



951 West Outer Road
Arnold, Missouri 63010
314.241.6660 T
636.296.2409 F

ClearFieldsGroup.com

November 7, 2007

CG Proposal #1323

Mark Bohnert
Red Brick Community Land Trust
1901 S. 11th Street
St. Louis, Missouri 63104

Analysis of Brownfields Cleanup Alternatives (ABCA)
Former Auto Repair Facility and Filling Station
1805 South Tucker
St. Louis, Missouri 63104

Dear Mr. Bohnert;

The following serves as ClearFields Group's (**CG**) Analysis of Brownfields Cleanup Alternatives (ABCA) for the former auto repair facility and filling station at 1801-1805 South Tucker in Saint Louis, Missouri 63104.

1.0 Introduction

ClearFields Group (CG) has developed this Analysis of Brownfields Cleanup Alternatives (ABCA) for the former auto repair and filling station facility located at 1805 South Tucker in the City of St. Louis, Missouri. This ABCA has been prepared in general accordance with the United States Environmental Protection Agency (EPA) guidance for Cleanups receiving EPA grant funds. The site has been awarded EPA grant money for the removal of the underground storage tanks located on the site. The scope of work for this ABCA includes the removal of the two (2) known underground storage tanks that were identified on site.

2.0 Site History & Background

The Subject Property is a vacant parcel currently being used as a neighborhood garden located at 1801-1805 South Tucker (previously known as South 12th Street) in the City of St. Louis, Missouri. The Subject Property consists of approximately 0.26 acres and is located in city block #408. The Subject Property is located in a mixed-use residential/commercial area. The property was developed commercially in the early 1900's.

During the course of an Environmental Site Assessment (ESA) conducted by ClearFields Group in June 2005 it was discovered that the Subject Property operated as an auto repair facility and filling station from 1958 through 1969. The City of St. Louis issued building permits in March of 1955 for the installation of two 5,000-gallon gasoline tanks and two 550-gallon oil tanks. The site inspection revealed the presence of two underground storage tanks (USTs) still on the site.

Subsequent to the Environmental Site Assessment, ClearFields Group conducted a magnetometer survey of the Subject Property in August 2005. A magnetometer survey was conducted on all portions of the subject property except those areas obstructed by dense vegetation. High-level

readings were identified at two locations on the southern end of the subject property near the former filling station structure. It was determined that at least two underground storage tanks are still present at this location.

It must be noted that while the magnetometer is a useful screening tool for locating USTs; however, it cannot definitively identify an UST because of the potential for interference from other buried metallic objects, i.e. steel reinforcing bar, pipes, conduits, etc.

In addition to the magnetometer survey, ClearFields Group conducted a limited Phase II soil/groundwater investigation. This investigation focused on areas with the highest probability of having residual contamination based on the information gathered during the Phase I ESA and magnetometer survey.

No detectable levels of volatile organic compounds and/or petroleum related compounds were detected in the soil samples analyzed from the eight boring locations.

RCRA metals were detected in the three sample locations on site. However, all were below the Missouri Department of Natural Resources (MDNR) Risk Based Corrective Action (RBCA), Risk Based Target Levels for Residential Land Use.

Based upon the findings of the Phase II investigation, no indication of widespread petroleum contamination was observed on the Subject Property.

3.0 Development Plans

The proposed project is a residential development that involves three new construction single-family homes, all with off-street parking or garages. The project site is located in the Bohemian Hill neighborhood, part of the Soulard area, and south of Downtown St. Louis, a rich historic neighborhood known for its farmers market and festive Mardi Gras celebration. The neighborhood was placed on the National Register of Historic Places in 1972 and several adjacent neighborhoods have been recognized locally as having historic significance.

Affordability in Soulard remains problematic, thus a promising location for Red Brick Community Land Trust's (RBCLT) proposed project. RBCLT is planning to offer these units for purchase to low and moderate income individuals making 80% or below of the Area Median Income. RBCLT has partnered with Youth Education and Health in Soulard/YouthBuild St. Louis AmeriCorps for this project. The plans incorporate universal design concepts and sustainable building technology in the new construction and renovations in order to train students in these methods and to demonstrate that green design can be incorporated into affordable housing development.

Analysis Of Brownfields Cleanup Alternatives

A total of two (2) alternatives have been developed for the site remediation and are discussed in this ABCA. These alternatives have been evaluated based on meeting the regulatory requirements for the underground storage tanks present on site as well as meeting the redevelopment goals of the site. Each alternative is described below.

Alternative 1: No Action

The No Action alternative is included as a baseline and is basically the “do-nothing” alternative. Under this approach, the underground storage tanks present on site would remain in place.

Alternative 2: Underground Storage Tank Removal

Under this approach closure of the underground storage tanks will be conducted on site. The underground storage tank closure will be conducted as prescribed in the Missouri Risk Based Corrective Action Guidance Document and in compliance will all local, state and federal laws and regulations.

Evaluation and Comparison of Cleanup Alternatives

A general evaluation of the potential alternatives considered in this ABCA is summarized below. The table is structured for comparison of alternatives by describing the benefits and limits of effectiveness, implementability, and cost of each alternative.

Alternative	Effectiveness	Implementability	Cost
Alternative 1 – Do Nothing	Does not eliminate potential risk at site.	Easy to implement; however, site redevelopment will not occur and attractive nuisance risks will continue.	No immediate cost
Alternative 2 – Underground Storage Tank Removal	Removes Underground Storage Tanks from site allowing redevelopment of the site.	Minor implementation risks to workers conducting the UST removal.	Tank closure activities are estimated at \$24,902.00

Selection of Preferred Alternative

Alternative 1, the No Action alternative, was included in the ABCA for comparative purposes only. This is not a feasible cleanup alternative for the site because it is not effective at meeting the project objectives. Although this alternative would be easy to implement, it is also not considered cost effective due to the continued risks to the environment and public safety, as well as the continued removal of the site from the tax base.

Alternative 2, Underground Storage Tank Removal, would effectively achieve regulatory compliance with the Missouri Department of Natural Resources by removing the abandoned tanks on site. In addition, the removal of the tanks will facilitate the redevelopment of the site thus removing the overall attractive nuisance of the site. Closure activities are estimated to take a week on site. Implementation of this alternative is straightforward with minor risks to workers conducting excavation, cleaning, and loading of the tanks onto flat bed trailers. The underground

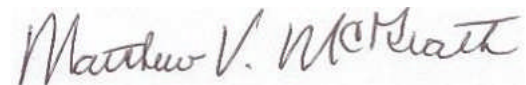
storage tank closure is estimated at \$24,902.00. Alternative 2 is the preferred alternative as it meets all of the development goals of the site.

Summary/Conclusions

Based on the above detailed analysis, the most optimal approach for meeting the future site construction plans while providing a "certificate of completion" and unrestricted site use, at the least overall cost for environmental remediation, is to excavate the two (2) known underground storage tanks that are present on the Subject Property.

Any questions or comments regarding this ABCA document can be directed to Matthew McGrath at (314) 241.6660.

Respectfully,

A handwritten signature in dark ink that reads "Matthew V. McGrath". The signature is written in a cursive style with a clear, legible font.

Matthew V. McGrath
President