



Seagull Environmental Technologies, Inc.

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PHASE II ENVIRONMENTAL SITE ASSESSMENT

1621 West College and 1620 West Olive Street Site

Date of Report: June 26, 2014

Assessment Funding: 2014 EPA Brownfields Assessment Grant

Acres: Approximately 0.98 acre

SITE BACKGROUND

Seagull Environmental Technologies, Inc. (Seagull) was tasked by the City of Springfield – Planning and Development Department to conduct a Phase I Environmental Site Assessment (ESA) of the 1621 West (W.) College and 1620 W. Olive Street site in Springfield, Missouri. The 1621 W. College and 1620 W. Olive Street site will hereafter be referred to as the “subject property” or “site.” The subject property is 0.98 acre in size and contains two buildings. The site building addressed as 1621 W. College Street is referred to in this report as the "commercial building." The site building addressed as 1620 W. Olive Street is referred to in this report as the "residence." The site formerly contained a third building (addressed as 215 North [N.] Kansas Expressway); however, that building was destroyed by a fire in October 2012. The subject property is currently owned by Empire Bank.

Phase II ESA activities were conducted at the site on June 3, 2014. The primary purpose of the Phase II ESA was to determine whether current and historic operation of the site for industrial purposes have resulted in releases of hazardous contaminants to the soil on the subject property. In addition, the scope of the Phase II ESA included an inspection of the two site buildings for the presence of asbestos-containing building materials (ACM). Suspected ACM was sampled to quantify the material.

The Phase II ESA included the collection of five soil samples. The soil samples were submitted for laboratory analysis of volatile organic compounds (VOC), total petroleum hydrocarbons (TPH)–gasoline range organics (GRO)/diesel range organics (DRO)/oil range organics (ORO), polynuclear aromatic hydrocarbons (PAH), and metals regulated under the Resource Conservation and Recovery Act (RCRA). For evaluation purposes, soil sample results were compared to their respective Missouri Risk-Based Corrective Action (MRBCA) standards established by the Missouri Department of Natural Resources

(MDNR). For the asbestos inspection, suspected ACM was sampled to quantify asbestos in the material. Findings and recommendations from the Phase II ESA were as follows:

Soil

Soil samples collected from the site contained low levels of contaminants. Specifically, the soil samples contained VOCs, RCRA metals, and one PAH compound (fluoranthene). Three VOCs were detected in the samples at concentrations that ranged from 0.00062 J to 0.049 J milligrams per kilogram (mg/kg). The detected VOCs were acetone, 2-butanone, and tetrachloroethene. All of the detected concentrations of VOCs were well below their respective MRBCA standards. The only PAH compound detected was fluoranthene at 0.0043 J mg/kg. The detected concentration of fluoranthene was well below its respective MRBCA standards.

All of the soil samples contained detectable concentrations of the eight RCRA metals. Four RCRA metals — arsenic, barium, lead, and selenium — were detected at concentrations that exceeded their respective MRBCA Default Target Levels (DTL). However, none of the metals were detected above their respective Tier 1 Risk-Based Target Levels (RBTL) established for residential or non-residential subsurface soil (if established).

The detected concentrations VOCs, fluoranthene, and RCRA metals do not pose a risk to future use and/or redevelopment of the site.

Asbestos-Containing Materials

Four materials associated with the commercial building (1621 W. College Street) and two materials associated with the residence (1620 W. Olive Street) were determined to contain asbestos. Specifically, the materials in the commercial building were: 12- by 12-inch vinyl floor tile, pipe insulation (two sizes), roof flashing, and transite siding. The two materials in the residence were ceiling texture and transite siding. Those materials contained asbestos (chrysotile) at concentrations ranging from 0.25 to 85 percent (%). The EPA defines ACM as any material containing asbestos at a concentration above 1%; therefore, the ceiling texture (determined to contain asbestos at 0.25%) is not ACM. Future renovations (including abatement and disposal activities) that could disturb the ACM should be conducted in accordance with applicable local, state, and federal regulations.