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DRAFT ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES

CONGREGATION ADATH ISRAEL
111 HUNTINGTOWN ROAD SITE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BROWNFIELDS CLEANUP GRANT

PREPARED FOR:
FY2022 Brownfields Cleanup Grant

PREPARED BY:
Board Members of Congregation Adath Israel

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1.0 Introduction

This document presents an Analysis of Brownfields Cleanup Alternatives (ABCA) for Congregation Adath Israel's building site located on 111 Huntingtown Road.

This report was prepared by members of Congregation Adath Israel's Board in conjunction with consultation from local environmental experts and environmental contractors in order to meet required documentation for United States Environmental Protection Agency (EPA) Brownfields Cleanup Grant awards.

This document is a draft format and will be revised pursuant to public comment and following any further required technical reviews.

Purpose and Scope include:
Under the EPA Brownfields Grant, recipients must supply an ABCA that includes:

- Information about the site and contamination issues (i.e. exposure pathways, Identification of contaminant sources, etc.), cleanup standards, applicable laws, alternatives considered, and the proposed cleanup method;
- Effectiveness, implementability, and the cost of alternatives, including the preferred or proposed cleanup alternative.

2.0 Site History & Background

The Newtown Jewish Community began with the immigration of several families from Russia, Poland, Austria, Hungary & Germany. Orthodox Jewish immigrants fleeing poverty and persecution in Eastern Europe were encouraged to become farmers in Connecticut. One sponsor of this initiative was the Jewish Agricultural and Industrial Aid Society, which was a subsidiary of the Baron de Hirsch Fund. Beginning in 1891, Baron Maurice de Hirsch, a Jewish German philanthropist, helped finance several of the immigrant communities in Connecticut and throughout the world. The town of Newtown was one of those benefactors.

Those first Jewish settlers arrived in Newtown around 1906 with the help and support of the aforementioned funding and programs. Other Jewish farmers followed, purchasing land and buildings and creating a thriving Jewish community in the area now known as Huntingtown Road. That community still exists today as Congregation Adath Israel with many members descending from the original founders and some members continuing to own and harvest the very same farmland. This is a true testament to the longevity and importance of this community in Newtown's history and the fabric of its society.

Initially, these Jewish settlers conducted their religious services and worshipped in their homes. As the community grew and thrived, it was decided to build a synagogue and school to support their community. On July 4, 1914, ground was broken for the synagogue on land donated by Israel & Rose Nezvesky. In 1919, the cornerstone was laid for the new building. In 1920, construction was completed, and the new synagogue and school opened its doors for services and community gatherings.

Image1: Photos of groundbreaking and completed building circa ~1914 and ~1920, respectively:

During the 1980s the building was renovated and upgraded. The building expanded to include a rabbi's study and another classroom space on the main floor. A beautiful new ark was constructed to enhance the sanctuary.

Image 2: Photos of renovated Synagogue on 111 Huntingtown Road circa ~1980s:

By the early 2000's it became clear that the building on 111 Huntingtown Road could no longer be practically maintained and serviceable for Congregation Adath Israel. On April 10, 2005 a ground-breaking ceremony was held to build a new synagogue and school just two building lots away at Congregation Adath Israel's present home of 115 Huntingtown Road – with the land again being donated by the generous descendants of the original founders.

At present, the former synagogue site at 111 Huntingtown Road can no longer be practically or economically maintained. In 2020, the Board of Directors received approval from the congregation members to proceed with the demolition of this old site. And consequently, environmental studies were conducted shown herein where some of the original building materials were found to have contained asbestos. By the summer of 2020, the Board of Directors received bids to appropriately abate

and clean-up the asbestos material and then demolish the building. After careful review of these costs, it was decided to pursue the possibility of applying for a federal environmental grant given the financial fragility of the congregation in hopes of responsibly dealing with the contaminated material and assuring the ongoing sustainability our community.

3.0 Hazardous Substances On-Site

In June of 2020, Congregation Adath Israel contracted Superior Industries, LLC to perform an asbestos inspection and report to determine the presence of any Asbestos Containing Material (ACM). Superior Industries, LLC is a licensed environmental laboratory by the State of Connecticut to perform such analyses.

Summary Results from Superior Industry Survey & Report – June 11, 2020:

[Complete report analytics on file with Congregation Adath Israel Office and provided to relevant contractors for purpose of quotation for abatement and demolition of site]

Table 1: Summary Results of Superior Industry ACM analysis

2.2 Results

Utilizing the USEPA protocol and criteria, materials determined to be ACM are listed in Table 1 "Asbestos Containing Materials" including their location and estimated quantities.

Table I Asbestos Containing Materials		
Location	Material	Quantity
1st Floor Main Room	Glue Daubs (Dark Brown)	~1,300 square feet
Basement Rooms	Floor Tile (9x9 Terra Cotta--Bottom Layer)	~1000 square feet

Table I Asbestos Containing Materials		
Location	Material	Quantity
Basement Rooms	Mastic (Black--Associated with 9x9 floor tile)	~1,000 square feet
Basement Furnace Room	Transite (Grey)	~5 square feet
Basement Hall @ Bathrooms	Floor Tile (Light Brown)	~165 square feet
Basement Hall @ Bathrooms	Mastic (Black—Associated with Floor Tile)	~165 square feet

The indication of asbestos is a concern because asbestos minerals tend to separate into microscopic particles that can remain in the air and are easily inhaled. Persons exposed to asbestos have developed several types of life-threatening diseases, including asbestosis and lung cancer. Although the use of asbestos and asbestos products has dramatically decreased, they are still found in many residential and commercial settings and continue to pose a health risk to potential occupants.

4.0 Nature of Threat to Public Health

The current threat to public health is the exposure to asbestos by individuals entering the building. Certain ACM in the building may be in poor condition that could cause the release of asbestos fibers to the air. For this reason, the building has been vacated and secured as we prepare for demolition of the site. Moreover, any demolition which may impact the affected material must be abated first in order to safely perform any subsequent demolition.

5.0 Cleanup Standards & Applicable Laws

Even though cancer risk from exposure to asbestos is most appropriately viewed as a chronic concern, short-term standards have been established by Occupational Safety and Health Administration (OSHA) to limit exposures of workers in the workplace. There are two types of short-term limits, as follows:

1. STEL (Short-term exposure limit): 1.0 PCM f/cc (fibers per cubic centimeters as detected using phase-contrast microscopy)
2. TWA PEL (8-hr time-weighted average [TWA] permissible exposure level [PEL]): 0.1 PCM f/cc (Source: EPA, 2003 - Libby Asbestos Site Residential/Commercial Cleanup Action Level and Clearance Criteria Technical Memorandum, Draft Final - December 15, 2003).

EPA AHERA regulations, (40 CFR 763) require clearance sampling after asbestos abatement activity. Leaf blowers and fans are used to disturb interior air and air samples are collected according to the standard method set forth in Appendix A of Subpart E of 40 CFR Part 763. The clearance criteria as set forth in this regulation are:

- PCM clearance criteria (for small areas): 0.01 f/cc
- TEM clearance criteria: 70 structures/mm2 on the filter, or no significant increase from exterior air sample results.

Although AHERA regulations apply to abatement in schools, the same standards are generally used for all abatement projects.

The following are applicable laws and regulations for ACM:

Asbestos is regulated by the AHERA, the Toxic Substances Control Act (TSCA), the Clean Air Act (CAA), the National Emission Standards for Hazardous Air Pollutants (NESHAPs), and Regulations of Connecticut State Agencies (RCSA), Sections 19a-14, 19a-17, 19a-332 to 19a-333, 20-435 to 20-442.

Further, to protect asbestos abatement workers, all asbestos abatement work must be performed in accordance with OSHA asbestos regulations as promulgated in Title 29 of the Code of Federal Regulations (29 CFR), Section 1926.1101. The following work practices should be followed whenever demolition/renovation activities involving asbestos-containing materials occur:

- Prepare abatement specifications by a Connecticut Department of Public Health licensed Asbestos Designer.
- Notify the Connecticut Department of Public Health of intention to demolish/renovate by the required notification form and receive approval for abatement activities.
- Remove all ACM from facility being demolished or renovated before any disruptive activity begins.
- Handle and dispose of all asbestos-containing materials in an approved manner (EPA, 2006a; Asbestos/NESHAP Regulated Asbestos-Containing Materials Guidance);
- Monitor asbestos abatement activities by a Connecticut Licensed Asbestos Project Monitor and Abatement Supervisor.
- Perform air clearance testing upon completion of ACM abatement; and
- Prepare an asbestos abatement Compliance Report.

6.0 Analysis of Cleanup Alternatives

Alternative 1: No-Action. A no-action alternative would leave the building in its present condition, making the building unusable for future use, and difficult to obtain private interest for the renovation and reuse of the building. The only advantages to no action are those related to immediate avoidance of expenses that would be incurred by taking action. However, in the long term, expenses associated with no action will certainly exceed those related to taking action at the present time due to the continued deterioration of the condition of the building, an inability to renovate and reuse the building, and potential exposures to and liability associated with unauthorized entrants.

- **Effectiveness:** A No-Action alternative would be entirely ineffective in achieving project goals of ultimate site demolition and ability to reuse the site in a safe productive way for the congregation and community. The continued presence of ACM as would be the case under the no-action alternative, would pose potential long-term health risk. Also, the presence and projected costs of removal of the materials will make it difficult to obtain private interest in leasing and renovating/reusing the building. The no-action alternative would be highly ineffectual in achieving the goals of reduction of health risks and facilitating the demolition of the building.

- **Implementation :** Implementation of the No-Action alternative would be fairly straightforward. The building would be left in the current unused state in which it currently exists. The identified ACM pose a hazard to those entering the building. The building would not be demolished, and the reclamation of the open space would not occur. Transfer and/or lease of the property to other parties would require notification of the presence of asbestos-containing materials. Under the No-action Alternative, the building will continue to deteriorate increasing the risk to

those entering the building making it more difficult to obtain private interest in leasing and renovating/reusing the building nearby. The building does not have reuse value.

- **Cost:** Direct costs associated with the No-Action Alternative and associated non-use of the building would consist of securing and insuring the site. These costs are difficult to estimate because it is uncertain whether obtaining viable insurance policies given the current degraded state of the building is even possible.

Alternative 2: A Dirty Demolition. This alternative would mean the entire structure is considered asbestos-containing waste. Based on the wide distribution of the contaminant, in consultation with an environmental consultant, it is deemed reasonable to consider this alternative in this situation. Asbestos was found to be present throughout both floors of this 2900 square foot structure. Justifiably the building can be considered for a dirty demolition.

- **Effectiveness:** This method would effectively remove the asbestos and decontaminate the area by removing the entire structure.
- **Implementation:** This would be done by a contractor who is a licensed asbestos abatement professional. All building materials would be considered contaminated and disposed of accordingly.
- **Cost:** Treating an entire structure as asbestos waste will increase the disposal cost but may lessen the labor cost involved with abatement. Depending on the quantities of asbestos and potential complexity of abatement, just treating all of it as asbestos waste may be more cost effective. We are unable to obtain a quote for this option. We believe this is due to the small size of the lot, the closeness of other dwellings & wells and the shared driveway beside the property.

Alternative 3: Removal of all Asbestos-Containing Materials. This alternative would address and properly remove all ACM including glue daubs affixing the ceiling tiles, floor tiles themselves, and the mastic. This would be done per EPA guidelines by a licensed environmental contractor prior to any demolition. This alternative has the advantage of removing all ACM in an appropriate manner, thereby allowing the site to be demolished and razed such that it can be utilized for green space or other productive purposes for the congregation and the community.

- **Effectiveness:** Alternative 3 would be highly effective in achieving the goal of eliminating exposures to asbestos for individuals in and around the building. Alternative 3 would be effective for the goal of facilitating the demolition of the building for removal.
- **Implementation :** Implementation of Alternative 3 would be performed by a certified asbestos contractor.
- **Cost:** The Board of the congregation secured two estimates ranging from $66,400 to $88,300 for abatement of asbestos only. The demolition and creation of green space will be funded separately from this grant by Congregation Adath Israel and their community partners

7.0 Analysis of Cleanup Alternatives

1) An Analysis of Brownfields Cleanup Alternatives (ABCA) has been performed for asbestos substances abatement alternatives for 111 Huntingtown Road that are to be addressed using monies provided by the EPA Brownfields Grant. Three alternatives were considered for implementability, cost, and effectiveness:

1. No Action
2. A Dirty Demolition
3. Abate all Asbestos-Containing Materials

The No Action option does not meet the criteria for abatement, demolition and eventual site redevelopment and improvement.

The Dirty Demolition option may not be possible because contractors have been unwilling to provide a cost estimate. Therefore, this is not a viable option.

The Abate all Asbestos-Containing Materials alternative is the most viable option in meeting the grant criteria for the Brownfields Cleanup. It addresses the core problem, which is the asbestos contamination throughout the building. It affords us the ability to safely decontaminate the building prior to its demolition, and the reclaiming of the site for green space.

8.0 Authorization and Implementation

The acting Board of Congregation Adath Israel has sought and received approval from its members to fund and properly demolish the site at 111 Huntingtown Road for a cost not to exceed $35,000 meanwhile pursuing all available grant opportunities to defray such costs.

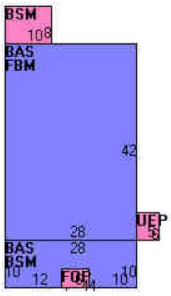
Field Card for 111 Huntingtown Road:

Field	Description
STYLE	Churches
MODEL	Comm/Ind
Grade	C-
Stories:	1
Occupancy	1
Exterior Wall 1	Clapboard
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Arch Shingles
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Hardwood
Interior Floor 2	
Heating Fuel	Oil
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	RELIGIOUS
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	NONE
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	LIGHT
Wall Height	13
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos/NewtownCTPhotos//\00\02\08/00.jpg)

Building Layout



(http://images.vgsi.com/photos/NewtownCTPhotos//Sketches/1187_1187.jp

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	1,432	1,432
BSM	Basement	336	0
FBM	Finished Basement	1,176	0
FOP	Open Porch	24	0
UEP	Unfin. Enclosed Porch	30	0
		2,998	1,432