthorized entry. All hazardous materials or hazardous energy/gases shall be addressed or removed prior to work beginning inside confined space. Designated persons will be "authorized entrants", "attendants" and "entry supervisors". Single attendants' are prohibited from monitoring multiple confined spaces at one time. The permit shall include the name the attendant working with the employee that is inside the confined space, the rescue plan. All entrants shall be involved in the preparation of the permit and have access to the air monitoring equipment calibration data as requested. If any additional monitoring is requested by entrants company shall provide.

## **Duties:**

Authorized Entrants duties are to perform the work within the confined space while fully understanding the permit and the plan for safe operation. Entrants shall know all of the hazards present and comply with the permit at all times.

Entry Supervisors primary duty is the responsibility for determining if acceptable entry conditions are present at a permit space where entry is planned including informing entrants of pre-entry atmospheric test results, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section. Knowing the hazards that may be faced during entry. Understanding possible behavioral effects of hazard exposure. Maintaining an accurate count of authorized entrants. Ensuring that there is continuous monitoring while entrants are inside. Employees shall be authorized to request additional monitoring at any time should they feel condition is unsafe.

Attendants primary duty is to station themselves outside of confined space and monitor entrants. Knowing the hazards that may be faced during entry. Understanding possible behavioral effects of hazard exposure. Maintaining an accurate count of authorized entrants.

Workers inside a confined space are to have some form of communication between the attendants as well as communication with emergency personnel should it be required. The attendant is charged with



monitoring the employee inside the confined space as well as the environment outside in case of potential changes in the hazards outside of space including vehicles and pedestrians if present. Attendants are not allowed to monitor more than one confined space at a time. Once the work is complete the permit is to be canceled and taken down. If area is still considered a confined space but no additional work is to be done in the area then proper signage shall be left behind to ensure others safety. Coordination must occur if multiple employers are working in a confined space from multiple companies.

Rescue is a part of every permit. Rescue services will vary depending on the situation and workplace. Unauthorized personnel are prohibited from attempting a rescue unless properly trained and qualified. The permit shall include a detailed rescue service plan whether it be provided by the host facility, an outside service (which will be given the opportunity to examine the entry site, practice rescue and decline as appropriate) or provided by Elder Demolition, Inc. by selecting a rescue team that is equipped and trained to perform the needed rescue services.

If a confined space is deemed immediate dangerous to life and health (IDLH) then a specific permit and plan shall be in place including on site professional rescue personnel.

## Cancelation of permit:

The Entry Supervisor shall terminate entry and cancel the entry permit when the operations covered by the permit have been completed. The permit shall be retained in the office for at least 1 year to facilitate the review for the permit-required confined space program required.

## 23.0 SILICA DUST

#### **About Crystalline Silica**

What is it?

Crystalline silica is the scientific name for a group of *minerals* containing silicon and oxygen. *Crystalline* means that the oxygen and silicon atoms are arranged in a specific pattern.

## **Forms of Crystalline Silica**

Crystalline silica exists in several forms, including *quartz, cristobalite*, and *tridymite*. Tridymite is the most potent, but least common form. Cristobalite, which occurs naturally in volcanic rock, is often found with quartz in the Pacific Northwest. Of these forms, quartz is the most common; in fact, it is the second most common mineral on the planet. (Feldspar is the most common.)

## **The Cause of Silicosis is linked to Cancer:**

Crystalline silica causes silicosis, but it has also been linked to cancer. As a result, any material that contains more than 0.1 percent crystalline silica must meet the labeling, information, and training requirements of the *Hazard Communication Standard*.

## What is Silicosis?

Silicosis is a progressive, disabling lung disease caused by breathing dust-containing particles of crystalline silica – particles so small you can see them only with a microscope. The cause of silicosis has been known for centuries – the earliest cases of silicosis were recorded before the first century – yet workers continue to die every year from the disease. Crystalline silica exists almost everywhere in our natural environment. It is abundant in soil, sand, dust, quartz, and granite rock. Not surprisingly, crystalline silica also exists in products that we make or use every day at home and at work. For example, china tableware is made from materials containing silica flour, which is finely ground quartz. In addition, unwashed root vegetables like



potatoes are coated with soil containing crystalline silica – a possible health hazard for those who harvest, sort, and bag them without appropriate exposure controls.

Keep in mind that crystalline silica can cause silicosis only when we breathe it into our lungs as dust or a fine powder. Here is what happens: The silica particles become trapped in the lungs and damage the tissue. As a result, the lung tissue scars and forms small, rounded masses called nodules. Over time, the nodules grow, making breathing increasingly difficult.

Though silicosis shows no symptoms at first, the victim eventually has trouble breathing and develops a severe cough. Other symptoms include fatigue, loss of appetite, chest pains, and fever. Only a complete work history, a chest X-ray, and a lung-function test will determine whether a worker has the disease. Those who think they may have silicosis should see a medical doctor who specializes in occupational medicine.

#### • Chronic Silicosis -

Silicosis can affect you in three ways. Most workers who get silicosis do not show any symptoms for 10 or more years. That is because their exposures to crystalline silica are low, but frequent. They develop a condition called *chronic silicosis*.

#### • Accelerated Silicosis –

As exposure levels increase, however, silicosis symptoms can appear much earlier. For example, those diagnosed with *accelerated silicosis* show symptoms within five to 10 years.

#### • Acute Silicosis -

Workers exposed to extremely high levels of crystalline silica dust may develop *acute silicosis*, a condition that can show symptoms within only a few weeks of an initial exposure. Acute silicosis is most common among sand blasters because of the high levels of silica dust they breathe.

## **Activities That Could Put Workers at Risk**

- Chipping, hammering, and drilling rock
- Crushing, loading, hauling, and dumping rock
- Abrasive blasting
- Sawing, hammering, drilling, grinding, and chipping masonry or concrete
- Demolition of concrete or masonry structures
- Dry sweeping or using pressurized air to blow concrete, rock or sand dust

## **Control Methods to Eliminate Exposure to:**

## • Dust-Contaminant System

Other ways to eliminate exposure include installing dust-collection systems on machines that generate dust or using enclosed cabinets with gloved armholes to do hazardous tasks.

#### Wet Method

Use wet drilling or sawing methods to control dust. Remove dust and debris with a wet vacuum or hose it down rather than blowing it around with compressed air or dry-sweeping it.

#### • Ventilate

Use local-exhaust ventilation systems to keep work areas dust free.



## • Personal Protective Equipment

Personal Protective Equipment (PPE) can protect workers from hazards, but it does not eliminate hazards. If the equipment fails, or it is not appropriate for a particular task, a worker can still be exposed.

Respirators are a special type of personal protective equipment. When carefully selected, worn, and used, respirators will protect workers from inhaling crystalline silica dust. Respirators will be used only when the dust cannot be eliminated or controlled with any other method, and employees needs to understand the requirements for using respirators." Refer to Respirator section of the on-site safety Manual Don't use a respirator as your only means of protection!

## • Air Monitoring

Air monitoring is a method of determining workers' exposures to silica dust. Air monitoring results can also help you decide the most appropriate methods for controlling crystalline silica dust.

Workers who may be exposed to crystalline silica dust should have regular medical exams. They should be examined before they begin their jobs and at least every three years thereafter. Examinations should include medical and work histories, chest X-rays, and tuberculosis evaluations. Medical examinations should supplement air monitoring and other control methods – not replace them.

## • Personal Hygiene

Those who work with materials containing crystalline silica should wash their hands before eating, drinking, or smoking. They should shower, if possible, and change into clean clothes before leaving the worksite. They should never eat, drink, or use tobacco in abrasive blasting areas.

#### • Communicate

Make sure any product that contains silica has a label that says so. Materials or products that contain more than 0.1 percent crystalline silica must have a Material Safety Data Sheet. (See the Hazard Communication Program for more information on labeling and Material Safety Data Sheets.)

## Warning Signs

Put up signs that identify the work areas, tasks, and equipment that may expose workers to crystalline silica. The signs should warn workers about crystalline-silica hazards and identify any required Personal Protective Equipment.

## 24.0 BACTERIA

It has become apparent that water damage building material contains substances specifically bacteria that can affect the health of people associated with the handling of there materials. This policy has been developed to protect our employees from this newly discovered health risk.

- Provide all employees with effective information and training about handling these materials at the time of their initial assignment.
- Provide each employee visual identification of place on site where the hazardous material exist.



- Assume all occurring areas are hazardous. These bacteria are difficult to detect and even more
  difficult to distinguish hazardous form non-hazardous. Furthermore each bacterium affects each
  individual differently, i.e. what makes one employee sick may not affect another employee.
  Handle all contaminated material in the way the site-specific handling plan mandates.
- Develop a site-specific handling plan to establish how all materials are to be removed and disposed of prior to any work being done. This plan will require input from the owner of the project, the general contractor, and may require input from an environmental consultant. This plan will be posted onsite usually in the job box along with normal safety plans and hazardous material handling policies.

## 25.0 DEMOLITION WASTE AND RECYCLING

As a leading recycling company in our industry we strive to keep as much material from being diverted to the landfills as possible. All employees should be aware of our commitment to recycling and do their part to ensure its success. Most of the material we haul from a job site is taken to a recovery center so we have to comply with their policies as well. Material flow will be taken into consideration prior to work beginning and employees made aware of the proper method to dispose of wastes. The following are some basic waste and recycling rules to follow:

- Materials we commonly sort out from being hauled to the recovery center are Wood, Scrap Metal/wire, concrete, brick and some roofing.
- No flat roofing is allowed at the recovery center so it needs to be sorted to go to a lined landfill instead.
- If any specific means or method is required, all employees will be made aware and properly trained.
- While storing materials on site, consideration needs to be made regarding surfaces that material are stored on as to not impact any environmental issues.

## 26.0 RESPIRATOR PROGRAM

#### Purpose

Elder Demolition, Inc., has determined that certain of its employees are or can be exposed to respiratory hazards. The purpose of this program is to ensure that all employees are protected from exposure to these hazards. If conditions are IDLH (immediate dangerous to life and health) atmospheres then a specific plan shall be created by management and include professional on site rescue personnel and equipment not standard issue.

Engineering controls such as ventilation and substitution of less toxic materials are the first line of defense. However, engineering controls have not always been feasible for some of our operations or have not always



completely controlled the identified hazards. In these situations, respirators and other protective equipment must be used. Respirators are also utilized for protection during emergencies.

## Scope and Application

This program applies to all employees who are required to wear respirators during normal work operations and during certain non-routine or emergency operations. Employees participating in the respiratory protection program do so at no cost to them. The expense associated with medical evaluations, training, and respiratory protection equipment will be borne by the company.

Employees who voluntarily choose to use a cartridge style respirator when the respirator is not required are subject to the medical evaluation, cleaning, maintenance and storage elements of this program. These individuals will also receive training covering proper procedures for cleaning, maintenance and storage of their respirators. In addition, the information specified in "Appendix A: Important Information about Voluntary Use of Respirators" will be provided to all voluntary users of respirators.

Employees who voluntarily choose to use a filtering face piece respirator (i.e., a dust mask style respirator) are excluded from all other requirements of this program.

Voluntary use does not require employers to pay for respirators, but program costs (e.g., medical evaluations when a cartridge style respirator is used) are the responsibility of the employer.

## Responsibilities

## **Respirator Program Administrator**

The Respirator Program Administrator is responsible for overseeing the respiratory protection program and to conduct the required evaluations of program effectiveness thereby ensuring that all the requirements of this program are fully implemented, as necessary.

Duties of the Program Administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.
- Selection of respiratory protection options.
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting qualitative/quantitative fit testing.
- Administering the medical surveillance program.
- Maintaining records required by the program.
- Evaluating the program.
- Updating the written program as necessary to reflect workplace changes that affect respirator use.

## **Supervisors**

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own



protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify changes in respiratory hazards.
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program.

## **Employees**

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed and store them in a clean and sanitary location.
- Inform their supervisor if the respirator no longer fits well and request a new one that fits properly.
- Inform their supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
- Notify their supervisor or the Program Administrator of any other problems associated with using their respirator.

#### **Respirator Selection**

The Program Administrator is responsible to ensure that the respirator selected will be adequate to effectively reduce exposure to the respirator user under all conditions of use including reasonably foreseeable emergency situations.

## **Evaluating Respiratory Hazards**

The Program Administrator will select respirators to be used on-site based on the hazards to which workers are exposed and in accordance with all WISHA standards. The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:

• Identification of respiratory hazard sources and development of a hazardous substance list used in the workplace by location or work process.



- Review of work processes to determine where hazardous exposures occur and the magnitude of the exposures. This review will be conducted by surveying the workplace, reviewing process records, obtaining objective data (if available), and talking with employees and supervisors.
- When necessary, exposure monitoring will be conducted to measure potential hazardous exposures. Monitoring will be conducted by Jones Environmental, Sterling Technologies, or similar company.

The results of the hazard evaluation are summarized in Table 1.

TABLE 1: HAZARD EVALUATION SUMMARY					
Department	Contaminants	Exposure	Permissible	Controls	
		Monitoring	Exposures		
Demolition	Lead	20 μg/m3 TWA	50 μg/m3 TWA	Hand scraping	
			30 μg/m3 AL	only	
Demolition	Manual	N/D	50 μg/m3 TWA	Fans and water	
	Demolition of		30 μg/m3 AL		
	walls that contain				
	5000ppm of Lead				
Demolition	Torch Cutting of	N/D	50 μg/m3 TWA	Torch cutting	
	steel with lead		30 μg/m3 AL	outside using 5'	
	paint 1433ppm			torch	
Demolition	Using Brokk with	N/D	50 μg/m3 TWA	Fans and Water	
	breaker on CMU		30 μg/m3 AL		
	wall with Lead				
	Paint				
Demolition	Torch Cutting of	15.0 μg/m3 TWA	50 μg/m3 TWA	Full face respirator	
	steel tand with lead		30 μg/m3 AL	was used during	
	paint 9700ppm			test.	

## **Hazard Evaluation Update**

The Program Administrator is responsible to revise and update the hazard evaluation as needed (i.e., any time work process changes may potentially affect employee exposure). If an employee feels that respiratory protection is needed during a particular activity, s/he is to contact Supervisor. The Program Administrator will evaluate the potential hazard. The Program Administrator will then communicate the results of that assessment back to the affected employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks and this program will be updated accordingly.

## **Workplace and User Factors**

The Program Administrator will review the job operation, the equipment or tools that will be used, and any motion or travel required which can interfere with the type of respirator to be selected. When powered, airpurifying respirators or continuous-flow airline respirators are used, the physical demands affecting breathing rate will be evaluated.



The Program Administrator will ensure that respirators selected will not impair the worker's vision, hearing, communication, and physical movement necessary to perform jobs safely. (For example, airline respirators should not be used by mobile employees around moving machinery to avoid entanglement of the respirator in the equipment, and connection to a clean air source must be considered.)

## **Respirator Selection Table**

Respirators have been selected for protection against gases, vapors, and particulate. Respirators are required for all employees engaged in tasks specified in Table 2.

TABLE 2: RESPIRATOR SELECTION				
Respirator	Department/Process			
Half-face piece P100 filter	Manual Demolition when surfaces contain lead unless a exposure assessment has been completed to prove that levels are below the action level			
Full-face supplied air	This respirator is used when doing an exposure assessment when torching on steel with lead base paint.			
Full-face powered air purifying respirator	This respirator is used when doing an exposure assessment except when torching steel with lead paint.			
Half-face piece P100 filter	Nuisance dust			
Half-face piece P100 filter	Breaking or grinding of concrete			

## NIOSH Certification

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. All filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

## **Assigned Protection Factors**

The assigned protection factors in "WAC 296-62-07131, Table 1--Assigned Protection Factors" will be used when selecting respirators. Half-mask respirators can provide adequate protection for routine respirator use, where employee exposures do not exceed ten times the permissible exposure limit. The Program Administrator will determine the type of respirator to be selected for non-routine or reasonably foreseeable emergency situations.



## **Contaminant Breakthrough Warning Systems**

For vapor or gas air purifying respirators the two systems in place to warn respirator wearers of contaminant breakthrough include using respirator cartridges equipped with an end-of-service life indicator (ESLI) or using a cartridge replacement schedule based on manufacturer breakthrough test data.

Employees using cartridges not equipped with ESLIs must replace cartridges in accordance with the instruction provided by Table 3. Cartridge color identification will be in accordance with "WAC 296-62-07184 Table 3 -- Color Coding of Respirator Filters, Cartridges and Canisters."

TABLE 3: VAPOR AND GAS CARTRIDGE REPLACEMENT SCHEDULES						
Cartridge Color	Contaminant	Replace every:	Work Site Conditions			
Identification	Concentration					
Magenta	P100 Particulate Filter (99.97% Minimum Filter Efficiency)	Whenever the wearer detects a change in breathing resistance.	Dusty conditions and when dealing with lead in a particulate matter			
Magenta double stack with black label	Organic Vapor Cartridge & P100 Particulate Filter (99.97% Minimum Filter Efficiency)	One work shift	When torching or making lead into a vapor matter			

For respirators worn exclusively for protection against particles, filters will be changed per the manufacturer's specification and whenever the wearer detects a change in breathing resistance.

#### **Medical Evaluation**

Employees assigned to tasks where respirators are utilized must be physically able to perform the work while using the respirator. Accordingly, the company has the responsibility of ensuring that employees are medically fit and able to tolerate the physical and psychological stress imposed by respirator use, as well as the physical stress originating from job and workplace conditions. Employees will not be allowed to wear respirators until a physician or other licensed health care professional (PLHCP) has determined that they are medically able to do so.

Any employee refusing the medical evaluation cannot work in an area requiring respirator use.

Employees voluntarily using filtering face piece respirators (dust masks) and employees using loose fitting escape-only respirators (provided that is the only respirator used) are exempt from the requirements of the medical evaluation program.

Adventist Health/Occupational Medicine Clinic will provide initial and any follow-up medical evaluations.

## **Information Provided to the PLHCP**

The Program Administrator will provide the PLHCP the following general information before evaluations begin:

• A copy of this written respiratory protection program including a list of respirators used by the company and a copy of the fit testing procedures used by the company.



• A copy of chapter "296-62 WAC, Part E, Respiratory protection."

In addition, the "Employer Provided Information for Medical Evaluations" of this written program will be used to compile the necessary user-specific information to be provided to the PLHCP. The user-specific information describes:

- The type and weight of the respirator to be used by the employee.
- The duration and frequency of respirator use (e.g., for routine, rescue and escape tasks).
- The expected physical work effort (e.g., "low", "medium" or "high" as indicated in Appendix B).
- Additional protective clothing and equipment to be worn.
- Estimates of temperature and humidity extremes that may be encountered.
- Any special or hazardous conditions the employee could encounter.

## **Medical Questionnaire Administration**

Employees assigned to tasks requiring the use of respirators will be required to complete the Respirator Medical Evaluation Questionnaire. The Program Administrator will make available a copy of the questionnaire to all employees requiring medical evaluations. The medical evaluation will be administered confidentially and during working hours at a place on site that is convenient to employees. A stamped and addressed envelope for mailing the questionnaire to the PLHCP will be provided. Employees will be paid their wages during questionnaire administration. If the questionnaire is completed at time of orientation then the employee will take with to the Physician.

To the extent feasible for maintaining confidentiality, the Program Administrator or his/her designee will aid employees who are unable to read the questionnaire by providing reading assistance. To ensure confidentiality, the questionnaire will not be reviewed at any time by the Program Administrator or designee. The Program Administrator or designee will not review completed questions and there will be no employee/employer interaction that could be considered a breach of confidentiality. Where confidentiality cannot be maintained during administration of the questionnaire, the employee will be sent to the PLHCP for medical evaluation.

If needed, employees will have the opportunity to discuss the questionnaire content and/or examination results with the PLHCP via telephone call. During questionnaire administration, the PLHCP's phone number will be given to employees and access to a phone will be provided at no charge to the employee. All records from medical evaluations, including completed questionnaires, will remain confidential between the employee and the PLHCP.

## **PLHCP's Written Recommendations**

The company will obtain a written recommendation from the PLHCP on whether/or not the employee is medically able to wear a respirator. The recommendation must identify any limitations on the employee's use of the respirator, as well as the need for periodic or future medical evaluations that are required by the PLHCP.

A powered air-purifying respirator (PAPR) will be provided to any employee if information from the PLHCP's written recommendation indicates that the employee can use a PAPR but not a negative pressure respirator. If, subsequent to this evaluation, the PLHCP determines that the employee is able to wear a negative pressure respirator, the company will no longer be required to provide a PAPR to that employee.



The employee will receive a copy of the PLHCP's written recommendations directly from the PLHCP. Information concerning diagnosis, test results, or other confidential medical information will not be disclosed to the company by the PLHCP.

#### **Additional Medical Evaluations**

The company will provide additional medical evaluation or medical re-evaluation for any employee when:

- The employee reports medical signs or symptoms that are related to the employee's ability to use a respirator.
- A PLHCP, supervisor, or the respirator program administrator observes that the employee is having a medical problem during fit testing or workplace respirator use.
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee re-evaluation.
- A change occurs in workplace conditions (e.g., physical work effort, type of respirator used, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

The content of such additional medical evaluations will be determined by the PLHCP.

## Fit Testing

Fit testing will be required for all respirators with a tight-fitting facepiece. Fit testing will be performed:

- After an employee has completed their medical evaluation and prior to being allowed to wear any respirator with a tight fitting facepiece in the work environment.
- Whenever a different respirator facepiece is used.
- At least annually thereafter.
- When there are changes in the employee's physical condition that could affect respiratory fit (e.g., obvious change in body weight, facial scarring, etc.)

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find the optimal fit.

Fit testing of tight-fitting PAPRs is to be conducted in negative pressure mode (i.e., with the fan motor turned off).

Fit testing of tight-fitting airline respirators will be conducted using an identical negative pressure air purifying respirator facepiece as a substitute test mask.

If for any reason an employee finds that the respirator fit is unacceptable, a reasonable opportunity to select a different facepiece and to be retested will be provided.

Employees who voluntarily chose to use air-purifying respirators are not required to be fit tested.

The form in "Appendix C: Respirator Fit Test record" will be used to document respirator fit testing.

## **Fit Testing Procedure**



Elder Demolition, Inc., Safety Coordinator, Adventist Health, United Fire and Safety, or Sanderson Safety Supply will conduct fit testing. It has been determined that employee exposures will not exceed airborne concentrations in excess of 10 times the Permissible Exposure Limit (PEL), therefore qualitative fit tests can be conducted on all negative pressure respirators. If conditions affecting exposure levels change, the Program Administrator will evaluate whether quantitative fit testing is required.

Quantitative fit testing is required on all masks except Half-face respirators.

Fit testing will be administered by using the WISHA-accepted qualitative fit test protocols found in "WAC 296-62-07201 Appendix A-1: General Fit Testing Requirements for Respiratory Protection and WAC 296-62-07205 Appendix A-2: Qualitative /fit Testing (QLFT) Protocols for Respiratory Protection." The qualitative fit test protocol that will be used at Elder Demolition, Inc. is the Irritant Smoke protocol.

## **Fit Testing Exercises**

When qualitative fit tests are to be conducted, the Program Administrator will ensure that the test exercises described in WAC 296-62-07203 are performed.

While a fit test is in progress, the respirator must not be adjusted.

Employees will perform fit test exercises in the test environment while wearing other safety equipment that will be worn during actual respirator use that could interfere with respirator fit.

If the employee exhibits breathing difficulty during the fit test, s/he will be referred to the PHLCP to determine whether a respirator can be worn while performing his or her duties.

## Respirator Use

The Program Administrator and/or Project Forman will monitor the work area in order to be aware of changing conditions where employees are using respirators.

## **Facepiece Seal Protection**

The company will not permit respirators with tight-fitting facepieces to be worn by employees who have conditions that would compromise the facepiece-to-face seal. Examples of these conditions include facial hair (e.g., stubble, bangs) that interferes with the facepiece seal or valve function, absence of normally worn dentures, facial deformities (e.g., scars, deep skin creases, prominent cheekbones), or the use of jewelry or headgear that projects under the facepiece seal.

Corrective glasses or goggles, or other personal protective equipment, must be worn in such a way that they do not interfere with the seal of the facepiece to the face. Full-facepiece respirators will be provided where either corrective glasses or eye protection is required, since corrective lenses can be mounted inside a full-facepiece respirator. The use of contact lenses with respirators where the wearer has successfully worn such lenses before will be allowed.

A user seal check (also known as a fit check) will be performed every time a tight-fitting respirator is put on or adjusted to ensure proper seating of the respirator to the face. The user seal check conducted must be either the positive and/or negative pressure checks described in "WAC 296-62-07251 Appendix B-1: User Seal Check Procedures," or the manufacturer's recommended procedures when equally protective.



## **Monitoring Respirator Effectiveness**

The Program Administrator and/or Supervisors (forperson, lead, etc.) will be responsible to maintain appropriate surveillance of changes in work area conditions that may increase employee exposure or stress.

Employees will be permitted to leave the respirator use area to wash their faces and respirator facepieces as needed to prevent skin or eye irritation associated with respirator use.

Whenever the respirator user can detect vapor or gas breakthrough (by odor, taste, and/or irritation effects), a change in breathing resistance or leakage of the facepiece, the employee will be allowed to leave the respirator use area to replace the respirator or the filter, cartridge, or canister elements.

Employees will be permitted to leave the respirator use area if they are replacing cartridge or canister elements according to the established replacement schedule or when the end-of-service-life indicator (ESLI) shows that the canister or cartridge(s) must be changed.

Employees will be permitted to leave the respirator use area if the respirator is not properly functioning and must be replaced, repaired, or discarded. The employee will be allowed back into the respirator use area only after the respirator has been replaced or repaired.

Employees will be permitted to leave the respirator use area if the employee experiences severe discomfort in wearing the respirator or if the employee experiences sensations of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever, and chills.

## Maintenance and Care

The Program Administrator will oversee the maintenance and care program.

## **Cleaning and Disinfecting**

Respirators will be cleaned and disinfected by the employee who is wearing it. Using the respirator manufacturer's cleaning procedures.

Respirators will be cleaned and disinfected as follows:

- Respirators that are issued for the exclusive use of an employee will be cleaned and disinfected as often as necessary to be maintained in a sanitary condition. Employees will be responsible to clean and disinfect respirators issued for their exclusive use.
- Respirators used by more than one employee will be cleaned and disinfected prior to being used by a different individual.
- During fit-tests, disinfectant wipes can be used in between respirator wears to minimize the risk for spreading cold, influenza or other respiratory illness. *Note:* The person cleaning respirators with disinfectant wipes must be so trained. At the end of the day, each respirator will be completely disassembled and cleaned by immersion.

Storage



Respirators will be stored so that they are protected against damage, contamination, dust, sunlight, temperature extremes, excessive moisture, and damaging chemicals. When respirators are packed or stored, the facepiece and exhalation valve will be stored in a manner that prevents deformation. Each respirator should be positioned so that it retains its natural configuration.

## Inspection

Respirators used in routine situations will be inspected before each use and during cleaning.

To ensure the continued reliability of respiratory equipment, it must be inspected on a regular basis. The frequency of inspection and the procedures to be followed depend on whether the respirator is intended for non-emergency, emergency, or escape use only.

Respirator inspections will include a check of respirator function, tightness of connections, and the condition of the various parts including but not limited to: The facepiece, head straps, valves, connecting tube, and cartridges, canisters, or filters. In addition, the elastomeric parts must be evaluated for pliability and signs of deterioration.

## Repair

The Program Administrator or designee will ensure that respirators which fail to pass inspection or are otherwise found to be defective will be removed from service and repaired or adjusted properly. If a respirator cannot be repaired or adjusted it will be discarded.

Repairs or adjustments to respirators will be done by Sanderson Safety Supply. Only NIOSH-approved manufacturer's replacement parts designed for that respirator will be used. Repairs will be made in accordance with the manufacturer's recommendations and specifications regarding the type and extent of repairs to be performed. In most cases the employee will receive a new mask of the same make, model, and size.

### Compressors

Compressors used for supplying breathing air must be constructed and situated so contaminated air cannot enter the air-supply system. The location of the air intake will be in an uncontaminated area where exhaust gases from nearby vehicles, the internal combustion engine that is powering the compressor itself (*if applicable*), or other exhaust contaminants being ventilated will not be picked up by the compressor air intake.

Compressors will be equipped with suitable in-line, air-purifying sorbent beds and filters to further ensure breathing air quality and to minimize moisture content so that the dew point at 1 atmosphere pressure is 10°F (5.56°C) below the ambient temperature. Sorbent beds and filters will be maintained and replaced or refurbished periodically according to the manufacturer's recommendations. An inspection tag will be kept at the compressor indicating the most recent change date and the signature of the Program Administrator or designee authorized to perform the maintenance.

Only non-oil-lubricated compressors will be used at Elder Demolition, Inc.

The Program Administrator will ensure that the compressor intake will not allow the introduction of carbon monoxide greater than 10 parts per million (ppm) into the system. *Note:* This could be from sources other than the compressor such as forklifts/vehicles or other gas powered equipment. Where this is not possible or feasible, it may be necessary to combine the use of a carbon monoxide alarm with a carbon monoxide



sorbent bed when conditions are such that a reliable carbon monoxide-free area for air intake cannot be found.

Breathing air couplings must be incompatible with outlets for non-respirable plant air or other gas systems to prevent accidental servicing of airline respirators with non-respirable gases or oxygen. No asphyxiating substance (e.g., nitrogen) will be allowed in the breathing airlines.

## Identification of Filters, Cartridges and Canisters

The Program Administer will ensure that all filters, cartridges, and canisters used in the workplace are labeled and color-coded with the NIOSH approval label, and ensure that the label is not removed and remains legible.

## **Training and Information**

The Safety Coordinator will provide training to respirator users, supervisors, and any person issuing respirators on the contents of the company's Respiratory Protection Program and their responsibilities under it, and on the WISHA respiratory protection standard.

Employees will be trained prior to using a respirator in the workplace. Supervisors will be trained prior to using a respirator in the workplace or prior to supervising employees who wear respirators.

Employees who voluntarily use filtering facepiece (dust mask) respirators are exempt from the training requirements. Voluntary users of elastomeric air-purifying respirators will receive limited training regarding cleaning and storage.

The information specified in "Appendix A, Important Information about Voluntary Use of Respirators" will be provided all voluntary users of respirators

#### **Respiratory Protection Training Guideline**

The Respiratory Protection Training course materials will cover the following information:

- Information regarding the consequences of improper fit, usage, or maintenance on respirator effectiveness will be provided to employees. Inadequate attention to any of these program elements would obviously defeat the effectiveness of the respirator. Proper fit, usage, and maintenance of respirators are critical to ensure employee protection.
- Employees will be provided an explanation of the limitations and capabilities of the respirator selected for employee use. A discussion of the limitations and capabilities of the respirator will address how the respirator operates. Training will include an explanation of how the respirator provides protection by either filtering the air, absorbing the vapor or gas, or providing clean air from an uncontaminated source, as applicable. Training will include limitations on the use of the equipment such as prohibitions against using an air-purifying respirator in IDLH atmospheres and an explanation of why such a respirator must not be used in these situations.
- Employees will be provided an explanation to understand how to use the respirator effectively in emergency situations including those in which the respirator malfunctions. Comprehensive



training will be provided where respirators are used in IDLH situations including oxygen-deficient atmospheres such as those that occur in rescue operations.

- Training will include the procedures for inspecting the respirator, donning and removing it, checking the fit and respirator seal, and actually wearing the respirator. Employees will be capable of recognizing any problems that may threaten the continued protective capability of the respirator. The training will include the steps employees are to follow if they discover any problems during inspection, that is, whom the problems are to be reported to and where they can obtain replacement equipment if necessary.
- Instructions will be given to respirator users regarding the proper procedures for maintenance and storage of respirators.
- Employees will be provided with medical information that is sufficient for them to recognize the signs and symptoms of medical conditions (e.g., shortness of breath, dizziness) that may limit or prevent the effective use of respirators.
- Employees will be informed of the general requirements of the WISHA respiratory protection standard. This discussion will inform employees that employers are obligated to develop a written program, properly select respirators, evaluate respirator use and correct deficiencies in use, conduct medical evaluations, provide for the maintenance, storage, and cleaning of respirators, and retain and provide access to specific records.

Employees will demonstrate their understanding of the information covered in the training through handson exercises and a written test. The Program Administrator will document respirator training and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested. The form in "Appendix D: Respirator Training Record" will be used to document employee training.

## Frequency of Training

Annual training is necessary and appropriate to ensure that employees know about the respiratory protection program and that they cooperate and actively participate in the program. Training and interaction with respirator instructors on at least an annual basis reinforces employee knowledge about the correct use of respirators and other pertinent elements of the respiratory protection program. It also builds employee confidence when using respirators.

New employees will be provided respirator training prior to using a respirator in the workplace.

Employees will be retrained annually and more often as needed (e.g., if they change area/location/position and need to use a different respirator).

Retraining will occur if the Program Administrator or Supervisor determines that any employee has not retained or demonstrated the knowledge, understanding, or skill level required by the company's training program

### **Program Evaluation**



The Program Administrator is responsible to conduct evaluations of the workplace, as necessary. Periodic program evaluation is required to ensure that the provisions of the respiratory protection program are being implemented for all employees using respirators. In addition, evaluations will be conducted to ensure the continued effectiveness of the program. Evaluations of the workplace will determine whether the correct respirators are being used and worn properly and will also serve to determine whether the training program is effective.

Supervisors are responsible to periodically monitor employee use of respirators to ensure that they are being used and worn properly.

The Program Administrator will regularly consult with employees wearing respirators to ascertain the employees' views on program effectiveness and to identify any problems so that corrective action can be taken.

The following factors will be evaluated to determine program effectiveness:

- Respirators are properly fitted and if employees are able to wear respirators without interfering with effective workplace performance.
- Respirators are correctly selected for the hazards encountered.
- Respirators are used properly depending on the workplace conditions encountered.
- Respirators are being maintained and stored properly.

The Program Administrator will be responsible to correct any problems associated with wearing a respirator that are identified by employees or that are revealed during any other part of this evaluation.

## Recordkeeping

The Program Administrator will retain a copy of the PLHCP's written recommendation for each employee subject to medical evaluation. Each employee's completed medical questionnaire, results of relevant medical tests, examinations, and diagnosis, etc., will be maintained by the PHLCP for a period of 30 years. Records of medical evaluations will be made available as specified in Chapter 296-62 WAC, Part B, WISHA's Access to Records rule.

The Program Administrator will retain fit test records for respirator users until the next fit test is administered. These records consist of:

- Name or identification of the employee tested;
- Type of fit test performed (QLFT, QNFT -- irritant smoke, saccharin, etc.);
- Make, model, and size of the respirator fitted;
- Date of the fit test;
- Pass/fail results if a QLFT is used; or
- Fit factor and strip chart recording or other record of the test results if quantitative fit testing was performed.

The form in "Appendix C: Respirator Fit Test Record" will be used to document employee fit testing.

The Program Administrator will retain employee training records that include the names of employees trained and the dates when training was conducted.



The Program Administrator will keep a current copy of Elder Demolition, Inc., written respiratory protection program in the office. All written materials required to be maintained under the recordkeeping requirements will be made available, upon request, to the employee who is subject of the records and to the director or the director's designee of the Washington State Department of Labor and Industries for examination and copying.

## **27.0** LOCK-OUT / TAG-OUT (OSHA 29 CFR 19.10.147)

## LOCK-OUT/TAG-OUT REQUIREMENTS

## **Program Overview**

Elder Demolition employees need special authorization to perform lock-out tag-out procedures. That authorization has to come in the form of offsite training and approved by the President. The intent of this program is to provide training of our employees working around such locked devices.

The intended use of the lock-out procedure is to make it impossible for targeted equipment or machinery to operate, by a variety of methods. One of the most obvious methods is by placing one or more locks on the switch, circuit breaker, fuse or other power source to a piece of equipment. Lock-out is used when repairing, maintaining, or checking the operation of, or performing other work around, energized machinery or equipment. All employees performing lock-out must provide their name and phone number in the appropriate Lock-out Log.

By the same token, tag-out is provided as a second and sometime co-existing method to warn others not to energize equipment when there may be exposure to others. Tag-out is only considered as a stand-alone process when there is no feasible method to physically lock the sources of energy relative to the equipment in question. Tags are only warning devices. They do not provide any physical restraint. Tags are also required to contain identifying information of the person who applied the tag, the date it was applied, and their phone number. Tags must be securely attached to each source of energy that cannot be physically locked out, must be easy to read, and are never to be removed by anyone other than the person who applied it. They must also enter the information in the appropriate Lock-out Log.

## **Authorized Employees**

These are employees who have received adequate training in completing Lock-out/Tag-out procedures and who perform service, maintenance and emergency repair to equipment which has been locked out or tagged out. Authorized employees must be trained in how to identify magnitudes and typed of energy, recognize energy hazards, and know the acceptable means and methods to perform Lock-out/Tag-out.

## **Affected Employees**

These are employees who operate equipment from which power may be isolated, or work in the area where servicing or equipment or machinery will be performed. Affected employees are to



be trained to understand the purpose of energy control, the use of the procedures to control energy, and how to Lock-out/Tag-out can apply to their specific job.

## **Other Employees**

Training as outlined above must be available and provided to any other employees whose work operations are or may be in an area where energy control procedures may be used.

For Authorized and Affected Employees, and Other Employees as applicable, training is to occur initially and when there is a change in job assignment, in machines, in the energy control procedures, or a new hazard is introduced. Training will occur in classroom settings and at shop and field equipment typically locked out or tagged out (i.e. hands-on experience with energy isolating devices, etc.). Training shall be documented, signed and certified.

## Types of Energy

There are numerous types of energy that must be considered. It is not limited to electrical. These include but are not limited to:

ELECTRICAL (AC AND D	C) HEAT	STEAM GRAVITY	WATER
CHEMICAL	SPRING HYDRAULIC	AIR LIG	GHT MAGNETIC

## **Associated Hazards**

There are a number of hazards associated with each of the types of energy. These include shock and electrocution (death by electric shock), burns, asphyxiation, crushing, and sudden impact, to name a few. Know what hazards they may relate to with the various energy sources listed, especially regarding your job description and the work you do or are around in the course of your work. Know what type of energy isolating devices is applicable with such energy sources.

## **Procedures for Energy Control**

When it is determined that a piece of equipment must be shut down for maintenance or repair, the following points must be reviewed and considered at the equipment with the authorized employee, affected employee, or other employees if any, and before the equipment or machine is turned off.

- The types and magnitudes of energy available at or used by the equipment.
- The hazards associated with the energy to be controlled.
- The methods and means that will be used to control the energy.

Once these points are determined, the equipment can be turned off or shut down in an orderly fashion only by following established procedures for such a shut down. Application of energy isolating devices are needed to control the energy to the equipment or produced by the equipment or situation, and used effectively. The objective is to have the equipment in a zero-energy state. The applied energy controlling devices will physically prevent the transmission or release of energy. Examples of places of application may include:



- on/off switch,
- circuit breakers,
- disconnect switches,
- valve covers,
- selector switches,
- cribbing or blocking under elevated loads,
- chains or devices to release spring tension or prevent its release,
- blocking of rotating parts and spindles,
- bleeding of valves controlling air, water, or steam pressure,
- blanking pipes, etc.

All steps must be taken to relieve, disconnect, control, restrain, or otherwise render safe any stored or residual energy source.

## **Typical Application in Many Cases**

Don't avoid considering all such sources or the types of isolating devices that may be needed. However, one of the most common devices used, as mentioned early, is the use of locks. When locks are used, they will each contain an accompanying tag on which the employee is to identify himself/herself, and how to contact them. When locks are used:

- A lock is assigned to one person. Each person who works on the locked equipment must also have their own lock(s).
- Don't fail to realize that there may be numerous places where a single task requires a machine or piece of equipment to be locked. Therefore, one worker may have multiple locks on the same process, but in different places. Still, each lock must be traceable to only one person.
- Locks are not transferable over a work shift or personnel change. Locks are returned, and new locks are issued. This process assures continuity of the procedures and all employees understand the energy sources that were identified.
- Each person who locks out an energy source must maintain the key(s) to their lock(s) on their person. They are never allowed to give their key to anyone else during the lockout.
- Locks and keys are numbered alike. Lock numbers <u>are to be recorded out/in</u> on the Lock-out Log as instructed by your foreman.
- When the work is complete, the lock(s) are only to be removed by the worker who installed their lock(s). Special instruction may apply.
- When more than one employee must lock to the same energy control device, the use of a multi-hasp (or lock tree) must be applied. This way, the energy source stays controlled and locked for all employees even if one of a work team completes their work and removes their lock. Another similar process is to use a lock box where one lock is applied to a lock-out point, the key is put inside a box that can be locked, and all locks are applied to the outside of the box. Until all locks are removed from the outside of



the box, the key to control the lock at the energy source cannot be obtained to remove that final lock at the source.

Energy isolating devices that cannot be locked out must have tags attached. Remember, this action is last resort if physical locking cannot be accomplished. The tags are to contain the name, date, and phone number of the authorized employee. Tags must be securely attached to each non-lockable energy isolating device, and easy to read. They are never to be ignored, defeated, or removed without authorization. Application of tags would include attachment to blocks for securing movable parts or to any mechanical device that physically prevents the transmission or release of energy.

## **Verification of Isolation**

Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized employee must verify that all isolation devices are in place, and all energy sources are controlled. They must log the lock and tag identification in the Lock-out Log book, and have another person verify their control devices and initial in the appropriate section in the Lock-out Log book.

## **Restoring Equipment to Operation**

Once all work is completed on a locked out or tagged out piece of equipment or process:

- Clear the machine or equipment of tools and all non-essential items including guards, barriers, etc. Ensure that machine or equipment components are operationally intact.
- Remove employees from the machine or equipment area or make sure they are safely positioned.
- Have each employee remove the lock or tag from the energy isolating devices they placed.
- Notify any affected employees that the lock and tag devices have been removed.
- Test start the equipment or machine.

## Summary

Failure to properly control energy, which results in being exposed to the potential to a variety of energy sources, is one of the leading causes of serious injury and death both in general and construction industries. Take this process extremely seriously. It is not only unlawful should you fail to follow procedures, it is also the accepted process at ELDER DEMOLITION and can lead to disciplinary actions when not compliant.

## 28.0 SUBCONTRACTOR MANAGEMENT

SUBCONTRACTOR MANAGEMENT GUIDELINES



All subcontractors shall go through an approval process prior to being brought on an ISNET contractor's site. Subs will be pre-qualified through ISNET by reviewing their safety programs, documents and statistics.

The qualification shall include metrics such as TRIR, EMR, DART, Fatality Rate as criteria for selecting subcontractors.

All subcontractors will be included in Elder Demolition site safety meetings and planning for all safety related topics. These meetings include pre-job, kick-off, tailgate meetings, job safety analysis or hazard assessments.

Once a subcontractor's work is complete the competent person on the project shall conduct a post-job safety performance review and report back to their supervisor for future use of said subcontractor.