

ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES
Preliminary Evaluation
Prepared by the City of Oakland

625-659 Hegenberger Road site, Oakland, 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 625-659 Hegenberger Road in Oakland, California. The Site comprises six street addresses (625, 633, 635, 639, 655, and 659 Hegenberger Road) totaling approximately 12.37 acres. The Site is situated in a mixed residential and commercial land use area, bordered by Hegenberger Road to the east, Collins Way to the south, a vacant parking lot to the west, and an office building to the north.

1.2 Ownership and Previous Site Use

The Site is owned by the City of Oakland (City). Based on information obtained during the Environmental Site Assessment (ESA), the Site appears to have been first developed in approximately 1963 as a gasoline service station on the southern portion of the Site and a department store on the northern portion of the Site. The gasoline service station appears to have closed in the mid-1970s and was later occupied by a tune-up shop, a smog check station, a car detailing shop, and a liquor store. The southern portion of the Site has been a vacant lot between 1993 and 1998 based on historical aerial photographs. The department store was originally occupied by White Front store and was later used as a warehouse (Oakland International Trade Center) until 1986, and then a home-improvement store by 1990 (the Home Club which later became known as Home Base). In October 2005, the retail building suffered fire damage and, based on building records, was subsequently demolished in 2006.

The property was sold to the former Oakland Redevelopment Agency (ORA) in 2010. The Site was transferred to the City in 2012.

1.3 Site Assessment Findings

In 2009, as part of the environmental due diligence for the purchase of the subject site, the City's consultant Fugro Consultants, Inc. (Fugro) performed a Phase I Environmental Site Assessment (ESA) with All Appropriate Inquiries (AAI) and a Phase II site investigation. The Phase I determined that historical land uses included gas station, car detailing shop, department store,

and home improvement store, and identified Recognized Environmental Conditions (RECs) of fill soils onsite from unknown origin, and potential petroleum hydrocarbon contamination from the former gas station. The Phase I recommended a Phase II ESA to determine whether the previous site uses had affected the study area soils and/or groundwater.

A Phase II ESA for the Site was completed by Fugro Consultants, Inc. (Fugro) in October 2009. The investigation included collecting soil and groundwater samples from six borings. Based on the analytical results of the Phase II, arsenic and lead were detected in site soils at concentrations exceeding the Environmental Screening Levels (ESLs) established by the San Francisco Regional Water Quality Control Board. Based on the analytical results for soluble lead, one sample exceeded the limit for RCRA hazardous criteria, and another sample exceeded the limit for California hazardous criteria. Out of the six groundwater samples collected during this investigation, one sample showed total petroleum hydrocarbons (both diesel and motor oil) at concentrations exceeding the ESLs.

1.4 Project Goal

The Site is a portion of the Coliseum City Redevelopment, in a mixed residential-commercial zoned area of Oakland. The proposed Coliseum Area Specific Plan includes a new sports venue, over 14 million square feet of Science & Technology, office, light industrial, logistics and retail space, and 6,370 residential units. The proposed Specific Plan also includes nearly 39 acres of new, publically-accessible open space, creek and wetland improvements, and restored open space on the Bay waterfront.

Environmental assessment and remediation of impacted sites are vital to continuing the current redevelopment process. In addition to the cleanup grant for the subject site, the City is also applying for an environmental assessment grant for the Coliseum City redevelopment area.

2.0 Applicable Regulations and Cleanup Standards

2.1 Cleanup Oversight Responsibility

For soil and groundwater issues in the Oakland area, the primary regulatory agencies are the Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board – San Francisco Bay Region (RWQCB), and the Alameda County Department of Environmental Health (ACDEH). 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 and lead) above regulatory screening levels were detected on the Site. In addition, portions of the impacted soil may exceed hazardous waste levels. 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.

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 – The site structures have already been demolished, therefore, there is already 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 and require a soil management plan for individuals that may need to perform subsurface work such as utility repair and may still require removal of some or all of the impacted soil 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, maintenance of the site to maintain the integrity of the cap would be required, and if there were any changes to the site that required subsurface excavation the soil would still need to be disposed at that time. In addition, Alternative 3 meets the requirements of the proposed development for the site.

4.0 Questions/ Comments

If you have any questions or comments on this document, please contact Gopal Nair, City of Oakland Environmental Services Division at 510-238-6361, or by email: gnair@oaklandnet.com