

ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES

Preliminary Evaluation Prepared by the City of South Gate Housing Authority

9019 Long Beach Boulevard, South Gate, California

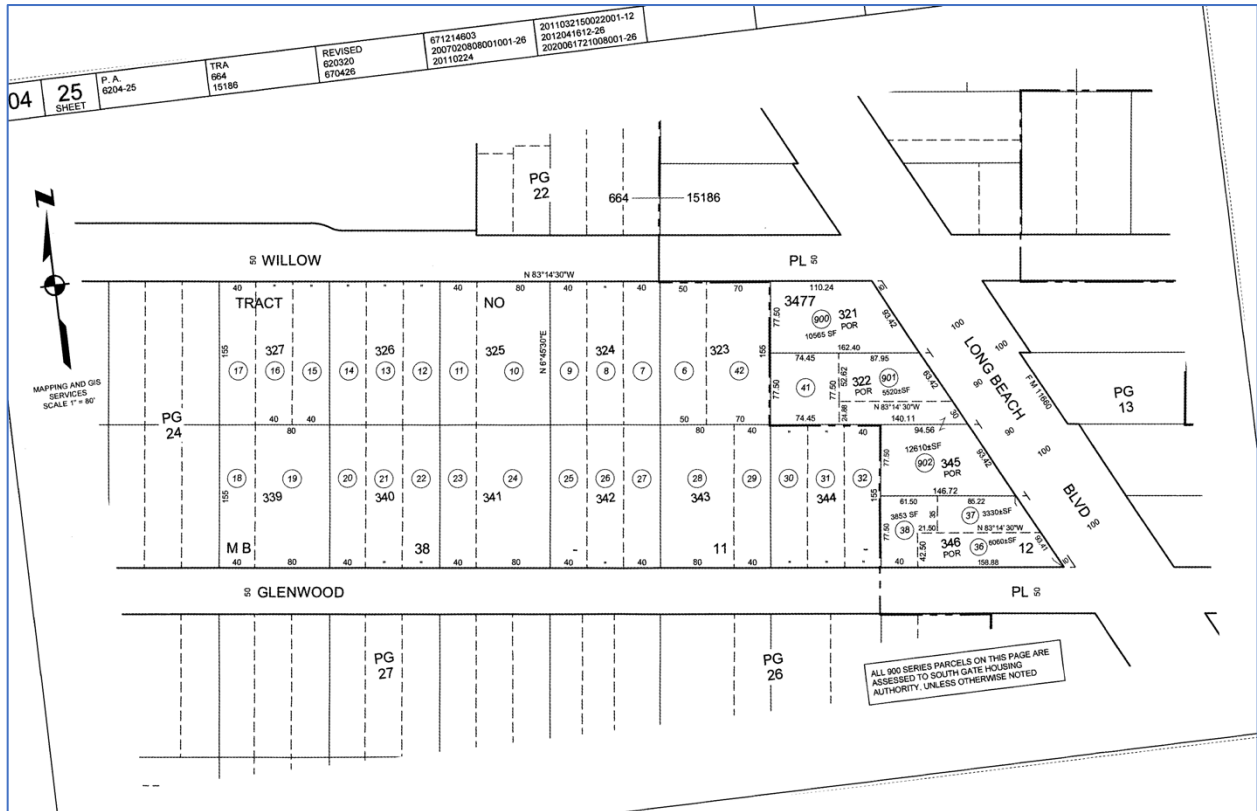
1.0 Introduction and Background

The purpose of this preliminary Analysis of Brownfields Cleanup Alternatives (ABCA) is to provide information about contamination issues at the site and evaluate possible remedial alternatives. This evaluation will be revised, as necessary, and incorporated into the final Site Cleanup Plan for review by the community, project partners, regulatory oversight agencies, and the United States Environmental Protection Agency (USEPA).

1.1 Site Location

The Site is located at 9019 Long Beach Boulevard, South Gate, California. The Site comprises one parcel (Los Angeles County APN 6204-025-902, formerly 6204-025-039) totaling approximately 12,601 square feet, as shown in Figure 1. The Site is situated in a mixed residential and commercial land use area, bordered by Long Beach Boulevard to the east, commercial uses to the south, residential uses to the west, and vacant property owned by the City of South Gate Housing Authority (Housing Authority) to the north.

Figure 1: Site Location (Source: Los Angeles County Assessor)



1.2 Ownership and Previous Site Use

The Site is owned by the Housing Authority, who acquired the property in March 2020 from a private property owner for purposes of redevelopment for affordable housing. The current use of the Site is an automotive repair shop, known as Vallarta Tires. Based on information obtained during the Environmental Site Assessment (“ESA”), the Site appears to have been a greasing and gasoline and oil facility in 1950 and has been used as an automotive repair shop from 1970 through present day.

1.3 Site Assessment Findings

The Brownfield Site is a 0.29-acre parcel that is improved with a 651 square foot building and is currently the location of an automotive repair shop. The Brownfield Site is bordered by Long Beach Boulevard to the east, commercial uses to the south, residential uses to the west, and vacant property owned by Housing Authority to the north. The Housing Authority intends to redevelop the Brownfield Site into affordable housing.

A review of historical documents in the Phase I Environmental Studies Analysis (ESA) performed by ACS Associates, Inc. indicates that an automotive greasing and “gas & oil” facility was located at the Brownfield Site in 1950. Prior to 1970, the Site was occupied by numerous gas stations and from 1970 through present day, the Brownfield Site has been occupied by various automotive repair shops. The current and former use of the Brownfield Site led Rincon to determine that potential Recognized Environmental Conditions may be present, indicating that there could be hazardous substances or petroleum products in, on, or at the Brownfield Site. Since this Brownfield Site is the location of a future affordable housing development, a Phase II ESA was authorized in order to investigate potential contaminants.

A Phase II ESA was conducted on the Brownfield Site in 2019 by Rincon Consultants, Inc. The Phase II ESA detected levels of arsenic, lead, and thallium that exceeded their respective Environmental Screening Levels (ESLs) for residential land uses and TPH as oil (TPHo) concentrations exceeding the Los Angeles Regional Water Quality Control Board (“LARWQCB”) soil screening levels (SSLs). While arsenic was detected at levels that exceeded the ESLs in all samples collected, the detected concentrations were within the naturally occurring background concentrations in California soils, making the concentrations of lead, thallium, and TPHo the primary areas of focus.

Lead was detected in all 22 soil sample locations at the Brownfield Site and concentrations were found to be elevated at levels above the ESL for residential properties in shallow soils in 4 of the 22 soil sampling locations. Rincon estimates that the volume of lead-impacted soil to be approximately 250 cubic yards, encompassing approximately 150 cubic yards of soil exceeding the environmental screening limit for residential properties, and approximately 100 cubic yards which would be considered California Non-RCRA hazardous waste if excavated. Thallium was detected in 8 samples at levels above the residential ESLs. However, Rincon noted that such elevated levels can often be an artifact of the EPA Method 6010 analytical methodology and

recommended that the thallium be tested by EPA Method 6020 to verify the concentration of thallium at the Brownfield Site. Lastly, TPHo was found to exceed soil screening criteria in only one location at a depth of 0.5 feet below ground surface.

Prior to commencing redevelopment, the Housing Authority intends to prepare a Remedial Action Plan (“RAP”), which will outline a plan of action to remediate the Brownfield Site. Actions outlined in the RAP will include, but not be limited to, verifying the concentration of thallium, excavating contaminated soil (which will also require the demolition of the 651 square foot building located on the property), and performing testing to ensure all contamination has been removed or has been reduced to levels that are considered safe. The Housing Authority will also contract with the California Department of Toxic Substances Control (“DTSC”) for voluntary oversight of the remediation of the lead and TPH impacts. Award of a Cleanup Grant would provide the Housing Authority funding needed to develop and accomplish the RAP, thereby enabling the Developer to begin construction of the affordable housing project.

1.4 Project Goal

The Site is a part of a larger redevelopment project planned for three (3) Housing Authority parcels located at 9001, 9015, and 9019 Long Beach Boulevard (Project Area). On April 23, 2019, the Housing Authority and Habitat for Humanity of Greater Los Angeles (Developer) entered into an Exclusive Negotiation Agreement (ENA) for the redevelopment the three Housing Authority parcels, including the Site, which would result in the development of 12 townhomes available for purchase to low and moderate income households as well as 2 townhomes available to rent to households earning less than 30 percent of the County median income. The Site and Project Area lie within a portion of South Gate where poverty is especially high, and homeownership opportunities are particularly difficult, as less than 15 percent of households in this area of the City could qualify to purchase a market rate priced home, despite the fact that South Gate remains one of the most affordable housing markets in Los Angeles County. As a result, gentrification pressures are significant, and the production of new and affordable housing units is critical to curb these pressures.

The Developer is a nonprofit housing entity that has a long track record of successful development of for sale affordable housing in the City and throughout the County. Redevelopment of the Site is also essential to remove a blighted property and execute the goals of the Redevelopment Plan that was previously established by the (dissolved) South Gate Community Development Commission. The overall project goal is to transfer the property to the Developer with no environmental impacts, thereby allowing the Developer to build the affordable housing project with no environmental restrictions.

2.0 Applicable Regulations and Cleanup Standards

2.1 Cleanup Oversight Responsibility

For soil and groundwater issues in the Gateway Cities area, the primary regulatory agencies are the Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board – Los Angeles Region (LARWQCB), and the Consolidated Fire Protection District of Los Angeles

County (Consolidated Fire). If soil is the only media affected, the DTSC would likely be the oversight agency assigned to the issue, if required.

2.2 Cleanup Standards for Major Contaminants

Cleanup standards in California are typically based on either site-specific risk assessments or regulatory guidance documents. The two regulatory guidance documents most commonly utilized in this region are the Environmental Screening Levels (ESLs) developed by the RWQCB and the California Human Health Screening Levels (CHHSLs) developed by the DTSC. Both of these standards will be utilized, as applicable, for this cleanup.

2.3 Laws and Regulations Applicable to the Cleanup

Laws and regulations applicable to the remediation of the hazardous substances in this cleanup include the California Water Code and the Health and Safety Code. For soil excavated for disposal, State (California Code of Regulations) and Federal (Code of Federal Regulations) waste disposal requirements apply. Also applicable to this cleanup are the Brownfields Revitalization Act and the Federal Davis-Bacon Act. In addition, for all City projects that receive Federal funding, Federal, state and local laws regarding procurement of contractors, equal opportunity, and the participation of small, woman, and minority-owned businesses will be applied.

3.0 Evaluation of Brownfields Cleanup Alternatives

3.1 Cleanup Action Objectives

Based on data from the Phase II ESAs performed for the site, soil with concentrations of heavy metals (arsenic, thallium, and lead) and TPHo were detected above regulatory screening levels on the Site. Portions of the impacted soil may exceed hazardous waste levels. However, the contamination is shallow and does not affect the groundwater. Therefore, the primary threat posed by the unabated contamination is to construction workers during subsurface activities (dermal contact exposure pathway). The selected cleanup alternative would need to address this risk and the development goal of removing soil classified as hazardous waste.

3.2 Identification and Evaluation of Cleanup Alternatives

Three feasible cleanup alternatives were evaluated for the Site: 1) No action, 2) Capping in place, and 3) Excavation and disposal. The evaluation criteria include effectiveness, implementability, and cost.

Alternative 1 – No Action

In the no action alternative, impacted soil would remain in place with no further action.

Effectiveness – This alternative would not reduce the concentrations of the contaminants of concern either for human health risks to future site workers or for removing potential

hazardous waste from the property. This alternative also would not meet the development goal of transferring the property with no environmental impacts.

Implementability – This alternative can easily be implemented.
Cost – No costs would be generated through the implementation of this alternative.

Alternative 2 – Capping in Place

The capping in place alternative would involve placing a barrier (i.e. concrete, asphalt, soil) over the impacted soil to prevent individuals from contacting it. This would prevent the dermal contact pathway for persons at the site. However, it is not protective of construction workers or other workers (such as for utility repair) that may need to perform subsurface activities. The cap would also require long-term monitoring to maintain the integrity of the cap.

Effectiveness – This alternative would not reduce the concentrations of the contaminants of concern or protect workers performing subsurface activities. However, this alternative will protect persons on-site from contact with impacted soil. Long-term monitoring of the integrity of the cap would be required. This alternative would not meet the development goal of transferring the property with no environmental impacts, and be prohibitive to any residential development as proposed.

Implementability – The cap is easy to implement using standard construction materials. Pending final development plans, the proposed site development may provide the cap through building foundations and paved lots.

Cost – The final cost would be based on the final development plans. If the planned development can provide the cap by means of buildings and paved parking lots, no additional initial cost will be needed. If construction of a cap is needed, costs would vary based on the type of cap (soil, asphalt, etc.) and could range from \$50,000 to \$70,000 for the contaminated area of approximately 0.5 acre (pending confirmation sampling to define the extent of contamination).

Alternative 3 – Excavation and Disposal

This alternative would involve the excavation of the impacted soil and off-site disposal at an appropriate permitted facility. Confirmation soil samples would need to be collected and analyzed to confirm the final extent of the excavation.

Effectiveness – Excavation of the impacted soil will completely remove the contaminants from the site. The risk to future workers performing subsurface activities will be removed. In addition, this alternative would meet the development goal of transferring the property with no environmental impacts that would allow unrestricted development.

Implementability – Once the 651 sf site structure is demolished, there will be easy access for excavation. There is sufficient space onsite for stockpiling and staging of the soil prior to removal off-site. This alternative is easily implemented.

Cost – The final cost will vary based on the final size of the excavation determined by confirmation samples and the waste classification of the excavated soils. Based on the preliminary projection of soil removal costs in the Supplementary Phase II ESA, up to 215 tons RCRA hazardous waste, and 835 tons of California hazardous waste would be excavated and disposed from the Site for an estimated cost of \$131,500.

Comparison of Alternatives

The no action alternative would not address any of the protective needs for the project and is therefore eliminated from further evaluation. Alternative 2 is protective for site workers, but requires a soil management plan for individuals that may need to perform subsurface work such as utility repair. Impacted soil still may need to be removed in the future.

Alternative 3 is completely protective of site workers and construction workers performing subsurface activities. In addition, Alternative 3 is the only alternative that meets the needs of the proposed development for removal of all environmental impacts that would allow unrestricted development.

3.3 Recommended Cleanup Alternative

Based on the analysis of effectiveness, implementability, cost, and benefit to the community, Alternative 3, Excavation and Disposal, is the most suitable cleanup alternative for the Project site.

This alternative provides complete contaminant removal, which is not provided by Alternatives 1 and 2. Although the short-term costs for Alternative 2 would be less than the cost for Alternative 3, Alternative 2 prohibits residential development on the property. In addition, Alternative 2 requires maintenance of the site to ensure the integrity of the cap is maintained and if there were any changes to the Site that required subsurface excavation, the soil would need to be disposed at that time. Lastly, Alternative 3 is the only Alternative option that would allow the Housing Authority to transfer the property to the Developer with no environmental impacts, thereby allowing the Developer to build the affordable housing project with no environmental restrictions.

4.0 Questions/ Comments

If you have any questions or comments on this document, please contact Dianne Guevara, Management Analyst with the City of South Gate at (323) 563-9535 or by email at dguevara@sogate.org