# Lake Behavioral Hospital
# 2615 Washington Street, Waukegan, IL

# Environmental Response & Mitigation Plan

**ENVIRONMENTAL SOLUTIONS, INC. PROJECT NO. : 20230395**

## *Prepared for:*

**V Covington Realty, LLC**
**32 E 57th St Ste 17**
**New York, NY 10022**

## *Prepared by:*

**Bradley A. Brown, P.E.**
**Asbestos Project Designer**
**IDPH License No. 100-18344**

Environmental Solutions, Inc.
**1136 WEST WOLFRAM STREET**
**SUITE 1**
**CHICAGO, ILLINOIS 60657**

**www.environmentalsolutionsinc.com**

**October 16, 2024**

# Table of Contents

# 1. Introduction

This Environmental Response & Mitigation Plan ("ER&MP" or "Plan") was developed to identify environmental conditions and potential safety hazards associated with the partially demolished hospital complex, for which demolition operations are currently halted, pending evaluation.

The former Saint Therese Hospital located at 2615 West Washington Street in Waukegan, Illinois was originally constructed in 1929 with several expansions to the campus over the years. In the 2000's, Saint Therese Hospital merged with another local hospital and became Vista Medical Center, which was acquired in 2018 by V Covington Realty, LLC which renamed the facility as Lake Behavioral Hospital. In 2020, the majority of the hospital campus was closed with the exception of the Lake Behavioral Hospital Building located in the southwest portion of the campus.

The old hospital building is currently in the process of being demolished with approximately 50% of the main building complex remaining. The work area is secured by chain link construction fence. Demolition activities at the site are currently suspended while work practices and site conditions are being assessed and investigated by regulators. Current site conditions include the presence or potential presence of friable asbestos containing building materials such as spray on fireproofing material and pipe insulation, which may be comingled with demolition debris.

This ER&MP is intended to be a living document establishing the work practices and measurable parameters necessary to protect the human health and the environment and worker safety during the remaining abatement and demolition work at the site. As a living document, the ER&MP may be revised and updated as site conditions and work methods are continuously reviewed by the project team to provide the highest levels of environmental and worker protection. Changes to the Plan will be submitted to the IEPA for approval before being implemented. Emergency changes needed to maintain safety and security will be reported to the IEPA as soon as practicable and no later than 24 hours following the emergency.

Specific details related to the demolition and the methods and procedures to complete demolition are included in Appendix A (the McDonagh Demolition Plan).

The ER&MP was developed to establish baseline health and safety guidelines for contractor personnel. Each subcontractor engaged by the owner or general contractor is equally responsible for matters relating to the health and safety of its personnel and equipment during the performance of the work. The ER&MP was prepared using general knowledge of the tasks that could be associated with the scope of work for this project.

Other safety hazards not associated with the suspect asbestos containing materials, such as physical and biological hazards that may be present at the site are not addressed in this ER&MP. The general contractor and subcontractors must manage all safety hazards not covered in this document consistent with the requirements of the United States Department of Labor, Occupational Safety and Health Administration ("OSHA").

## 2. Project Objectives

Project objectives include completion of demolition of the remaining old hospital building, the boiler house and site restoration to include the following action items:

- Minimize the release of asbestos fibers during the remaining building demolition activities by demonstrating compliance with the EPA's Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations and applicable Illinois law;
- Protect workers involved with the remaining demolition and abatement work to be completed on site by documenting asbestos exposure compliance with OSHA 1926.1101 regulations for asbestos;
- Ensure that asbestos containing demolition and waste materials from the site are disposed of in compliance with applicable laws for asbestos disposal; and
- Confirm that asbestos containing materials have been removed from the site demolition work area, including asbestos residue which may have been comingled with surface soil in the demolition work area.

## 3. Roles & Responsibilities

- Owner: **V Covington Realty, LLC**
  - Contact: Chief Executive Officer: Cindy DeMarco – (855) 990-1900
  - Responsibilities: Communications between ownership and remediation team.
- General Contractor: **McDonagh Demolition, Inc**
  - Site Contact: John Roehrick - (773) 304-6547
  - The General Contractor will serve as the owner's representative for coordination and oversight of abatement, demolition, waste disposal, maintain or direct site security, and restoration activities at the site associated with the remaining building demolition work. Communication and coordination with the project team which includes regulatory authorities, subcontractors, and environmental professionals will be critical for the successful completion of the work.
- Environmental Consultant: **Environmental Solutions, Inc. ("ESI")**
  - Mark J. Brumwell - (773)883-0750
    - IDPH Asbestos License 100-6717
    - Asbestos Inspector, Management Planner, Project Manager
  - Bradley A. Brown, P.E. - (608)-314-6956
    - IDPH Asbestos license no. 100-18344
    - Asbestos Building Inspector, Management Planner, and Project Designer
  - On-Site Manager: Michael Allen - (708) 878-0674
  - Air Sampling Professional: Joseph Tito - (312) 296-8299
  - ESI has been retained to design the site-specific Environmental Response & Mitigation Plan that establishes parameters for completing the demolition and abatement work. The intention of this document is to mitigate existing asbestos and potential hazards at the project while protecting the community, environment, and workers.
  - ESI's Air Sampling Professional will be responsible for monitoring the dust control plan and procedures.

- Abatement Contractor: **EHC Industries, Inc.**
    - Site Contact: Mike Prosen - (847) 561-8256
    - The abatement contractor will be responsible for providing all labor, materials, and equipment necessary to perform abatement of asbestos containing materials as required in a manner which is compliant with all federal, state, and local rules and regulations.
- Demolition Contractor: **Mc Donagh Demolition, Inc**
    - Site Contact: John Roehrick - (773) 304-6547
    - The demolition contractor will be responsible for obtaining permits, providing labor, materials, and equipment necessary to complete demolition activities using wet methods, material processing-handling-loadout, and material disposal. Regulated asbestos containing materials will be processed and handled by the abatement contractor.

# 4. Site Security

The site shall be secured with a ten-foot-tall chain link fence with privacy screen at the worksite perimeter with controlled access gates. The fence is to remain in place until all asbestos abatement and demolition activities have been completed, including cleanup and confirmation that asbestos containing materials and associated debris have been removed from the demolition work area and regulatory approval(s) have been achieved.

All gates and points of access shall be secured and locked when not in use and monitored during work hours to prevent unauthorized access. Security personnel shall be present 24 hours per day - 7 days per week to maintain site security and prevent unauthorized access to the site, throughout the duration of abatement and demolition activities.

A site layout drawing showing the security fence is included as Appendix B and shall be updated if site conditions change.

# 5. Regulatory Compliance

The ER&MP implements the following measures to manage dust on the site associated with abatement and demolition, stormwater runoff from the work area, and disposal of asbestos containing and other demolition materials from the site in compliance with all applicable laws and regulations.

## Dust Control

As the existing demolition debris at the site may contain friable asbestos containing materials, controlling dust from the site is necessary to protect the community and environment. Dust at the site will be controlled with large area misters/water cannons, water trucks, and where feasible spray hoses on an as needed basis. The attached Dust Control Plan in Appendix C provides details to prevent visible emissions and to keep the site adequately wet.

Controlling dust from construction traffic entering and leaving the site will be managed with a truck wheel wash system as referenced in the Demolition Plan in Appendix A, or coarse aggregate base tracking pads to prevent trucks from tracking mud out of the site onto local roadways. The tracking pads and access roadways will be maintained on an as needed basis, and tracking onto roadways from the site will be monitored. Mobile cleaning equipment with a water spray system may be utilized to clean roadways, if needed.

Asbestos air monitoring will be conducted at the four cardinal points (N, S, E, & W) of the site during active site work which has the potential to create dust. The air samples will be collected with low-flow pumps for analysis by Phase Contrast Microscopy ("PCM"), which measures fiber concentrations of air samples. The samples will be evaluated on a pass/fail basis when compared to the OSHA Permissible Exposure Limit ("PEL") of 0.10 fibers per cc based on 8-hour time weighted average ("TWA"). If any air samples are found to be above the PEL of 0.10 f/cc, work measures, weather, site conditions and wetting activities will be reviewed to mitigate dust concerns. At the discretion of project management, the sample(s) may be analyzed by a TEM Quantitative Method to determine the presence or absence of asbestos fibers.

### Stormwater Management

The management of stormwater runoff from the work area is necessary to prevent contaminants, such as asbestos particles which may be present in surface soils, and silt from leaving the work area and entering the local storm sewer system. A combination of silt fence, straw logs, silt basins, and erosion control fabric at all storm water inlet structures will be implemented to control silt from the work area. As a best practice measure, all erosion control materials will be disposed of as asbestos containing material at the completion of the project.

Periodic visual inspections of the stormwater control measures will be conducted by site personnel. Stormwater issues or concerns will be addressed within 24 hours of inspection, or notification of a problem, when feasible.

### Waste Disposal

All comingled demolition debris and waste material from the site will be disposed of at a landfill as Regulated Asbestos Containing Materials (RACM). These materials will be handled and disposed of in accordance with NESHAP disposal requirements by the landfill.

## 6. Health & Safety

All personnel entering the site are required to have OSHA Class IV Asbestos certification or higher according to work activity, and attend a Site-Specific Health & Safety Briefing which will cover the following:

- Site History;
- Site Contacts;
- Current Site Conditions, Work Activities and Associated Hazards; and
- Work Zones and Associated PPE Required.

A log of all Site-Specific Health & Safety Training is to be kept which will include the name, date, company, and trainer.

The Exclusion Zone will be treated as an OSHA Class I asbestos project and will be regulated as such until properly de-regulated. Employee exposure monitoring will be conducted to evaluate worker exposure levels and control methods. PPE and work practices will be adjusted to meet project specific conditions as necessary to comply with applicable OSHA regulations.

All workers entering the Exclusion Zone where demolition and/or abatement work is being conducted will be required to wear Level B Personal Protective Equipment ("PPE") consisting of:

- a synthetic coverall, boots, gloves, and a half face respirator fitted with P100 filter cartridge(s), or respirator appropriate for asbestos within expected project parameters; and
- When leaving the Exclusion Zone, workers will be decontaminated as referenced below.

### Worker Protection

It is anticipated that the following workers and worker classifications will be needed to complete the abatement and demolition work at the site:

- Supervising Personnel
  - Supervising personnel may include foreman, superintendents, and other managers as may be required to complete the work. If entering the Exclusion Zone Level B PPE will be required. An IDPH licensed Asbestos Supervisor will always be on site when abatement work is conducted.
- Abatement Workers
  - All abatement work will be performed by Illinois Department of Public Health ("IDPH") licensed abatement workers.
  - The abatement workers will, at a minimum, be required to wear Level B PPE and perform all abatement work in strict compliance with federal, state, and local regulations.

Other trades such as laborers, truck and equipment operators, etc. may need to enter the exclusion (red) zone to perform a variety of ancillary and support tasks. Ancillary and support personnel will not be conducting asbestos removal but supporting the activities by operating equipment to facilitate asbestos removal activities. In accordance with 29 CFR 1926.1101, support activities are OSHA Class IV activities and as noted above, are required to have OSHA Class IV Asbestos certification or higher according to work activity. Exposure assessments of workers and tasks will be conducted, and site workers will wear PPE in compliance with applicable portions of 29 CFR 1926.1101.

## 7. Site Assessment & Supplemental Asbestos Testing

Additional sampling and testing of suspect asbestos containing materials may be conducted as needed to guide the mitigation. Samples of suspect materials will be collected by a licensed asbestos inspector and analyzed using the PLM (Polarized Light Microscopy) method by a laboratory accredited by the National Voluntary Laboratory Accreditation Program ("NVLAP").

This supplemental testing and assessment may be used by the project team to make decisions regarding worker protection and PPE requirements, material handling methods, and material disposal requirements.

## 8. Work Zones

### Exclusion Zone ("EZ")

The Exclusion Zone will include the area of work where active demolition and abatement is being conducted as well as the debris field which is created from demolition. Only authorized personnel equipped with Level B PPE will be allowed to enter the Exclusion Zone.

### Contamination Reduction Zone ("CRZ")

The Contamination Reduction Zone will include an area of the site where equipment is decontaminated

and support materials are stored, such as roll off boxes, and other equipment which will be needed to perform the demolition and abatement work.

### Support Zone ("SZ")

The Support Zone is an uncontaminated area outside of the EZ and CRZ where workers should not be exposed to hazardous conditions. Activities in this area may include jobsite management trailers, pre-staging of equipment and materials, and other site management operations as may be needed to complete the work.

## 9. Material Handling, Segregation, and Disposal

### Material Handling & Segregation

Materials generated from the demolition of the old hospital, debris field, as well as other site activities will be treated as comingled asbestos containing waste material (ACWM). Once on the ground, the building materials will be reduced in size with mechanical equipment such as excavators and other large scale material handling equipment as needed to facilitate the cleaning and loading of these materials on to trucks or dumpsters.

Metal materials such as structural steel and other building components with suspect asbestos will be segregated to the extent it is safe and practical. Metal materials will be thoroughly washed/cleaned to remove RACM. Intact concrete materials, such as foundations and flat work, are routinely cleaned during demolition to avoid placing substantial quantities of reusable/recyclable materials into scarce solid waste landfills. At the direction of the IEPA, these materials along with other debris generated during the demolition (brick, plaster, mortar, etc.) will be treated as asbestos contaminated waste materials (ACWM).

Comingled building debris will be separated from the metal materials as referenced above and kept sufficiently wet at all times during the material handling process. In general, materials will only be reduced in size as needed (with heavy equipment) to facilitate the cleaning and loading of these materials.

### Material Disposal

Metal building materials which have been segregated, abated of asbestos containing materials, and cleaned may be removed from site as non-asbestos containing building materials and recycled, provided a thorough visual inspection of the material has been conducted in accordance with 40 CFR 61, Subpart M. Representative sampling of metal building materials will be tested as outlined in Section 10.0 of this plan. Upon evaluation of those results and subjectively clean, those cleaned and tested materials may be removed from the site for recycling.

RACM from cleaned components (e.g. fireproofing) will be placed into leak-tight containers for disposal in accordance with NESHAP as RACM.

Copies of Waste Shipment Records will be completed and retained to document material leaving the site and will be included in the project summary report.

# 10. Abatement of Metal Building Components

The abatement of asbestos containing materials adhered to metal building components, such as spray on fireproofing on structural steel beams, will be required as part of the demolition and abatement scope of work. As the facility structure(s) and immediately surrounding area(s) are currently in a state of severe structural deterioration and are deemed unsafe for occupancy or entry, traditional methods of abatement prior to demolition are not safe. Where practical and feasible, metal, structural steel building components will be separated from the existing debris piles and remaining building(s) will be demolished utilizing wet methods and heavy equipment such as excavators and loaders.

Metal building components are considered contaminated with asbestos until cleaned.

Building materials will be kept sufficiently wet at all times to minimize fugitive dust and airborne asbestos particles during demolition, material handling/separating, and processing. All abatement work will be stopped if sustained wind speeds or wind gusts exceed 20 mph. Abatement of asbestos containing materials will be performed in a designated abatement area as shown on the Site Layout Plan in Appendix B.

Abatement/cleaning, where appropriate, may include the following:

- Remote decontamination facility for the abatement work area;
- Wind screens at the perimeter of the abatement area;
- Construction of a poly/stone asbestos removal work area to capture wash water generated during component/metal cleaning;
- Barrier tape and signage at the perimeter of this work area to clearly delineate and regulate the abatement work area;
- Regulate entry to immediate area where work activities will take place. Unauthorized entry shall be prevented by using appropriate barriers, such as warning tape and signage;
- All persons within regulated area will don personal protective equipment (disposable suits, air purifying respirator with P100 filters at a minimum, eye protection, etc.). The contractor may utilize double-suiting procedures for remote decontamination if appropriate;
- Wet all materials to be abated and conduct gross scrape of asbestos fireproofing from structural steel by using hand scrapers;
- Wash steel materials (utilizing methods like scraping, wet wiping, HEPA vacuuming, etc.) to remove all visual asbestos from surfaces;
- Remove and dispose of RACM debris as asbestos waste with the following information:
    - OSHA warning label;
    - DOT performance-oriented hazardous material label; and
    - Name and address of generator and abatement location
- All RACM waste to be stored inside onsite dumpsters prior to loading onto transport vehicle; and
- Air samples will be collected from inside and outside the abatement area to document fiber concentrations during the removal of asbestos. Air samples will be collected and analyzed by PCM throughout the cleaning process.

Water generated from the cleaning area will be collected where feasible and treated in accordance with applicable regulatory requirements.

Water for washing, material wetting (wet demolition), decontamination, and site dust control will be

provided by the City of Waukegan's public water supply through metered hydrant connections. The project team will coordinate with municipal agencies to ensure adequate water resources are available to meet project needs.

## Surface Testing Protocol

The IEPA has imposed a testing requirement (either ASTM D-6480 (wipe) or ASTM D-5755 (microvac) methodology were suggested) to determine if surfaces that have been thoroughly cleaned by trained IDPH asbestos workers can be recycled. It is our professional opinion that this requirement has been imposed by the IEPA despite the lack of an established or regulatory recognized standard to compare these results. Specifically, there is no regulatory applicability to asbestos dust sampling and U.S. federal regulations regarding asbestos abatement activities. As such, surface testing as required by the agency is not recommended for use as a final clearance tool after asbestos removal or other ACM disturbing activities or to demonstrate surfaces are "clean" or "contaminated" because there are no established criteria for what constitutes clean, aside from what is contained in the NESHAP.

The IEPA has stated that if any asbestos fibers are identified by surface testing, the material is not "clean". However, according to established industry and regulatory standards, there is no pass/fail criteria for asbestos dust. Finally, neither of the methods proposed by the IEPA and noted below are designed to evaluate cleanliness or have an established relationship between the results and potential exposure.

Nonetheless, based on technical discussions with the IEPA, the following protocol will be utilized to meet the required testing obligation. Representative sampling of community and site surfaces/materials will be collected in accordance with the ASTM standards referenced below and evaluated as follows:

- Cleaned surfaces for recycling: ASTM D-6480 methodology (wipe) will be utilized to evaluate cleaned large metal components like I-beams prior to recycling. One representative sample from each stockpile (approximately two roll offs) will be collected and compared to either of the following criteria for completion: (a) the highest background sample level results from samples collected outside of the project yet within the Waukegan area; or (b) No Asbestos Detected. Sample results less than or equal to the criteria for completion shall be deemed "clean" and recycled where and when deemed feasible by site and project management.

# 11. Equipment Decontamination

Equipment remaining on-site (KLF), equipment currently on-site, and equipment to conduct the proposed demolition and abatement work is expected to include a variety of heavy equipment such as cranes, loaders, backhoes, all terrain material handlers, etc. The equipment present or used for abatement and/or demolition work is to remain in the Exclusion Zone.

Any equipment being removed from site will be decontaminated in the Contamination Reduction Zone. Wash water generated by the project will be handled and disposed of in accordance with current regulatory requirements.

# 12. Phasing

The following sequence of work is anticipated to implement the Environmental Response & Mitigation Plan:

1. Secure perimeter with chain link fence and implement restricted access with 24/7 onsite security personnel.
2. Set up decontamination trailer on site.
3. Delineate Exclusion Zone, Contamination Reduction Zone, and Support Zone
4. Remove visible surface debris from areas where demolition and abatement are not going to take place.
5. Set up regulated gross removal cleaning location.
6. Perform demolition and abatement of remaining building(s) and building material debris piles.
7. Post abatement and demolition site cleanup and removal of visible suspect ACM debris and/or fireproofing material which may contain asbestos, and other debris considered ACWM from within the exclusion zone.
8. Remove all concrete foundations and concrete surfaces which are part of the project scope.
9. Remove a six-inch layer of soil from the Exclusion Zone.
10. Remove security fencing and associated project support infrastructure (i.e. trailers, equipment, and temporary infrastructure).
11. Backfill existing foundations/excavations and site restoration.

# 13. Environmental Monitoring & Documentation

Environmental monitoring and documentation will be performed daily by ESI environmental professionals who will be responsible for the following:

- Conduct environmental air monitoring as referenced in Section 5.
- Collect and evaluate test data to confirm that the work practices and methods for dust control are adequate to protect the environment.
- Visually inspect and test cleaned components such as metal according to the approach detailed in Section 10.
- Evaluate test findings, communicate findings to abatement and wrecking team for re-cleaning/re-testing or disposal. Evaluate site conditions and work practices to minimize fugitive dust and ensure environmental controls are effective.
- Periodically review site stormwater conditions.
- Compile daily reports summarizing site conditions, type of work completed, material hauled offsite, and workers present at the site.

# 14. Project Summary Report

Once the demolition and abatement work are completed, and the site is restored, ESI will compile a Project Summary Report to document the overall scope of work completed. The Project Summary Report may include the following items as applicable:

- Project Description;
- Abatement Methods Implemented;
- Material Disposal Logs (including waste manifests and material load documentation) for the following categories;
    - Asbestos;
    - Metal Materials Recycled; and
    - Debris Disposal
- Air Sampling Data;
- Dust Control Documentation (included in daily logs);
- Supplemental Asbestos Sampling (if applicable);
- Appendices;
    - IEPA Project Notification(s);
    - Abatement Worker Documentation;
    - Site Specific Training Documentation;
    - Daily Logs; and
    - Material Disposal Logs (Material Disposal Waste Manifests and Load Tickets). The

Project Summary Report will be provided to the IEPA upon completion of the project.

# Appendix A
# McDonagh Demolition Plan

# DEMOLITION PLAN

Site:

Lake Behavioral Hospital
2615 Washington Street
Waukegan, IL 60085

Date:

Prepared by:

McDONAGH DEMOLITION
7243 W. Touhy, Chicago, IL 60631
T: 773-276-7707 F: 773-276-7723
www.mcdonaghdemo.com

## Preface and Scope Overview

This plan outlines the scope of work required to safely carry out the demolition of the superstructure of the remaining hospital building, along with the associated site clean-up, in accordance with the approved plan from Environmental Solutions, Inc. (ESI), which has been submitted separately.

McDonagh Demolition (MDD) has conducted comprehensive site walkthroughs in collaboration with ESI and project team during the pre-planning phases. This collaborative effort has informed the development of a demolition procedure designed to prioritize safety throughout the project.

Key factors such as the age, size, condition of the building, and its surrounding environment have been considered in formulating this plan. MDD has been engaged to complete the remaining demolition work at the site, following the partial demolition performed by a previous contractor, which has altered the building from its original state. This plan has been specifically tailored for this project.

## Codes and Regulations

All contract work will be completed in accordance with all codes and regulations as published and adopted by the governing authority. MDD will comply with all requirements of these codes, standards, regulations, and specifications.

## Project Coordination

MDD will coordinate and schedule all phases of the work with the owner and other required parties as necessary for proper execution of the work.

## Pre-Planning

MDD will submit the following, as well as any additional required submittals:

- State and local notifications.
- Municipal Permits
- Utility disconnection confirmations
- Demolition Plan
- Health and Safety Plan
- Schedule
- Training records for project personnel
- Site logistics plan

## Building Security and Protection

MDD will post proper signage at designated entrances to the work area. A site security fence will be maintained, the fencing will be utilized to control access to the site. When MDD personnel is not on-site the gates will be kept locked and off-hour security will be maintained for the duration of the project. During work shift the gates will be closed and all visitors must check in with security and be escorted by on-site personnel as work conditions will change daily at the site.

## Safety

MDD will develop and implement a site-specific Health and Safety Work Plan for all work conducted on-site in accordance with regulatory requirements. MDD will conduct daily toolbox meetings and topic specific safety training.

MDD will prepare a contingency plan for emergencies including fire, accident, etc. A comprehensive first aid kit will always be in a designated location on site. Portable fire extinguisher equipment will be maintained around the work areas. Fire watches will be utilized when any hot work is performed on-site. All authorized site visitors will be required to sign in/out of the security trailer and be escorted by on-site personnel.

## Planning Work Activities

MDD will work with all on-site parties to pre-plan work activities to ensure proper and safe project flow. As work progresses MDD will continue to work daily with all parties and will be available for regular progress meetings to continually adjust all work items at the project site to ensure successful project completion.

## Building Demolition

MDD will commence building demolition upon plan approval, utility disconnection confirmations and site protections have been completed and installed. Copies of all permits, notifications and approved will be verified and provided prior to beginning demolition activities.

## Demolition Sequence

<u>Pre-Demolition Preparations</u>

1. Laydown Area Preparation:
    - Water Application: Water cannons, hoses and/or water trucks equipped with high-capacity spray nozzles will be employed to saturate the laydown area before demolition begins.

2. Top-Down Watering Procedure:
    - Water Cannons and Misting Systems: High-powered water cannons and misting systems will be utilized to apply water directly to the upper levels of the structure. These devices can cover large areas with fine water droplets, effectively suppressing dust before it can become airborne. This process will be initiated prior to any demolition activities and will continue intermittently as necessary to suppress potential emissions.

<u>Active Demolition Process</u>

1. Deployment of Dust Suppression Equipment:
    - Strategic Placement of Equipment: High-powered water cannons and misting systems will be strategically placed at key locations around the demolition site. The placement will be based on prevailing wind directions, ensuring that water is directed toward areas where dust is most likely to be generated.

- Real-Time Adjustments: MDD will maintain communication with the site supervisor to make real-time adjustments to the positioning and operation of suppression equipment depending on wind direction and work location. This may include adjusting the pressure of water sprays or repositioning equipment to target specific areas.

2. Continuous Monitoring:
   - Visual Monitoring: Designated ESI personnel will conduct visual inspections at throughout the work shift, noting any observable emissions. All observations will be documented, and necessary adjustments made.

3. Controlled Demolition Techniques:
   - Use of Low-Impact Equipment: Hydraulic excavators equipped with specialized attachments will be used to minimize the impact force during demolition. For instance, using shears to cut through structural members rather than swinging a hammer will reduce the release of dust and debris.
   - Sequential Removal: Demolition will be conducted in a top-down sequence, removing structural elements floor by floor. This approach minimizes the risk of collapse and allows for better control of demolition.

## Sorting and Dismantlement

1. Phased Dismantlement:
   - Work Shift Planning: Each work shift will be carefully planned to ensure that work is paused at predetermined safe points, allowing for the safe removal of demolished materials and the sorting process to occur without risk of collapse.

2. Material Sorting and Wetting:
   - Dedicated Sorting Zones: Designated zones will be established for sorting materials. These zones will be regularly wetted down to control dust.
   - Intermittent Wetting: A dedicated crew will be assigned to intermittently wet stockpiled materials throughout the shift using handheld hoses or portable misting units or similar methods.

## Waste Management

MDD will segregate all waste as follows:

- RACM

It is anticipated that RACM and ACWM will be hauled to Zion Landfill, Inc. located at 701 Green bay Rd – Zion, IL 60099 and/or Laraway Landfill located at 21233 W Laraway Rd - Joliet, IL 60436.

No solids generated during building demolition will be crushed on-site for reutilization.

MDD will coordinate closely with licensed waste haulers to schedule timely pickups of segregated waste. This will ensure that waste does not accumulate on-site and that all materials are transported in a safe and compliant manner.

Each load leaving the site will be documented with a manifest that includes details such as the type of material, the disposal facility, and the date of disposal. This manifest will be maintained as part of the project records to ensure compliance with local, state, and federal regulations.

Upon completion of the demolition project, MDD will compile a closeout package that includes copies of all load tickets, manifests, and disposal receipts. This package will be made available to stakeholders and regulatory agencies upon request.

## Asbestos Abatement Removal

Due to the height and condition of the structure, it is unsafe to remove the remaining asbestos materials before demolition activities resume. Demolition materials generated will be sorted, abated, cleaned, loaded, and disposed of according to parameters established in ESI approved design.

The abatement contractor, EHC, will set up a Personal Decontamination Unit (Decon Unit). Asbestos workers will use this unit to don proper PPE per OSHA requirements at the start of each shift and to decontaminate and change back into street clothing at the end of their shifts.

EHC will mark a regulated abatement area with tape and signage to indicate the presence of asbestos-containing materials. Access will be restricted to asbestos contractors and authorized personnel wearing appropriate PPE, with OSHA-compliant signage displayed at the entrance.

Truck drivers and operators will also wear necessary PPE to comply with OSHA regulations. Hand sprayers will be available to spray off footwear prior to entering equipment cabs inside the EZ zone to prevent tracking contamination into cab.

Wetting will be applied as needed, along with visual monitoring for emissions, conducted by the Asbestos Project Manager (APM) and Asbestos Air Sampling Professional (ASP), with support from EHC and MDD during debris handling.

Large steel components will be abated, cleaned, and tested according to parameters established in ESI approved design. The regulated abatement area will have a wash basin for collecting and storing wastewater in frac tanks. Wastewater will be filtered and properly discharged. The steel will be handled using an excavator with a grapple attachment for direct loading into the abatement area, minimizing potential fall height. Visible asbestos materials will be manually collected, properly bagged, and transported to a designated dumpster that will be lined and kept closed when not in use.

## Wheel Wash

The wheel wash system is integral to maintaining safety and compliance during the demolition process, effectively reducing the risk of tracking exposure to workers and the surrounding community.

The ConLine 400MC wheel wash system or equivalent will be strategically positioned in the contamination reduction zone, equipped with a PF 200 particulate water filter.

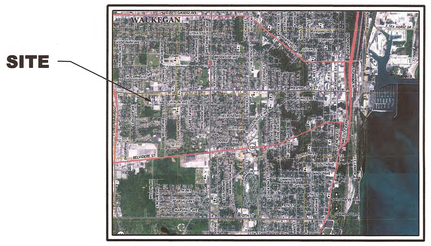
Vehicles will pass through the wheel wash system, where high-pressure jets will effectively clean the wheels and undercarriage. The PF 200 filter will capture fine particulates, ensuring that any particulates are contained and do not disperse into the surrounding environment. After washing, vehicles will be permitted to exit the site. Collected wash water will be properly handled in accordance with regulations to prevent any environmental contamination.

## Subgrade Removal

Once superstructure demolition is completed, work will commence on slab on grade, foundation and soil removal and disposal. Process will follow parameters established in project design. This process will be completed utilizing hydraulic excavators equipped with buckets, breakers, and wrecking balls to break concrete in manageable sections. Dust suppression equipment will be in place and direct spray will be utilized to reduce source emissions. MDD will visually monitor all work throughout the shift and adjust engineering controls as needed to minimize emissions.

# Appendix B

# Site Layout Diagram




VICINITY MAP
(NOT TO SCALE)

2615 & 2645 Washington Street
Waukegan, Illinois 60085

N

Legend

- 10 Foot Security Fencing with Screen
- Controlled Site Access
- Emergency Site Access
- # — See Key Below
- Demolished
- Install 3/4" Plywood Barrier with Sealed Seams - North Side of Parking Garage
- Support Zone
- Contamination Reduction Zone
- Exclusion Zone

1 - Site Security
2 - Office Trailer
3 - Abatement Area
4 - Decon. Trailer
5 - Truck Wash

Washington Street
Truck Exit
Truck Entrance
Keller Avenue
1
2
3
4
5
Multi-Story Brick Buiding
111,139 Sq. Ft.
Overhang
Overhang
Brick Building
12,776 Sq. Ft.
Remaining Building to
be Demolished
4-Story
Metal 7 Glass Building
12,718 Sq. Ft.
Overhang
Enclosed Walking Bridge
5-Story
Pre-Cast Concrete
Parking Structure
68,363 Sq. Ft.
1-Story Concrete
Block Building
1,446 Sq. Ft.

# Appendix B: Site Layout

Environmental Solutions, Inc.
1136 WEST WOLFRAM STREET, SUITE 1
CHICAGO, ILLINOIS 60657

# Appendix C

Dust Control Plan
August 15, 2024

Existing demolition debris at the site is suspected of containing friable asbestos containing materials. Therefore, controlling dust from the site is necessary to protect site workers, the community and environment.

Further, in order to comply with applicable NESHAP requirements, dust at the site will be controlled with a variety of methods to account for anticipated changes in material types, demolition methods, site conditions, and weather conditions. Such changes may occur daily or even hourly. To account for these variabilities, dust control methodologies and techniques may be adjusted or added as needed to best address the conditions at hand.

Where feasible and apt, large area misters/water cannons, water trucks, sprinklers, spray hoses, and hand sprayers will be utilized. The attached Dust Control Diagram provides an overview of anticipated equipment to prevent visible emissions and to keep the site adequately wet.

Controlling dust from construction traffic and equipment decontamination prior to exiting the site will be managed with a truck wheel wash system and/or coarse aggregate base tracking pad. Details related the truck washing system (or similar) is attached to this Plan. The washing system/tracking pads and access roadways will be maintained and monitored to maintain site integrity. A mobile cleaning system with a water spray system may be utilized on site to clean roadways if needed.

Asbestos air monitoring will be conducted at the four cardinal points (N, S, E, & W) of the site during active site work which has the potential to create dust. The air samples will be collected with low-flow pumps for analysis by Phase Contrast Microscopy (“PCM”), which measures fiber concentrations of air samples. The samples will be evaluated on a pass/fail basis when compared to the OSHA Permissible Exposure Limit (“PEL”) of 0.10 fibers per cc based on 8-hour time weighted average (“TWA”).

If any air samples are found to be above the PEL of 0.10 f/cc, work measures, weather, site conditions and wetting activities will be reviewed to mitigate dust concerns. At the discretion of project management, the sample(s) may be analyzed by a TEM Quantitative Method to determine the presence or absence of asbestos fibers.

It is important to note that although site conditions and methods may vary significantly as the project progresses and seasons change, dust control efforts may be adjusted as needed to protect site personnel, community, and environment.

**Lake Behavioral 2615 Washington**

# PPE And Site Entry Plan.

- The regulated area (Site) boundaries are currently demarked by the existing fence line with work zones demarcated on diagrams attached to this plan.
- 24-hour site monitoring and control is provided by the Gamma Team Security of Northbrook, IL. Phone (224) 235-4347
- Authorized personnel only will be allowed to access to the Site.,
- This plan assumes that the existing partially demolished hospital structure at the Site is not safe for access due to structural and/or potential asbestos contamination. **Under no circumstances will personnel or equipment enter the structure.**
- The debris field surrounding the partially demolished structure(s) are also assumed unsafe due to unstable, uneven surfaces and potential asbestos contamination. Access to these areas is restricted. When feasible, only remote wetting of these areas is allowed.
- McDonagh Demolition is responsible for the implementation of the Dust Control Plan.
- ESI will provide personnel trained in the provisions of 40 CFR Part 61, Subpart M to document the ongoing performance of the Dust Control Plan.
- Personnel entering the site shall have at a minimum: OSHA Cl ass IV Asbestos Training. If requested, personnel will provide evidence of this training.
- Personnel entering the site will wear PPE appropriate for their assigned task and work zone.
- Personnel and/or their respective employer shall ensure that they are in compliance with applicable OSHA requirements regarding PPE used by their personnel. PPE usage may be adjusted to be in accordance with exposure assessment data.
- Workers/personnel entering the Site shall decontaminate according to applicable OSHA standards prior to exiting. McDonagh Demolition has established a decontamination trailer unit to facilitate decontamination.
- Disturbance of surfaces and materials within the Site shall be minimized.
- Equipment and vehicle traffic onto the Site shall be minimized.
- Equipment and vehicles exiting the Site shall be decontaminated and subject to inspection immediately prior to departure.
- Wetting and/or water usage may be temporarily suspended in the following circumstances:
    - Freezing temperatures as recorded at the site and documented at beginning, middle, and end of each workday,
    - And/or it is actively raining during the work shift.

This plan will remain in effect until modification or project completion. The IEPA is to be notified prior to implementation of any changes.

**Date issued: August 15, 2024**

# Appendix C


VICINITY MAP
(NOT TO SCALE)

2615 & 2645 Washington Street
Waukegan, Illinois 60085

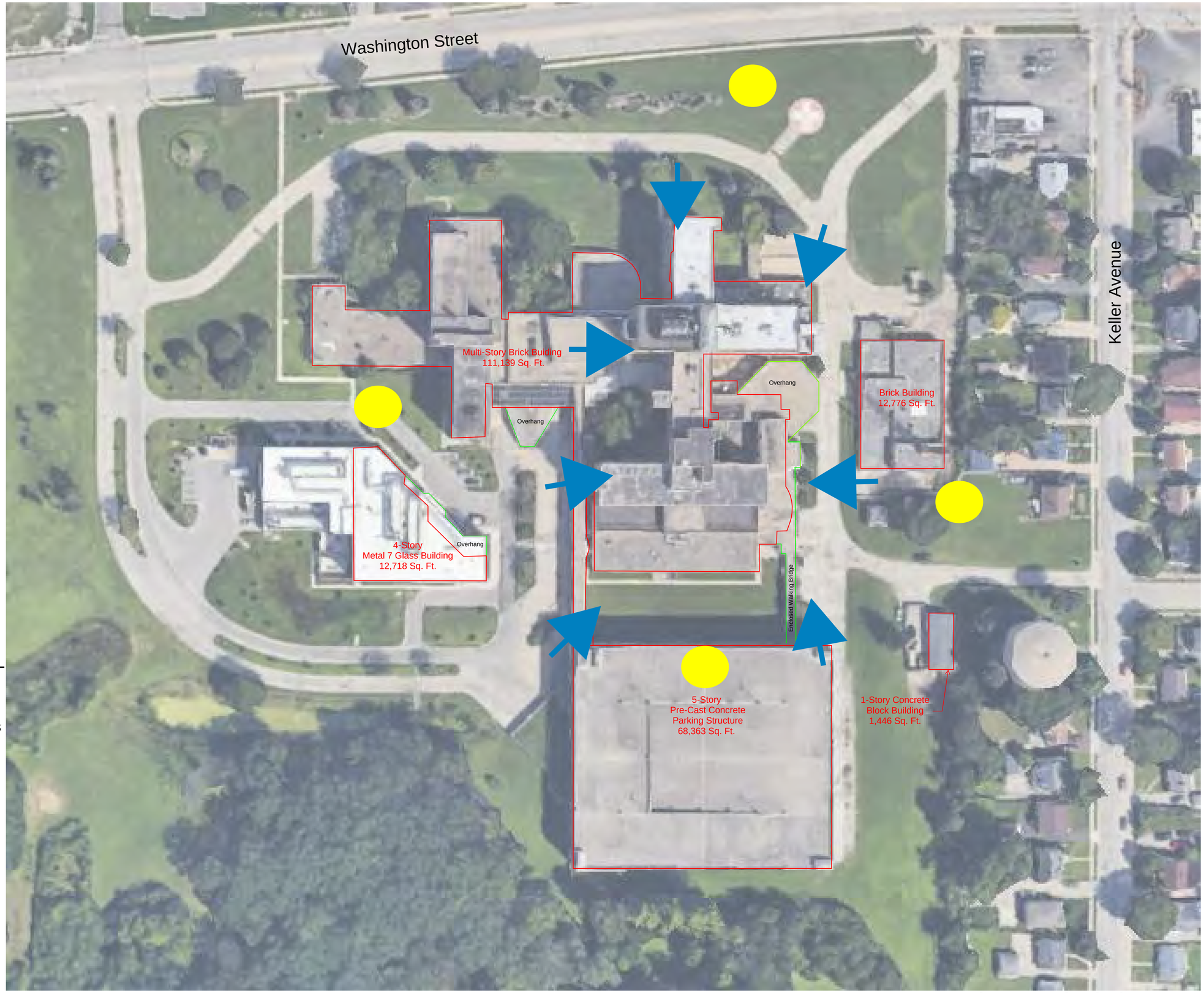
N

Large Area Misters

Perimeter Air Sampling Equipment

Notes:

- The number and location of Large Area Misters are “suggested”. The actual locations and number of misters will be adjusted as needed to control dust at the site.
- Additional methods of dust control may include a water truck and manual hose spraying, as needed to control dust at the site.
- The entire Exclusion Zone, including areas of previous demolition, will be wetted on an as needed basis to control dust.
- Work will be suspended if sustained wind speeds or wind gusts exceed 20 mph.




# Appendix C: Dust Control & Air Monitoring

Environmental Solutions, Inc.
1136 WEST WOLFRAM STREET, SUITE 1
CHICAGO, ILLINOIS 60657