

Phase 2 Brownfields Assessment

318 S. Campbell Avenue

Date of Report: August 15, 2011

Assessment Funding: EPA Brownfields Assessment Grant

Acres: 0.59

Site Background

Seagull Environmental Technologies Inc. conducted a Phase II Brownfields Assessment of the 318 South (S.) Campbell Avenue site located in Springfield, Missouri. The site, which is comprised of two parcels of land that together are approximately 0.59 acre in size, is located near the intersection of S. Campbell Avenue and West McDaniel Street in downtown Springfield. Both of the parcels that comprise the site are currently owned by Sertoma Building Corporation

(Sertoma). Those are (1) the 318 S. Campbell Avenue property and (2) a surface parking lot located directly across S. Campbell Avenue (to the west) with a listed address of S. Campbell Avenue. The 318 S. Campbell Avenue property is approximately 0.17 acre in size, and the surface parking lot is approximately 0.42 acre in size. The 318 S. Campbell Avenue property currently contains a building, while the surface parking lot is utilized for parking space.



The building at the 318 S. Campbell Avenue property is currently vacant and has been undergoing renovation. Sertoma is a civic organization and has used the building for office space and to conduct meetings, dinners, and fundraisers for the last 20 years. Sertoma moved out of the building in December 2010 so they could begin renovation. In March 2011, Sertoma decided to stop renovation of the building and instead move their operations to a different location. Historical documents indicate that a building has been located on the 318 S. Campbell Avenue property dating back to the late 1800s. Property/building use was primarily identified in historical records as a “store.” The surface parking lot has been owned by Sertoma for approximately 10 years. Currently, the parking lot is utilized as a pay lot. The asphalt-covered surface parking lot has been utilized for parking since the late 1960s; however, prior to that date it contained numerous buildings dating back to the late 1800s. The area surrounding the site is primarily occupied by commercial businesses. Historical records indicate that the surrounding area has been developed since the late 1800s and has contained a mix of residential, commercial, and industrial properties.

Findings

Phase II Brownfields Assessment activities were conducted at the site on July 25 and 26, 2011, and August 2, 2011. The purpose of the Phase II Brownfields Assessment was to determine

whether past site operations have resulted in releases of hazardous contaminants to environmental media (soil and groundwater). In addition, the scope of the Phase II Brownfields Assessment included an inspection of the 318 S. Campbell Avenue building for the presence of asbestos-containing building materials (ACM). Suspected ACM was sampled to quantify the material.

Phase II Brownfields Assessment activities included the collection of five subsurface soil samples for laboratory analysis of site-related contaminants (volatile organic compounds [VOC], polynuclear aromatic hydrocarbons [PAH], total petroleum hydrocarbons [TPH] / gasoline range organics [GRO] / diesel range organics [DRO] / oil range organics [ORO], and metals regulated under the Resource Conservation and Recovery Act [RCRA]). Three groundwater samples were proposed and attempted, but due to shallow depth of underlying bedrock, groundwater sample collection was not possible. For evaluation purposes, soil sample results were compared to their respective Missouri Risk-Based Corrective Action (MRBCA) standards as established by the Missouri Department of Natural Resources (MDNR). For the asbestos inspection, 76 samples were collected from structural materials associated with the building at 318 S. Campbell Avenue. A summary of the Phase II Brownfields Assessment sample results follows:

Soil

Soil samples collected from the site contained the VOC acetone and RCRA metals. Acetone was detected in three of the five soil samples at concentrations that ranged from 0.0157 J to 0.0528 milligrams per kilogram (mg/kg). A J-coded result indicates the concentration was estimated. The detected concentrations of acetone were well below its respective MRBCA soil standards. Additionally, acetone is a common laboratory contaminant and not likely a site-related contaminant. The RCRA metals arsenic, barium, cadmium, chromium, lead, and mercury were detected in all of the soil samples. Two RCRA metals – arsenic and lead – were detected at concentrations that exceeded their respective MRBCA Default Target Levels (DTL). All of the samples contained arsenic above its MRBCA DTL of 3.89 mg/kg. Specifically, arsenic was detected at concentrations that ranged from 10.8 to 15.9 mg/kg. Currently, there are no MRBCA Tier 1 RBTLs established for arsenic in subsurface soil. All of the samples contained lead above its MRBCA DTL of 3.74 mg/kg. Lead was detected at concentrations that ranged from 15.3 to 57.2 mg/kg. None of the lead concentrations exceeded its MRBCA Tier 1 Risk-Based Target Levels (RBTL) established for residential and non-residential subsurface soil, which are 260 and 660 mg/kg, respectively. Based on average levels of metals in Greene County soils, it is likely the detected arsenic and lead concentrations are naturally occurring. The detected concentrations of acetone, arsenic, and lead are low and present minimal risk to future use and redevelopment of the site.

Asbestos

None of the bulk material samples submitted for analysis of asbestos were determined to contain asbestos.