



EcolSciences, Inc.

Environmental Management & Regulatory Compliance

January 27, 2017

James S. Haklar, Ph.D.
Sr. PCB Disposal Specialist
Division of Enforcement and Compliance Assistance
United States Environmental Protection Agency – Region 2

Re: Follow up to the Risk Based Application Addendum and January 3, 2017 Meeting:
December 1, 2015 Application for Risk Based PCB Disposal Approval
450-490 South Avenue and 50 Center Street
Borough of Garwood
Block 401, Lots 1 and 2
Union County, New Jersey
NJDEP PI# 032470 and 631620

Dear Dr. Haklar:

This letter has been prepared to summarize our discussions during the meeting on January 3, 2017 at the USEPA's office in Edison, New Jersey. The purpose of the meeting was to discuss the November 8, 2016 Risk Based Application Addendum (Addendum) to the December 1, 2015 Application for a Risk Based Disposal Approval (Application) prepared by EcolSciences, Inc. (EcolSciences) on behalf of 490 South Avenue, LLC (490 South Avenue) for the above referenced Site.

Based on our meeting, you requested additional clarification and/or information on the following issues:

- Areas where PCBs were previously used in the onsite buildings;
- Concrete slab sampling frequency;
- PCB Bulk Product Waste;
- Groundwater/Potential LNAPL Sampling; and,
- PCB analysis methodology confirmation.

1. Site Areas Where PCBs Were Historically Used

During our January 3, 2017 meeting, you requested additional information regarding the areas where PCBs were used onsite. The USEPA is requesting an increase in the proposed PCB concrete wall chip sample frequency in areas where PCBs may have been used inside the building.

As indicated in the Application and Addendum, based on the depth of the PCB contamination identified during the investigations and the relative immobility of PCBs in the environment, the

conceptual site model developed by EcolSciences indicates that the PCBs were likely discharged directly to the subsurface as a result of leakage from subgrade machinery (vaults, pits, piping, etc.) and these subgrade spills are largely limited to the south/central portion of Lots 1 and 2 (the former ALCOA building). With the exception of the loading dock area, EcolSciences has not identified evidence of a substantive surficial spill of PCBs onsite. This is corroborated by the existing concrete slab sampling data which has not identified PCB concentrations above 10 milligrams/kilogram (mg/kg) throughout the facility, with the exception of the loading dock on Lot 2. Furthermore, the areas where PCBs were identified in the soil at elevated concentrations above 10 mg/kg indicate predominately higher PCB concentrations at deeper depths onsite with cleaner soil at shallow depths in the soil profile. This data supports EcolSciences understanding that the PCB discharges occurred predominately below grade.

The history of possible PCB usage at the Site was discussed in detail in the original Application and is summarized herein. Aroclor 1248, commonly associated with hydraulic oils, was the Aroclor identified at the Garwood property. The Aluminum Company of America (ALCOA) historically operated on the property from sometime between 1921 and 1928 until 1961. The National Institute for Occupational Safety and Health (NIOSH) Publication number 78-127 (November 3, 1975) indicates that PCB production began circa 1929 and the use of PCBs in hydraulic oils was ceased by 1971. However, from the early 1960s until recently, the Site was operated by a sheet metal fabricator and plastics extrusion company and neither of these operations utilized PCB containing materials in their operations. Therefore, the potential for PCB impacts to onsite structures as a result of past operations are discussed below for the time period between 1929 and 1961, when PCB containing hydraulic oils would have been used as part of the casting operations by ALCOA.

For ease of discussion purposes, the site was divided into different sections as shown on Figure 1 which also presents the 1949 Sanborn Map overlaid on a current aerial image. The sections of the building are discussed below.

Area 1: 'Out Buildings' in the Western Portion of Lot 1 and Northwestern Portion of the Former ALCOA Building

There are currently five 'out buildings' in the western portion of Lot 1 and based on historical resources, including Sanborn Maps and property transaction records, these structures were either not present or were used for storage during the ALCOA tenure. None of these structures were used for manufacturing operations during the period of suspected PCB materials usage onsite. During EcolSciences numerous inspections of the facility both prior to and after cessation of the most recent operations, no evidence of staining was observed on the walls, ceiling, or concrete floors that would indicate the potential for a past discharge of PCB containing materials. Concrete floor chip samples collected from these buildings did not contain PCBs.

Area 2: Northern Portions of Former ALCOA Facility Building

These portions of the building were labelled as a manufacturing areas with the northeastern portion of the building labelled as 'factory building' on the 1928 and 1949 Sanborn Maps.

Given the manufacturing usage, it is possible that PCB containing materials were used in this area of the building. However, during the numerous inspections of the facility both prior to and after cessation of the most recent operations, no evidence of staining was observed on the walls, ceiling, or concrete floors that would indicate the potential for a past discharge of PCB containing materials. Concrete chip samples collected from the floor in this area of the building, identified PCBs at a maximum concentration of 4.8 mg/kg with the majority of concrete chip samples containing PCBs under 1.0 mg/kg. PCB soil concentrations in this vicinity of the Site were also generally low, with only two areas containing PCBs above 1.0 mg/kg but below 10 mg/kg. When these deminimis PCB concentrations are compared to the levels identified in the south-central portion of the building where significantly higher PCB concentrations are present, it is apparent to EcolSciences using Professional Judgment that significant PCB usage did not occur in this portion of the building.

Area 3: Eastern-Central Portion of the Former ALCOA Facility Building

This portion of the building was labelled as a die shop on the 1928 and 1949 Sanborn Maps. It is unlikely that PCB-containing materials were used in the manufacturing of die tooling. Furthermore, during the numerous inspections of the facility both prior to and after cessation of the most recent operations, no evidence of staining was observed on the walls or ceiling (typically metal with a small percentage of concrete comprising the lower portions of the walls), or concrete floors that would indicate the potential for a past discharge of PCB containing materials. In addition, concrete floor sampling in this area of the building did not identify any PCBs over 1.0 mg/kg. PCB soil concentrations in this vicinity of the Site were also generally low, with only one area containing PCBs above 1.0 mg/kg but below 10 mg/kg. These deminimis PCB concentrations are not indicative of substantive PCB-containing material usage.

Area 4: Southeastern Portion of the Former ALCOA Facility Building

This portion of the building was labelled as an engineer's office on the Sanborn Maps. This area features wood framed wall construction and has not been used for manufacturing or industrial operations. During the numerous inspections of the facility both prior to and after cessation of the most recent operations, no evidence of staining was observed in this area that would indicate the potential for a past discharge of PCB containing materials.

As discussed during the meeting, a total of ten concrete chip samples will be collected from the wall masonry through Areas 1 through 4 (non-PCB use areas).

Area 5: Central and Southern Portion of the Former ALCOA Facility Building

This portion of the building was labelled as a manufacturing and aluminum casting areas on the 1928 and 1949 Sanborn Maps. In addition, the schedule of personal property in the 1961 deed referenced a 'cellulube circulating pump in pit and cooler' within the Casting Department as well as a 'lindol cooling tank in pump house' and 'cellulube circulating pump in pit and cooler.' Given the prevalence of trenches and piping observed in the southern portion of the Site and that the highest concentrations of PCBs were identified in the soil in this Area of the property, EcolSciences (based on Professional Judgment) strongly suspects that the equipment was located

in this portion of the building and contained PCB-containing fluids. However, during the numerous inspections of the facility both prior to and after cessation of the most recent operations, no evidence of staining was observed on the walls, ceiling, or concrete floors that would indicate the potential for a past discharge of PCB containing materials. Furthermore, the floor concrete chip sampling previously conducted in this area of the site contained only *deminimis* PCB concentrations that are not consistent with substantial above-grade discharges. With the exception of PCBs at 77 mg/kg within the concrete floor in the loading dock in this area of the Site, which was likely associated with a spill during shipping and receiving operations since the soil immediately underlying and adjacent to this area is substantially contaminated with PCBs, EcolSciences does not believe that above-grade discharges to the walls or ceiling occurred.

Notwithstanding EcolSciences conceptual site model of the PCB discharges, since this area is the location where PCB containing materials were largely used, subsequent to the USEPA's approval of the Application (but prior to demolition) concrete chip samples will be collected from the walls in ten locations from this area of the building. Given the significant height of the ceiling in the area (generally greater than 20 feet), and that no ceiling staining was observed, the sampling will be limited to the walls. Upon receipt of the analytical results, the material will be handled accordingly in a manner consistent with that proposed in the application as follows:

- Concrete masonry containing PCBs below 10 mg/kg will be crushed and reused on the site in the high-occupancy use areas set forth in the Application and/or Amendment. The material will be capped in accordance with the procedures outlined in the Application and/or Amendment;
- Concrete masonry containing PCBs between 10 mg/kg and 100 mg/kg will be placed within the low-occupancy use areas set forth in the Application and/or Amendment. The material will be capped in accordance with the procedures outlined in the Application and/or Amendment.
- Material containing PCBs above 100 mg/kg will be removed from the site for disposal as set forth in the Application and/or Amendment.

2. Concrete Slab Sampling Frequency

As discussed during the meeting, it is our understanding that the concrete slab sample rate of one sample for every 1,500-square feet of building slab is acceptable to the USEPA. Subsequent to approval of the Application but prior to demolition, concrete chip samples will be collected from locations evenly distributed throughout the buildings to comply with this frequency. A total of 77 additional concrete chip samples will be collected from the building slabs with 27 of these samples collected from the structures on Lot 1 and 50 of these samples collected from the concrete slab of the structures on Lot 2. The location of the building slab and wall sample locations discussed above is shown on the attached Figure 2. **This figure supersedes and replaces Figure 6 of our November 8, 2016 Addendum.**

3. PCB Bulk Product Waste Sampling

You requested additional clarification regarding the manner in which the PCB Bulk Product waste investigation will be conducted for the building. In addition to the information provided in the Application and/or Addendum, the Bulk Product waste investigation will be conducted as follows:

- One five point composite sample of each type of Bulk Product waste will be collected for analysis. As an example, if both gray and white caulk are identified in the building, these materials will be treated as separate types of bulk product waste and a composite sample will be collected from each building material.
- The samples will be analyzed for PCBs in accordance with the analytical protocols set forth in the Application, Addendum, and the extraction methods discussed below.

4. Non-Aqueous Phase Liquids

In the event non-aqueous phase liquids (NAPL) are identified in a monitoring well or otherwise identified in the groundwater at any time in the future, the NAPL will be analyzed for PCBs in accordance with the analytical protocols set forth in the Application, Addendum, and the extraction methods discussed below.

5. PCB analysis methodology confirmation

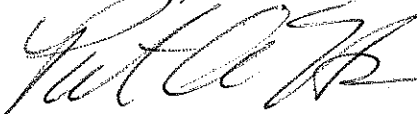
Future PCB analysis will be conducted pursuant to extraction Method 3500B/3540C or Method 3500B/3550B from EPA's SW-846 and analyzed via Method 8082 in accordance with 40 CFR §761.272.

Closing

490 South Avenue, LLC, EcolSciences, Inc., and the undersigned LSRP have prepared this response in order to address the comments shared by the USEPA during our January 3, 2017 meeting. We look forward to receiving a draft of the Risk Based Disposal Approval from your office shortly. Should you have any questions or require additional information, please contact me at 973-366-9500. Thank you in advance for your immediate attention to this matter.

Very truly yours,

EcolSciences, Inc.



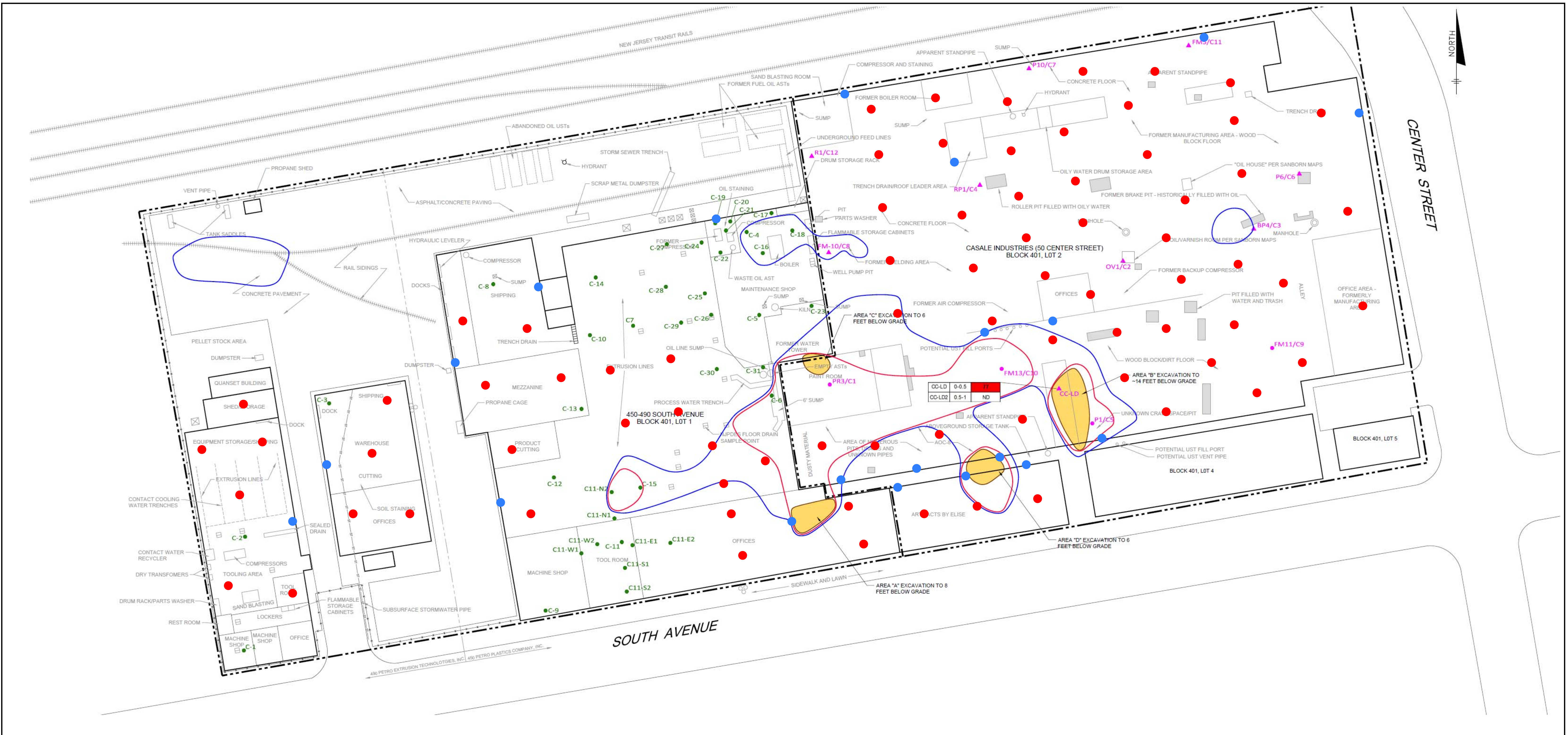
Peter A. Hansen, LSRP, LEP
Vice President

Attachments

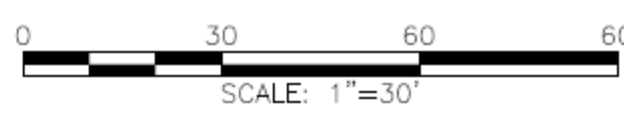
cc: Ed Russo, 490 South Avenue LLC


FIGURES

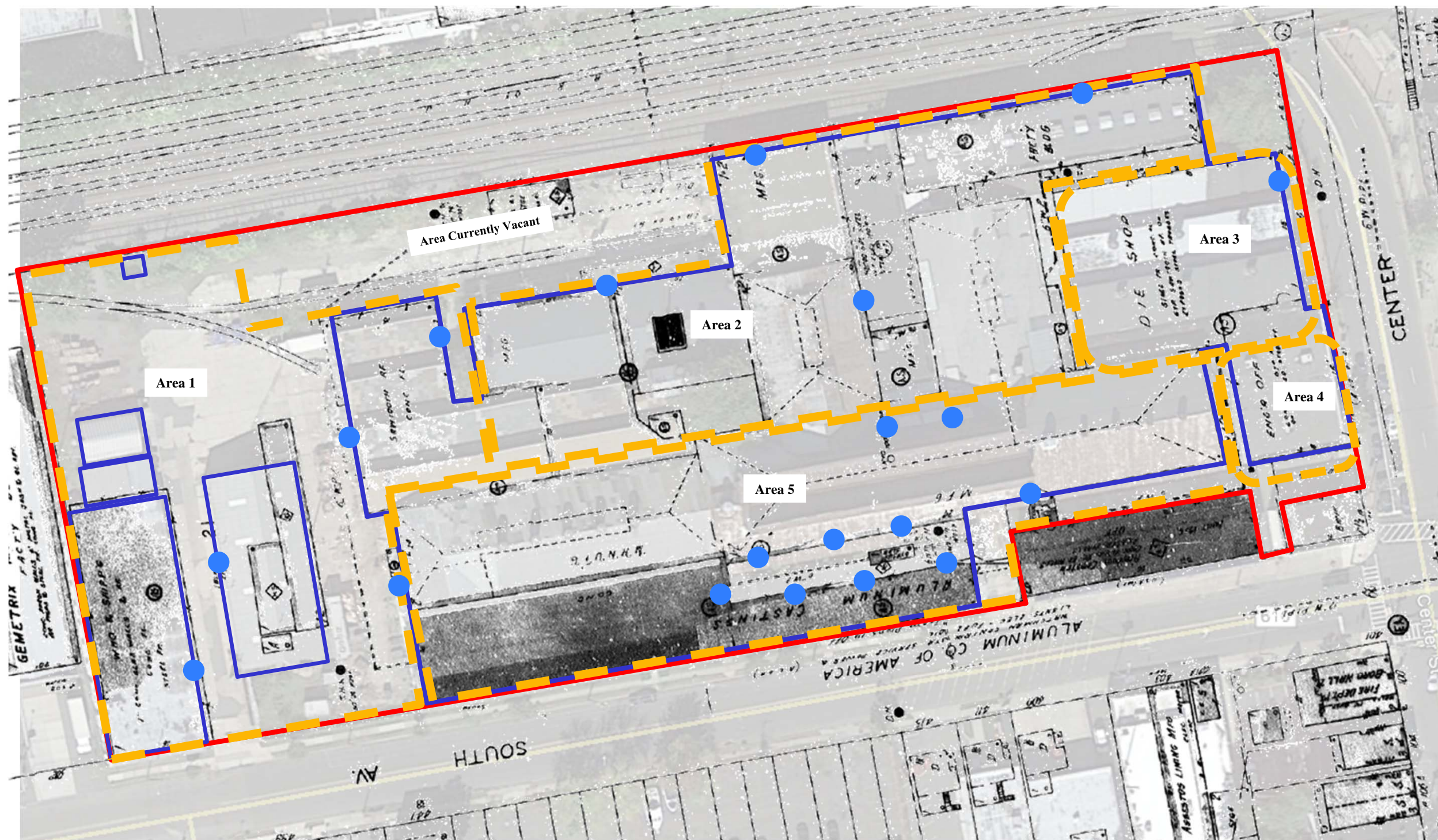
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- LEGEND**
- APPROXIMATE PROPERTY LINE
 - FLOOR DRAIN
 - POLE TRANSFORMERS
 - PAD TRANSFORMERS
 - CONCRETE SAMPLE LOCATION (LOT 1)
 - ▲ CONCRETE SAMPLE LOCATION (LOT 2)
 - AREA CONTAINING PCBs ABOVE 10 mg/kg IN SOIL
 - DELINEATED AREA CONTAINING PCBs ABOVE 1.0 mg/kg (LESS THAN 10.0 mg/kg) IN SOIL
 - AREA TO BE EXCAVATED
 - PROPOSED CONCRETE FLOOR SAMPLE LOCATION
 - PROPOSED CONCRETE WALL SAMPLE LOCATION



Additional Concrete Sampling Locations		
USEPA Risk-Based Plan Addendum Follow-Up 450 & 490 South Avenue and 50 Center Street Block 401, Lots 1 and 2 Garwood, New Jersey		
 EcolSciences, Inc. Environmental Management & Regulatory Compliance	January 2017 Scale: As Shown	Figure Number 2



Legend

- Site Boundary
- Extent of Current Structures
- Area Boundaries
- Proposed PCB Wall Sampling Location

Property Layout Plan

USEPA Risk-Based Plan Addendum Follow Up
450 & 490 South Avenue and 50 Center Street
Block 401, Lots 1 and 2
Garwood, New Jersey