

**Analysis of Brownfields Cleanup Alternatives – Preliminary Evaluation**

**Former Mo’s Lounge Property  
111 S. Main St., Piqua Ohio 45356**

**ACRES Property ID: 175702**

**AUGUST 23, 2017**

**Prepared By: The City of Piqua**

**I. Introduction & Background**

**a. Site Location**

The site is located at 111 S. Main Street, Piqua Ohio 45356 (herein referred to as “the Site”), one-half block south of East Water Street in Piqua, Ohio. The Site is approximately 0.1 acres and contains a 9,200 square foot two-story structure with a basement.

**b. Previous Site Use(s) and any previous cleanup/remediation**

The Site was first developed as early as 1887, but the current building was not built until 1930. Historically the building has had many uses including bottling, and laundry. The Site was utilized as a Moose Lodge (meeting place for the Loyal Order of Moose) from at least 1960 to 1975. It was redeveloped as Mo’s Lounge & South Sea Restaurant in 1980. The restaurant and bar operated until 2003. It was most recently sold to the City of Piqua in 2014 and is currently vacant. There has not been any prior cleanup/remediation known at the Site. The Site is vacant other than some items left from previous restaurant operations and items for renovations being stored.

**c. Site Assessment Findings**

The City of Piqua hired T & M Associates to prepare an ASTM Phase I Report for the Site, dated July 2014. The ASTM Phase I Report did not reveal Recognized Environmental Conditions (RECs), historical RECs, or controlled RECs in connection with the Site with the exception of the following:

**REC 1: Possible Former Coal-Fired Furnace**

The gas-fired furnace located in the basement may have historically been fired by coal or fuel oil before being converted to natural gas. Potential releases from historical use of coal and fuel oil could have impacted the Site.

**REC 2: Potential Releases from Neighboring Properties**

Potential releases from historical operations on neighboring properties are also of concern. The parcels on the block just west (and potentially up gradient) historically housed a transformer yard, auto operations, the Miami Light Heat & Power Company, Dayton Power & Light Company, and Zollingers (wholesale grocery distributor with possible on-site fleet fueling operations). The area further west historically housed

Linseed Oil Works Company, Piqua Street Railway Company, Miami Valley Electric Company, Car Barn Repair Shop, and the Dayton & Troy Electric Railroad Company. Potential releases from historical site operations and chemical handling at these facilities could have impacted the Site.

It was recommended that a Phase II ESA be performed, where soil samples from different locations beneath the basement floor are collected. The samples should be analyzed, at a minimum, for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and Resource Conservation and Recovery Act (RCRA) metals.

Should any of these chemical constituents be detected in the subsurface soil at levels of concern, potential migration to groundwater should be assessed through a groundwater monitoring investigation. In addition, if contamination is found in groundwater or unsaturated soils, a comprehensive assessment of the vapor intrusion pathway should be conducted.

Additional recommendations, while beyond the scope of the ESA, include:

- A study conducted by the previous owner, Joseph Drapp, confirmed the presence of asbestos and lead paint throughout the building. These materials should be properly addressed as part of any future redevelopment.
- Universal-like waste materials throughout the Site should be properly disposed. This includes items such as oils, paints, and degreasers.
- Because of the significant water damage, the potential presence of mold within the building is also a concern.

In October 2015, T & M Associates conducted Phase II site assessment activities to evaluate the extent of contamination remaining at the Site. Since the redevelopment objectives under consideration include renovation and restoration of the existing building for commercial use, T & M Associates compared analytical results to the Ohio Voluntary Action Program (VAP) Generic Direct-Contact Soil Standards (GDCSS) for two scenarios: Commercial/Industrial Land Use and Construction/Excavation Activity.

Based on the analytical results, T & M Associates has prepared the following conclusions and recommendations:

Environmental

- No VOCs, PCBs, TPH-GRO or TPH-DRO were detected at concentrations exceeding laboratory reporting limits. It is unlikely these COCs pose a significant environmental risk to future commercial or industrial tenants at the Site.

- Concentrations of TPH-ORO, various SVOCs, and several RCRA metals were detected above reporting limits in one or more samples collected less than 4 feet beneath the basement floor. None of these detections exceed Ohio VAP GDCSS for a Single Chemical under Commercial/Industrial or Construction/Excavation Activity scenarios. Therefore, these compounds do not represent an environmental risk for redeveloping the Property for commercial/industrial purposes.
- Lead was detected in one sample at 2,000 mg/kg. This concentration exceeds the Ohio VAP GDCSS for Commercial/Industrial and Construction/Excavation Activities scenarios. However:
  - Lead is not volatile, and therefore volatilization to indoor air is not a viable potential exposure pathway.
  - Lead is not mobile in the environment and is bound to the mineralogy of the soil and fill materials. Because groundwater within the vicinity of the Property is encountered within the limestone bedrock at depths of 40 or more feet below grade, it is highly unlikely that the elevated shallow lead concentrations discovered during this investigation could migrate to groundwater and off-Property.
  - If the building foundation is left in place, the direct-contact exposure pathway will be eliminated for the redevelopment and reuse of the Site.
  - If the basement floor slab is removed during redevelopment, then construction specifications should include provisions for worker safety (e.g. personal protective equipment) and/or delineation and removal of affected fill material (soil) followed by verification sampling and backfill with clean material.

#### Asbestos

- Significant quantities of asbestos-containing materials were encountered throughout the building interior and exterior, including window caulking, acoustical plaster, various adhesives and mastics, firebrick, pipe and electrical insulation, boiler gaskets and firebrick, fire doors, and electrical components.
- Current Federal and State regulations require special asbestos abatement procedures prior to building demolition that will disturb confirmed or assumed friable or potentially-friable asbestos-containing materials. Prior to renovation or demolition, asbestos-containing materials should be removed using a licensed asbestos abatement contractor.
- Helix Environmental Inc. provided cost estimates for the abatement of the confirmed asbestos-containing materials:
  - Original Building footprint: \$254,600
  - East Addition: \$14,100

### Lead-Based Paint

- A total of 20 suspect lead containing coating samples were collected in the building in an attempt to document the probability that detectable concentrations of lead are present on painted or coated surfaces. Eighteen of the 19 samples collected in the Original Building contained detectable concentrations of lead, with many containing more than 0.5% lead. A single paint-film sample collected in the East Addition was also reported to contain detectable levels of lead.
- Because the City anticipates a commercial redevelopment, the prospective new owner or tenants should be advised of the presence of lead-based paint and provided with a copy of the inspection report. There are no regulations requiring abatement of lead-based paint or coatings for commercial/industrial use except when considering potential construction worker exposure during renovation/demolition and in cases where the commercial use involves child occupancy.
- Because detectable concentrations of lead were documented in the Original Building and in the East Addition, renovation/demolition contractors must comply with the requirements of the OSHA Construction Industry Lead regulations during any work which may disturb lead-containing coatings.
- If the building is renovated for re-use as residences, child-care or child education purposes where children under age seven will be expected to spend time on a regular basis, then a lead-based paint risk assessment should be performed after the renovation is complete to document that the renovated building will not present lead hazards for the children. If lead hazards are found in surface dust at that time, then the hazards can be rectified by lead cleaning.

#### **d. Project Goal**

The planned reuse of the Site is commercial use. The Site is currently zoned commercial. In 2012, the City of Piqua completed a Downtown Riverfront District Development Strategy Plan that identified six properties abutting and/or in close proximity to the Riverfront as priorities for environmental investigation and potential redevelopment. As part of the strategic process, community workshops were held and the community input that was received was that the former Mo's Lounge was one of priority redevelopment properties. The former Mo's Lounge is a unique property for two major reasons. First it is located atop the Great Miami River levee overlooking the river. Secondly, the building is the only structure in this area that opens directly to the Great Miami River Recreational Trail which opens up economic development opportunities to have a canoe/kayak livery and/or bike shop. Discussions with regional River recreational organizations confirmed that the former

Mo's Lounge provides a significant opportunity for Piqua's riverfront, as the growing number of recreationalists who utilize the River and the trail system cite the lack of supplies, services, food and drink, and bike or boat operations as a major deficiency in the amenities of the River's system. By abating the asbestos the Site will become a more desirable property for a developer to purchase and renovate.

## **II. Applicable Regulations and Cleanup Standards**

### **a. Cleanup Oversight Responsibility**

The asbestos abatement will be overseen by the Regional Air Pollution Control Agency (RAPCA) and staff from the City of Piqua's Development Department.

### **b. Cleanup Standards for major contaminants**

- U.S. EPA established regulations that apply to friable and potentially friable materials with asbestos content in excess of one percent, as determined by PLM;
- Occupational Safety and Health Administration (OSHA) has promulgated an eight-hour Time-Weighted Average (TWA) Permissible Exposure Limit of 0.1 fibers/cc for airborne asbestos exposures while working in and around asbestos-containing materials;
- American Conference of Governmental Industrial Hygienists (ACGIH) recommends an airborne eight-hour TWA Threshold Limit Value of 0.1 fibers/cc (2014 TLVs and BEIs);
- National Institute for Occupational Safety and Health (NIOSH) identifies asbestos as an occupational carcinogen, and recommends that occupational exposures be "limited to the lowest feasible concentration";
- Ohio Department of Health (ODOH) has established additional regulations for asbestos abatement, including certification program for asbestos supervisors, workers, hazard evaluation specialists, project designers, and air monitoring technicians.

### **c. Laws & Regulations Applicable to the Cleanup**

Laws and regulations that are applicable to this cleanup include the Federal Small Business Liability Relief and Brownfields Revitalization Act; Federal Davis-Bacon Act; state environmental law, and City Ordinances. Federal, state and local laws regarding procurement of contractors to conduct the cleanup will be followed. In addition, all appropriate permits i.e. OEPA Notification of Demolition and Renovation Form will be obtained prior to the work commencing.

### **III. Evaluation of Cleanup Alternatives**

#### **a. Cleanup Alternatives Considered**

To address contamination at the Site, three different alternatives were considered, including Alternative #1: No Action, Alternative #2: Abate the asbestos, Alternative #3: Demolition of the Site.

#### **b. Cost Estimate of Cleanup Alternatives**

To satisfy EPA requirements, the effectiveness, implementability, and cost of each alternative must be considered prior to selecting a recommend cleanup alternative.

##### Effectiveness

- Alternative #1: No Action is not effective in eliminating the slum and blight of the existing building. If no action is taken then the Site will continue to deteriorate and will be beyond restoring this unique structure.
- Alternative #2: Abating the asbestos will allow the Site to be a more favorable property for a developer to purchase and restore. This is a more cost effective alternative compared to demolition. Also, this alternative preserves an unique property along the Great Miami River Recreational Trail bringing economic investment back into the City of Piqua.
- Alternative #3: Demolition of the Site with the end use as green space. This alternative would be extremely costly since you would still have to abate the asbestos prior to the demolition.

##### Implementability

- Alternative #1: No Action is easy to implement since no actions will be conducted.
- Alternative #2: The asbestos abatement will be expensive but the economic impact will be huge to the City of Piqua once a developer restores the commercial property. The asbestos survey has been completed and the proper procurement of hiring an asbestos abatement contractor will need to occur to implement this alternative.
- Alternative #3: Demolition of the Site will be the most costly alternative. The cost to demolish the Site will be significant not to mention the loss of economic investment that would occur once the building is gone.


##### Cost

- There will be no costs under Alternative #1: No Action
- It is estimated that Alternative #2: Asbestos Abatement at the Site will be on the order of \$268,700.

- Alternative #3: Demolition of the site and restored to green space is estimated to cost roughly \$349,000, which includes the asbestos abatement.

**c. Recommended Cleanup Alternative**


The recommended cleanup alternative is Alternative #2: Asbestos Abatement of the Site. Alternative #1: No Action cannot be recommended since it does not address the existing deterioration of the structure. If the Site is left as is it will continue to be a blighted impact on the Downtown Riverfront District. Alternative #2: Asbestos Abatement is less expensive than demolition and has an advantageous economic impact once a developer restores the Site into a restaurant, outdoor sporting goods store, and office retail. Alternative #3: Demolition would eliminate the slum and blight of the Site, but the City would lose this unique structure and the potential economic investment it has.

  
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Gary A. Huff, City Manager  
City of Piqua

8-25-17  
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Date

STATE OF OHIO  
MIAMI COUNTY/ ss:

The foregoing instrument was acknowledged before me this 25<sup>th</sup> day of August, 2017, by Gary A. Huff, City Manager, City of Piqua.

  
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Notary Public



**DEBORAH ANN STEIN**  
Notary Public, State of Ohio  
My Commission Expires 11/14/2019

This instrument prepared by Nikki Reese, Piqua Development Program Manager.