DRAFT ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES
FORMER FAMILY INDEPENDENCE AGENCY
2320 WEST PIERSON ROAD
FLINT, MICHIGAN 48504

Prepared by AKT Peerless for GENESEE COUNTY LAND BANK AUTHORITY 452 SOUTH SAGINAW STREET, 2<sup>ND</sup> FLOOR FLINT, MICHIGAN 48502

# **TABLE OF CONTENTS**

TABLE OF CONTENTSI					
1.0	INTRO	DUCTION	. 1		
2.0	ВАСКО	GROUND	. 1		
	2.1	SITE DESCRIPTION	. 1		
	2.2	SITE HISTORY	. 2		
	2.3	PREVIOUS ENVIRONMENTAL INVESTIGATIONS	. 2		
	2.4	CURRENT ENVIRONMENTAL CONCERNS	. 2		
3.0	PROPO	OSED CLEANUP OBJECTIVES	. 3		
	3.1	POTENTIAL CLEANUP ALTERNATIVES	. 3		
	3.2	RECOMMENDED CLEANUP ALTERNATIVE	. 5		
4.0	CONCI	LUSION	. 5		

# 1.0 INTRODUCTION

This DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA) was prepared by the Genesee County Land Bank Authority (GCLBA). The ABCA is a required element of the application for a Hazardous Substances Brownfield Cleanup (Cleanup Grant) submitted by the GCLBA to the United States Environmental Protection Agency (USEPA). This ABCA will be re-evaluated and revised to reflect any updated information should the grant be awarded.

If awarded, the Cleanup Grant will fund the cleanup of 2320 West Pierson Road, Flint, Genesee County, Michigan (subject property).

# 2.0 BACKGROUND

## 2.1 SITE DESCRIPTION

The subject property is located in the southwest ¼ of the southwest ¼ of Section 26 in the City of Flint (T.8N. /R.6E.), Genesee County, Michigan. The subject property is located north of West Pierson Road, east of Clio Road, and west of Cloverlawn Drive.

It consists of an irregular shaped parcel that contains approximately 6.91 acres. The current owner of the subject property is the GCLBA. The subject property is unoccupied. The subject property's parcel identification number is 46-26-351-045 and is zoned D-5, Metropolitan Commercial Service District.

The subject property is currently improved with a blighted, unoccupied, commercial building, most recently utilized for administrative/retail purposes. The subject property is located in an area of the City of Flint that is characterized by commercial and residential properties.

General information regarding the on-site building (the subject building) is presented in the following table:

General Construction	One-story, flat roof, steel frame, brick and concrete block exterior, concrete slab on grade foundation, no basement.
Predominant Interior Finish	Concrete, drywall, paint, wood, metal, glass, ceramic tile, ceiling tile, vinyl floor tile, carpet
Square Footage (total)	99,958
Construction and Other Improvement Dates	Constructed in 1961
Interior Areas	Interior areas retail/office space, utility rooms, warehouse, and bathrooms

Non-structural improvements at the subject property are limited to an asphalt parking lot and limited greenbelts.

## 2.2 SITE HISTORY

From at least 1937 to 1960, the subject property was utilized for agricultural purpose. In 1961, the subject property was developed with the subject building. The subject property was utilized as a department store and for multi-tenant commercial purposes from 1961 to 2014. Since 2014, the subject property has been unoccupied.

# 2.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Following is a list of environmental investigations that have been conducted at the subject property:

- July 2016 Pre-Demolition Hazardous Materials Survey conducted by AKT Peerless on behalf of the GCLBA;
- August 2016 Phase I ESA prepared by AKT Peerless on behalf of the GCLBA; and
- November 2016 Phase II ESA conducted on the subject property by AKT Peerless on behalf of the GCLBA.

Copies of all reports are on file with the GCLBA, 452 South Saginaw Street, 2<sup>nd</sup> Floor, Flint, Michigan 48502, and will be made available for public review with the final ABCA.

# 2.4 CURRENT ENVIRONMENTAL CONCERNS

In July 2016, AKT Peerless conducted a pre-demolition materials survey of the subject building to identify asbestos-containing materials (ACMs) and other regulated materials located on the subject property. The following ACMs were identified at the subject property:

Material Description	Estimated Quantity	Friable (F) / Non-friable (NF)
Joint Compound	Throughout	NF
9" Red Floor Tile	45,000 SF	NF
9" Tan Floor Tile	45,000 SF	NF
Roofing Materials	99,500 SF	NF
Suspect Transite Pipe	25 LF	NF
12" Black and White Floor Tile	2,100 SF	NF
Cream Pattern Linoleum	40 SF	NF
12" Cream Floor Tiles	425 SF	NF
12" Cream Pattern Floor Tile	894 SF	NF
Vermiculite	NE	F

Material Description	Estimated Quantity	Friable (F) / Non-friable (NF)
12" Cream Floor Tiles	1,032 SF	NF
White Textured Ceiling Paint	156 SF	F
Suspect Transite Panels	692 SF	NF
12" Black and 12" White Floor Tile	200 SF	NF
12" Cream Pattern Floor Tile	19,448 SF	NF
12" Cream Floor Tile	40 SF	NF
18"- 24" Mud Fittings	1 CT	F
4" - 18" Mud Fittings	6 CT	F
9" Tan Floor Tile	1,361 SF	NF
12" Cream Floor Tile	432 SF	NF
Duct Wrap Seam	14 LF	F
Window Caulk	NE	F
Fire Doors and Frames	14 CT	NF

This magnitude of severely damaged materials is the result of fire, widespread failure of the building weather envelope leading to water intrusion, and deterioration of structural components. Further building deterioration could lead to conditions whereby the friable asbestos is no longer contained inside the building and becomes a threat to the outside environment.

Due to the unsafe nature of the building, the asbestos abatement activities cannot be completed; therefore, the building will need to be demolished under the Order Demolition provisions of the NESHAP rule 40 CFR 61.145 (a)(3).

# 3.0 PROPOSED CLEANUP OBJECTIVES

The GCLBA intends to use the USEPA Cleanup Grant to fund the accessible abatement, demolition, site assessment, and site prep for future development. The proposed cleanup will allow for demolition of the subject building and prepare the subject property for future redevelopment of a grocery store.

## 3.1 POTENTIAL CLEANUP ALTERNATIVES

# Option No. 1 – No Action

*Effectiveness:* A no-action alternative will not mitigate the threat to human health and the environment that is known to exist on the subject property and will not facilitate demolition of the subject building for redevelopment of the subject property. Continued, unchecked deterioration of the building could potentially result in an increased threat to human health and the environment. As breaches in the building envelope become more severe,

damaged/deteriorated asbestos could become airborne and be liberated into the air and environment.

The no-action alternative is not recommended as it is not compatible with regulatory requirements or the goals of reducing the threat to human health and the environment, and will impede future redevelopment of the subject property.

*Implementation*: The no-action option is not feasible because, according to regulatory requirements, regulated asbestos-containing materials are required to be removed from a structure before demolition can be performed, unless the structure is demolished under the Order Demolition provisions of the NESHAP rule 40 CFR 61.145 (a)(3).

**Cost:** A no-action alternative would represent the lowest cost initially, but continued, unchecked deterioration of the building could result in fugitive releases to the surrounding community.

# Option No. 2 – Asbestos Abatement by Demolition

## Asbestos Abatement

*Effectiveness:* Due to the condition of the structure and the known presence of asbestos containing materials, the building will be demolished under the Order Demolition provisions of the NESHAP rule 40 CFR 61.145 (a)(3). This method will allow the contractor to raze the building and treat all the demolished material as asbestos containing. As the building has been subject to fire and water damage, it is not feasible due to safety concerns, to abate the known asbestos containing materials.

This alternative will mitigate the threat to human health and the environment that is known to exist on the subject property and will facilitate demolition of the subject building for redevelopment of the subject property. In addition, this option is required by regulation in advance of building demolition.

*Implementation:* This option is technically feasible.

A biddable specification package will be prepared to include all necessary design drawings, technical specifications, and general requirements. The package will be suitable for bidding purposes to secure a contractor to implement the corrective action, as applicable.

The approved contractor will submit a joint Notification of Intent to Renovate/Demolish (Notification) form to the Michigan Department of Environmental Quality (MDEQ), Air Quality Division and the MDELEG Asbestos Program in advance of demolition. The Notification will be submitted ten working days prior to on-site activities. The Notification summarizes the project description, schedule, approved contractor, facility owner, disposal location, and engineering controls, etc.

Air clearance samples will be collected during demolition activities to verify that fugitive asbestos dust is not present. The final air clearance criterion established by specification for this project is the level referenced in 40 CFR Part 763, Subpart E, of the EPA Asbestos in Schools Rule of 0.01 fibers per cubic centimeter of air or the background level as measured before the start of demolition. Clearance samples will be analyzed by phase contrast optical microscopy. Properly trained and equipped personnel shall perform all work.

## 3.2 RECOMMENDED CLEANUP ALTERNATIVE

Option No. 2 is recommended for the subject property, as it is feasible to implement, will mitigate risks to human health and the environment, and will provide a long term cleanup response. In addition, this alternative is necessary to support demolition of the structure and the intended future use of the subject property. It has been determined that Option No. 1 will not mitigate, but my actually increase, the threat to human health and the environment that is known to exist on the subject property, will not facilitate/meet project goals, and will not meet regulatory requirements.

# 4.0 **CONCLUSION**

Remedial alternatives were evaluated based on effectiveness, ease of implementation, cost, and the potential future use of the property.

The no-action alternative (Option No.1) will not mitigate, but may increase, the threat to human health and the environment that is known to exist on the subject property, will not facilitate/meet project goals and will not meet regulatory requirements. The GCLBA has recommended not proceeding with Option No.1.

The asbestos abatement by demolition alternative is technically feasible and implementable, will mitigate risks to human health and the environment, and will provide a long term cleanup response in the most cost-effective manner. In addition, this alternative is necessary to support the intended future use of the property. The GCLBA has recommended proceeding with Option No. 2 regarding asbestos-containing materials.

