

1. INTRODUCTION:

The United States Environmental Protection Agency (USEPA) has been tasked to evaluate the effectiveness of various cleaning procedures that may have been utilized in cleaning residential living spaces located in the immediate vicinity of ground zero that are contaminated with dust and debris from the World Trade Center (WTC) attack. The study will involve implementing various vacuuming and cleaning techniques in separate apartments to determine their effectiveness. Comprehensive sampling for Contaminants of Potential Concern (COPC) will be conducted throughout the study to determine which method of cleaning is most effective at dust control. The building located at 110 Liberty Street has been selected for the study. The location of the building in relation to ground zero is shown on Figure 1.

1.1 BACKGROUND INFORMATION

The building at 110 Liberty Street is 5 stories with 12 residential and 6 commercial spaces and has been unoccupied since 9/11. It is owned by David M. Baldwin Realty Co., Inc. The building is situated between Liberty and Cedar Steets and has a co-address of 113-117 Cedar Street. The collapse of the WTC severely impacted all spaces in the building with deposition of dust and debris. Windows of residential and commercial spaces facing the WTC were blown out as were the sky lights located in the ceilings of the three, 5th floor dwellings. The building was professionally cleaned shortly after the collapse of the WTC. The cleanup was limited to all residential spaces, the basement and the roof. None of the commercial spaces, except for unit 3A were cleaned. Two of the commercial spaces (Unit 1 and Unit 2) are presently covered with inches of dust. All of the residential rental spaces contain dust of various degrees due to redeposition of dust generated from the work effort at ground zero.

The rental spaces range in size from 1,000 to 1,300 square feet. The residential spaces are of open design and include a kitchen, bathroom and sleeping area. Commercial spaces identified as Unit 1, Unit 2 and Dwelling 3A were used as a Chiropractors office, a retail mattress showroom and offices of Baldwin Realty, respectively. Each space is heated by an individual hot water base board system. Window or roof mounted air conditioners are present in the residential space, central systems are present in the commercial space (Unit 1 and Unit 2). Rental spaces are accessible from Liberty or Cedar Streets through common hallways, floors are accessible via an elevator and stairs. The building is presently without electricity and service is not expected to be restored until mid June. Each floor has a trash compactor room and a utility room. A laundry room is located on the 2nd floor. The basement contains the building trash compactor, elevator shaft, electric meter rooms, preparation and storage areas for the Chinese restaurant, and a hair salon.

The study will be conducted on 12 residential and 3 commercial spaces. The two restaurants and hair salon are not part of the study but will be cleaned by USEPA at the completion of the study.