# 2316 South Elm Avenue, Fresno, California

# Analysis of Brownfield Cleanup Alternatives

December 21, 2021

Prepared for:

City of Fresno
2600 Fresno Street, Room 3076
Fresno, California 99201

Prepared by:

Stantec Consulting Services Inc.
3875 Atherton Road
Rocklin, CA 95765

Project No.: 185704673

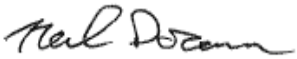
USEPA Brownfields Coalition
Assessment Grant Cooperative
Agreement No. BF00E02372
ACRES Nos. 229501

# Sign-off Sheet

This document entitled 2316 South Elm Avenue, Fresno, California – Analysis of Brownfield Cleanup Alternatives was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of City of Fresno (the “Client”). Any reliance on this document by any third party is strictly prohibited without the written consent of Stantec, which may be granted at Stantec’s sole discretion. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any third party use of this document is wholly the responsibility of such third party. Any reliance granted to a third party will require the use and acceptance of Stantec’s form of reliance letter.

Author: 

**David B. Holmes**



Quality Reviewer: _____

**Neil Doran, P.G.**

# Table of Contents

**ABBREVIATIONS AND ACRONYMS** ..... **III**

**EXECUTIVE SUMMARY** ..... **V**

**1.0 INTRODUCTION AND BACKGROUND** ..... **1**
1.1 GENERAL SITE INFORMATION ..... 2
1.2 SITE HISTORY AND PREVIOUS USE ..... 2
1.3 HYDROGEOLOGIC SETTING ..... 2
1.4 PREVIOUS ENVIRONMENTAL STUDIES AND REMEDIAL ACTIVITIES ..... 3

**2.0 REDEVELOPMENT PLAN** ..... **12**

**3.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS** ..... **15**
3.1 CLEANUP OVERSIGHT RESPONSIBILITY ..... 15
3.2 APPLICABLE CLEANUP STANDARDS FOR KEY CONTAMINANTS ..... 15
3.3 LAWS AND REGULATIONS APPLICABLE TO CLEANUP ..... 15
3.4 GENERAL BROWNFIELDS REDEVELOPMENT BEST PRACTICES APPLICABLE TO CLEANUP ..... 16

**4.0 EVALUATION OF BROWNFIELDS CLEANUP ALTERNATIVES** ..... **18**
4.1 CLEANUP ACTION OBJECTIVES ..... 18
4.2 CLEANUP ALTERNATIVES CONSIDERED ..... 18
4.2.1 Alternative 1 – No Action ..... 18
4.2.2 Alternative 2 – Encasement/Enclosure ..... 18
4.2.3 Alternative 3 – Removal ..... 19
4.3 EVALUATION OF CLEANUP ALTERNATIVES ..... 19
4.3.1 Effectiveness ..... 19
4.3.2 Implementability ..... 20
4.3.3 Costs ..... 21
4.3.4 Consideration of Climate Change Impacts ..... 22
4.3.5 Consideration of Equity and Environmental Justice Concerns ..... 23
4.3.6 Consideration of Green and Sustainable Remediation Guidance ..... 23
4.4 RECOMMENDED REMEDIAL ALTERNATIVE ..... 24

**5.0 DISCLAIMER AND LIMITATIONS** ..... **25**

**6.0 REFERENCES** ..... **26**

**LIST OF FIGURES**

FIGURE 1 SITE LOCATION MAP
FIGURE 2 SITE PLAN AND SURROUNDING PROPERTIES
FIGURE 3 SITE PLAN AND SAMPLING LOCATIONS

## LIST OF APPENDICES

APPENDIX A PLOT PLAN DATED 1959

APPENDIX B PREVIOUS RBM SURVEY REPORT

APPENDIX C BUILDING/SITE RENOVATION PLANS

# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ABCA | Analysis of Brownfield Cleanup Alternatives |
| ACM | asbestos-containing material |
| ACRES | Assessment, Cleanup, and Redevelopment Exchange System |
| AHERA | Asbestos Hazard Emergency Response Act |
| Alta | Alta Environmental, Inc. |
| BER | business environmental risk |
| bgs | below ground surface |
| CA-WETs | California Waste Extraction Tests |
| CBRE | CBRE, Inc. |
| CFR | Code of Federal Regulations |
| COC | contaminant of concern |
| CUPA | California Certified Unified Program Activity |
| CY | cubic yards |
| DTSC | Department of Toxic Substances Control |
| DTSC-SL | DTSC Screening Level |
| EDR | Environmental Data Resources |
| EP | Environmental Professional |
| EPA | Environmental Protection Agency |
| ESA | environmental site assessment |
| ESL | environmental screening level |
| FEMA | Federal Emergency Management Agency |
| FUSD | Fresno Unified School District |
| GHG | greenhouse gas |
| GPR | ground penetrating radar |
| HAZWOPER | Hazardous Waste Operations and Emergency Response |
| HUD | Housing and Urban Development |
| LBP | lead-based paint |
| Metro | Fresno Metropolitan Ministry |
| mg/kg | milligrams per kilogram |
| NESHAP | National Emissions Standards for Hazardous Air Pollutants |
| OSHA | Occupational Safety and Health Administration |
| PAH | polynuclear aromatic hydrocarbons |
| PCE | tetrachloroethylene |
| PID | photoionization detector |
| RBMs | regulated building materials |
| RCRA | Resource Conservation and Recovery Act |
| REC | recognized environmental condition |
| RLF | revolving loan fund |

| | |
|---|---|
| RRP | Renovation, Repair, and Painting |
| SF | square foot or feet |
| SFBRWQCB | San Francisco Bay Regional Water Quality Control Board |
| SGC | Strategic Growth Council |
| SRBC | Saint Rest Baptist Church |
| SRCDC | Saint Rest Community Development Corporation |
| Stantec | Stantec Consulting Services, Inc. |
| STLC | Soluble threshold limit concentrations |
| TBA | Targeted Brownfields Assessment |
| TCC | Transformative Climate Communities |
| TCLP | toxicity characteristic leaching procedure |
| TPH | total petroleum hydrocarbon |
| TPH-d | total petroleum hydrocarbon (as diesel fuel) |
| TPH-g | total petroleum hydrocarbon (as gasoline) |
| TPH-mo | total petroleum hydrocarbon (as motor oil) |
| TPH-o | total petroleum hydrocarbon (as oil) |
| USEPA | United States Environmental Protection Agency |
| USGS | United States Geological Survey |
| UST | underground storage tank |
| VOCs | volatile organic compounds |
| µg/kg | micrograms per kilogram |

# EXECUTIVE SUMMARY

Stantec Consulting Services, Inc. (Stantec) prepared this Analysis of Brownfield Cleanup Alternatives (ABCA) for a parcel of land containing a building located at 2316 South Elm Avenue, Fresno, California (the "Property"), on behalf of City of Fresno (City or the "Client"). The Property, known locally as the former Farmer John Meat Company warehouse, occupies 0.46-acres. The Property was acquired by the current owner, St. Rest Baptist Church (SRBC) in 2014 for the purpose of renovation of the building and adaptive reuse of the Property as a food hub (the "St. Rest + Food to Share Hub") in partnership with Fresno Metropolitan Ministry. The redevelopment plans include: a) repair and renovation of the existing 5,852 square foot (SF) former Farmer John Meat Company warehouse to serve as a food recovery, storage, and distribution center, b) construction of a new 3,800-SF two-story building that will include office space, a meeting room, and a certified commercial kitchen, and c) "urban heat island" mitigation measures in the form of landscape improvements in outdoor areas.

Phase I and II environmental site assessments (ESAs) completed in 2013, 2014, 2016, and 2021 identified and evaluated potential environmental concerns associated with the past uses of the Property as an orchard, a bakery, and a meat processing company, as well as concerns associated with neighboring properties (several of which were used as gas stations or auto repair facilities). Results of these studies suggest that the primary environmental concern impacting redevelopment plans is the presence of asbestos containing materials (ACMs) within the building, and in particular, ACMs present in the form of a ceiling skim coat throughout the building. Mold is a secondary concern related to the ceiling areas and interior of the warehouse. Therefore, this ABCA is focused on evaluating three remedial alternatives needed to address ACMs and mold: Alternative 1 - No Action; Alternative 2 – Encasement/Enclosure; and Alternative 3 – Removal. The three alternatives are evaluated based on their effectiveness, implementability, and cost. Consideration is also given to climate change impacts, equity and environmental justice concerns, and green and sustainable remediation guidance. No Action (Alternative 1) was considered but is not feasible as it would not allow the primary project goals to be achieved – which depend on renovation of the building. Alternatives 2 and 3 include common elements, but the primary difference is that for Alternative 2, the ceiling would remain in place but be enclosed/encapsulated by a new lower ceiling constructed throughout the building, whereas for Alternative 3, the existing ceiling and skim coat would be fully removed and replaced with an entirely new ceiling. A complicating factor is that the existing ceiling is considered structurally deficient by current California building codes but would be "grandfathered in" if it remains, whereas a new ceiling would require construction of additional structural components.

Alternative 3 is the recommended remedial alternative, and includes the following activities: 1) inspecting and repairing the roof; 2) establishing appropriate containment, barrier, and air-filtration systems as necessary for workers in appropriate protective clothing to work in areas subject to mold and ACM; 3) removing the ceiling and disposing of appropriately as a regulated ACM; 4) repairing or rerouting any plumbing or water lines located in areas above the ceiling; 5) treating all exposed framing and studs with evidence of mold with a microbial cleaning agent; 6) constructing a new ceiling together with required structural reinforcements; and 7) abating limited ACM in other areas of the building as needed. Activities 1 and 4 are considered to be general building rehabilitation activities and not specifically "cleanup" activities,

but are listed as they are necessary prerequisite actions for the cleanup activities. The estimated cost for the five “cleanup activities” associated with Alternative 3 is $165,648.

Alternative 3 is recommended because it is considered to be the most effective alternative, as well as the most implementable alternative (excluding the “no action” alternative). The costs for Alternatives 2 and 3 are similar, but Alternative 3 provides additional advantages that include: 1) greater likelihood of achieving effective abatement of mold, in particular within areas above the ceiling, 2) elimination of on-going future maintenance, monitoring, or notification requirements related to ACM in the ceiling (if enclosed/encapsulated as would occur under Alternative 2), and 3) enhanced long-term structural integrity for the roof.

# 1.0 INTRODUCTION AND BACKGROUND

Stantec Consulting Services, Inc. (Stantec) prepared this Analysis of Brownfield Cleanup Alternatives (ABCA) for a parcel of land containing a building located at 2316 South Elm Avenue, Fresno, California (the "Property"), on behalf of City of Fresno (City or the "Client"). The Property, known locally as the former Farmer John Meat Company warehouse, occupies 0.46-acres and is located on a commercial corridor (South Elm Avenue) located within Southwest Fresno as shown on **Figure 1**.

The Property was acquired by the current owner, St. Rest Baptist Church (SRBC) in 2014 for the purpose of renovation of the building and adaptive reuse as a food hub in partnership with Fresno Metropolitan Ministry (Metro). The redevelopment project is being supported in part through funding provided by a Transformative Climate Communities (TCC) Grant awarded to the City in 2018, and is identified on the "Transform Fresno" project website (https://www.transformfresno.com/) as:

- Project #16 – St. Rest + Food to Share Hub: Urban Heat Island Mitigation, and
- Project #17 – St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution Hub.

This ABCA is being funded through a United States Environmental Protection Agency (USEPA) Brownfield Coalition Assessment Grant awarded to City in 2019. The Property is one of the catalyst sites identified in the grant application for the USEPA Brownfield Coalition Assessment Grant, and the Property is located within the target area identified within the grant (i.e., which was designated as the 4.9-square mile Transform Fresno project area). The Property was also identified as a catalyst site in the City's application for a USEPA Brownfields Revolving Loan Fund (RLF) Grant awarded to the City in 2020, through it is anticipated that funding needed for abatement of regulated building materials (RBMs) will be provided through a subgrant awarded to Metro and/or SRBC. St. Rest Community Development Corporation (SRCDC) which is affiliated with SRBC is one of three coalition members that were identified in the City's applications for both the USEPA Brownfield Coalition Assessment and Brownfield RLF Grants.

The primary environmental concern associated with the Property, as identified through previous environmental studies, is the presence of RBMs used to construct and/or maintain the building on the Property, which was constructed in the 1950s. Renovation of the building requires that these materials (which include asbestos-containing materials [ACMs], and lead-based paint [LBP]) be appropriately abated and/or managed as part of planed construction activities. The purpose of this ABCA is to evaluate alternatives for addressing RBMs at the Property, including analysis of applicable cleanup standards, laws, and regulations, as well as effectiveness, implementability, and cost. In addition, the analysis is specific to the proposed plans for adaptive reuse as a food hub, and certain key assumptions linked to those plans (in particular, the plan to renovate rather than to demolish the existing building and replace it with a new building; the anticipated maximum depths for excavations for foundations and utility lines; and other factors as detailed in **Section 2.0**). Finally, the analysis includes evaluation of remedial alternatives that include doing nothing (the "no action" alternative), encapsulating select hazardous building materials (i.e., ACM and LBP) while removing other hazardous materials, and full removal of hazardous materials. It should be noted that although cost estimates are provided, these estimates should be independently verified by the owner and/or development project manager. The actual costs for remedial alternatives may vary

significantly depending on the availability of local contractors and other factors, as well as the willingness of the developer to assume certain risks.

## 1.1 GENERAL SITE INFORMATION

The Site is located at 2316 South Elm Avenue in Fresno, California, and is composed of a single parcel of land (Fresno County Assessor Parcel Number 478-183-07) occupying approximately 0.46 acres (**Figure 1**). The Site is in a mixed residential, commercial, and industrial neighborhood. The geographic coordinates for the approximate center of the Site are 38° 43' 2" North latitude and 119° 47' 28" West longitude. The lot is approximately 151 feet wide and 134 feet deep. The Property contains an approximately 5,852 square foot (SF) warehouse with three loading docks and one loading ramp along the south side of the building. The remaining portions of the Property are asphalt paved. The Property is fenced with gated access from South Elm Avenue. The current site layout is presented on **Figure 2**.

## 1.2 SITE HISTORY AND PREVIOUS USE

The Site is currently owned by the SRBC, which acquired the Property on 7/18/2014 from Clougherty Packing Co. According to information in previous Phase I ESA reports (Alta Environmental, 2013; CBRE, Inc., 2013; and Weston Solutions, Inc., 2016a), the first development on the Property occurred prior to 1937 with the development of an orchard/grove and several structures that appear to be rural residential and ancillary agricultural structures. In the early 1950s, the Property was redeveloped as a bakery and converted to a meat packing facility and warehouse in 1955. The warehouse was expanded in 1959 and construction plans identified a septic system, gasoline underground storage tank (UST), and dispenser that was identified for removal as part of the expansion. The Property was annexed into the City on 10/15/1959. The meat packing/cold storage facility (Farmer John Meat Company) operated until October 2012.

The adjoining property to the north (which is also owned by SRBC) was first developed prior to 1932 as a small automotive fueling station, which was located in the northeast corner of the parcel. This adjoining property was redeveloped in the late 1950s/early 1960s with another automotive fueling and service station, which was demolished in the 1970s.

## 1.3 HYDROGEOLOGIC SETTING

The following summary of hydrogeologic conditions is adapted from Weston (2016a):

Geology: *The Site is located in the southeastern area of the San Joaquin Valley, a broad structural trough oriented southeast to northwest within the Great Valley Geomorphic Province. The Great Valley Province is bound to the east by the Sierra Nevada Range, to the west by the Coast Range, to the south by the Sierra Madre and Tehachapi Mountains, and to the north by the Klamath Mountains and the Cascade Range. The subsurface of the San Joaquin Valley is composed of Jurassic to Holocene marine and alluvial sediments formed from periodic inundation by the Pacific Ocean and alluvial deposits originating in the surrounding mountains. The Site is flat and at an elevation of approximately 280 feet above sea level, with regional topography sloping gently to the southwest (USGS, 1972).*

Hydrology: *The Site is located in the San Joaquin Valley Groundwater Basin, Kings Subbasin in the Tulare Lake Hydrologic Region. The Kings Subbasin groundwater aquifer system consists of unconsolidated*

*continental deposits. These deposits are an older series of Tertiary and Quaternary age overlain by a younger series of deposits of Quaternary age. The Quaternary-age deposits are divided into older alluvium, lacustrine and marsh deposits, younger alluvium, and flood-basin deposits (DWR, 2006). The groundwater subbasin covers approximately 1,530 square miles. Based on groundwater monitoring conducted in 2011 at the J&C Food and Gas site (Geotracker ID T0601791878), located approximately 1,000 feet south of the Site at 2394 S. Elm Avenue, the depth-to-groundwater is estimated to be approximately 85 feet below ground surface (bgs) and flows towards the north.*

Flood Zones: *The Site is located on Flood Insurance Rate Map 06019C2110H and is shown as being located in the 0.2 percent annual chance flood hazard zone (FEMA, 2009).*

## 1.4 PREVIOUS ENVIRONMENTAL STUDIES AND REMEDIAL ACTIVITIES

*Phase I Environmental Site Assessment (ESA) – 2316 South Elm Avenue, Fresno, California, prepared for Clougherty Packing Company, LLC and Hormel Foods Corporate Services, Project No. FARM-13-7306 – November 1, 2013, revised December 2, 2013 (Alta Environmental, 2013).*

Alta Environmental (Alta) completed a Phase I ESA of the Property in 2013 on behalf of the former owner. The "subject property" for the Phase I ESA included both the Property and the adjacent vacant lot and former gas station property to the north. The Phase I ESA identified two recognized environmental conditions (RECs):

1. ***Identified former gasoline underground storage tank (UST) and dispenser pump, septic tank, and catch basin in the southwest corner of the Site, in historical building permit plot plans dated in 1959. No records regarding the removal of these subsurface structures were found. No evidence of USTs, septic tanks, or catch basins was identified during the Site reconnaissance.***
2. *Historical use of the northern parcel of the Site (23004/2306 South Elm Avenue; APN 478-138-06) as a former gasoline service station as early as 1932 until 1972, when records indicate all structures onsite were demolished. Building permit records and California Certified Unified Program Agency (CUPA) files indicated that three (3) 10,000-gallon gasoline USTs, and one (1) 550-gallon drain oil UST were removed from the northwest corner of the northern parcel in 1973 under the ownership of Farmer John. However, no UST removal or closure reports were provided in regard to the removal of the USTs.*

The first REC listed above (shown in **bold font**) is associated with the Property, while the second is associated with the adjacent parcel to the north. A copy of the plot plan dated 1959 is provided in **Appendix A**. In addition to the RECs, the report also identified the following two "potential environmental concerns":

1. *Former Gasoline and Auto Service Stations – During the course of the investigation, two gasoline and auto service station facilities were identified in the vicinity of and up-gradient to the Site. The*

*Eckhardt S Mobil Service listing located approximately 400 feet southeast of the Site at 2355 S. Elm Avenue, and the Elm Auto Repair/A-Must Stop Shop located approximately 400 feet southeast and upgradient of the Site at 2365 S. Elm Avenue. In general, gas and auto service station facilities have been known as potential significant sources of hazardous petroleum hydrocarbon releases to the environment. No definitive indicators of unauthorized hydrocarbon releases were identified during this Phase I ESA. However, if significant hydrocarbon releases have occurred at the identified locations, then there exists a potential for impacted soil, soil-vapor, and/or groundwater to be present in subsurface soils beneath the Site.*

2. *The former Mel Wagner Wood Yard is identified on the Environmental Data Resources (EDR) CUPA listing database, located adjacent south and up-gradient of the subject Site at 2328 South Elm Avenue. The CUPA listing indicated USTs had been removed from the Mel Wagner Wood Yard. No additional historical UST removal reports or listings were identified for this address. No definitive indicators of unauthorized hydrocarbon releases were identified during this Phase I ESA. However, if significant hydrocarbon releases have occurred from the former USTs at the identified locations, them there exists a potential for impacted soil, soil-vapor, and/or groundwater to be present in subsurface soils beneath the Site*.

The Phase I ESA report recommended that a site investigation be conducted to further assess the identified RECs.

*Phase I ESA Report – Cold Storage Facility, 2316 South Elm Avenue, Fresno, California 93706, prepared for Saint Rest Baptist Church, Project No. 13-460TX-2272 – December 30, 2013 (CBRE, Inc., 2013)*

CBRE, Inc. (CBRE) completed a Phase I ESA of the Property in 2013 on behalf of the current owner. The subject property for the Phase I ESA included both the Property and the adjacent vacant lot and former gas station property to the north. The Phase I ESA identified the following RECs:

1. *Four of the Historical Auto Stations sites identified within the EDR Proprietary Records reviewed were apparently located on the northern portion of the Property from roughly 1932 through 1962 (C&W auto service facility at 2306 South Elm Avenue, Joe S Sunland Service at 2304 South Elm Avenue, Arnold John/Arnold Brothers at 2304 South Elm Avenue, and Ray's Service Station at 2304 South Elm Avenue). The likely presence of service stations on the Property for roughly 30 years is considered a REC for the Property*.
2. *Two of the Historical Auto Stations identified within the EDR Proprietary Records reviewed appear to be located on the east adjacent property, Sam's S Flying A Service Station at 2305 South Elm Avenue and Mattecce Fred (gas and service station) at 2303 South Elm Avenue. These facilities appear to have been in operation from roughly 1927 through 1965. The use of the upgradient adjacent property as a gasoline or services station for roughly 40 years is considered a REC for the Property*.
3. ***Evidence of a UST system is present at the Property. CBRE observed a vent pipe on the west exterior perimeter of the building extending below ground to above the roof line.***

4. ***Staining was observed on the concrete floor in the area of the cooling equipment in the equipment room*.**
5. ***CBRE noted two pole-mounted transformers located adjacent to the west perimeter of the Property south of the storage building. Evidence of leakage was noted as staining at the bottom of one transformer canister. The units also displayed rusting typical of older transformers*.**

The first two RECs listed above are associated with the adjacent parcel to the north, while the last three (shown in **bold font**) appear to be associated with the Property. The report recommended that a "*limited subsurface investigation be conducted to assess if the property has been impacted by the historical on-site and adjacent service station operations, the on-site operation of cooling equipment, and the rusting transformer adjacent to the property perimeter*." The report also recommended that "*the subsurface investigation should also assess the potential for a UST system to be present at the property*." The report also noted the presence of suspect ACM and LBP in the building and recommended that a survey be conducted for materials within areas planned for disturbance or renovation.

*Limited Phase II ESA Report – 2316 South Elm Avenue, Fresno, California, prepared for Clougherty Packing Company, LLC and Hormel Foods Corporate Services, Project No. FARM-14-1705 – June 9, 2014 (Alta Environmental, 2014)*

Alta completed a limited Phase II ESA on behalf of the former owner to further assess potential subsurface soil and soil gas impacts identified beneath the subject property in the Phase I ESA report completed by Alta in 2013 (Alta, 2013). The subject property for the Limited Phase II ESA included both the Property and the adjacent vacant lot and former gas station property to the north. The scope of work for the Limited Phase II ESA included the following elements:

- Completion of a geophysical survey with ground penetrating radar and a metal detector in select areas to identify the potential presence of buried structures associated with historical use of the site. The areas assessed included the locations for the gasoline UST, dispenser pump, septic tank, and catch basin shown on the Property as shown on the historical permit plot plan dated 1959.
- Advancement of eight direct-push borings to depths of 15 feet bgs, four of which (B1 through B4) were located on the Property, with collection and logging of continuous soil core samples, field screening of the samples for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID), and preservation of samples from pre-determined depths of 5, 10, and 15 feet bgs for possible laboratory analysis. (The field PID data were not included in the report).
- Laboratory analysis of select soil samples (one per boring) for total petroleum hydrocarbons (TPH), VOCs, and Title 22 metals. For borings B1 to B4 located on the Property, the soil samples submitted for laboratory analysis were collected from depths of either 5 feet bgs (B1 and B2) or 10 feet bgs (B3 and B4).
- Installation of dual-nested soil vapor probes in each of the eight boreholes, at depths of 5 and 15 feet bgs, and subsequent collection of soil vapor samples, and laboratory analysis for VOCs by

USEPA Method TO-15. Four of the dual nested probes (and eight of the soil vapor samples) were collected from the Property.

Several geophysical anomalies were detected at the Property. In the four soil samples analyzed from the Property, no TPH was detected as either gasoline (TPH-g) or as diesel (TPH-d). The only TPH detected was oil (TPH-o) at a concentration of 12 milligrams per kilogram (mg/kg) at B1 (5 ft). No VOCs were detected except for 49 micrograms per kilogram (µg/kg) of acetone at B4 (10 ft). Select metals were detected, but none of the measured concentrations exceeded applicable soil screening levels, and most were likely attributable to natural occurrence.

The data for the soil vapor samples are presented below for the 16 VOC constituents that were detected in one or more samples, together with the Tier 1 commercial and residential environmental screening levels (ESLs) for subslab soil vapor samples as updated by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) in 2019. The Phase II ESA report by Alta (2014) stated that all of the detected concentrations were below then-applicable screening levels, but this no longer appears to be true with the concentrations for four of the VOCs in one or more samples exceeding the residential ESLs and the concentrations for three VOCs exceeding the commercial ESLs.

| Constituent | Soil Vapor Sample ID and Collection Date | | | | | | | | Tier 1 Commercial ESLs (µg/L) | Tier 1 Residential ESLs (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| | SV1-5 | SV1-15 | SV2-5 | SV2-15 | SV3-5 | SV3-15 | SV4-5 | SV4-15 | | |
| | 4/7/14 | 4/7/14 | 4/7/14 | 4/7/14 | 4/8/14 | 4/8/14 | 4/8/14 | 4/8/14 | | |
| | Measured Concentrations (µg/L) | | | | | | | | | |
| Acetone | 0.15 | 0.065 | 0.17 | 0.016 | 0.028 | 0.042 | 0.025 | 0.043 | 4,500 | 1,100 |
| Benzene | **0.022** | **0.0097** | **0.018** | ND | **0.0040** | ND | **0.013** | **0.0053** | 0.014 | 0.0032 |
| Bromodichloromethane | **0.011** | ND | ND | ND | ND | **0.0036** | ND | ND | 0.011 | 0.0025 |
| 2-Butanone | 0.029 | 0.0098 | 0.035 | ND | 0.0068 | 0.0056 | ND | 0.0055 | NE | NE |
| Chloroform | **0.20** | ND | **0.15** | ND | **0.016** | **0.024** | **0.050** | **0.017** | 0.018 | 0.0041 |
| Chloromethane | ND | ND | ND | 0.0020 | ND | ND | ND | 0.0017 | NE | NE |
| Dichlorodifluoromethane | 0.0030 | 0.0050 | ND | 0.0029 | 0.0029 | 0.0034 | 0.0030 | 0.0048 | NE | NE |
| Ethylbenzene | 0.0091 | 0.0045 | 0.0085 | ND | ND | 0.0034 | 0.0038 | 0.0028 | 0.16 | 0.037 |
| 4-Ethyltoluene | 0.0025 | ND | ND | ND | ND | 0.0099 | ND | 0.0033 | NE | NE |
| 4-Methyl-2-Pentanone | 0.016 | 0.0071 | ND | ND | ND | ND | ND | ND | NE | NE |
| Tetrachloroethene | **0.052** | 0.011 | ND | ND | 0.0071 | 0.014 | 0.0035 | 0.0085 | 0.067 | 0.015 |
| Toluene | 0.040 | 0.014 | 0.035 | ND | 0.0038 | 0.041 | 0.022 | 0.011 | 4.4 | 1.0 |
| 1,2,4-Trimethylbenzene | 0.0086 | ND | ND | ND | ND | 0.042 | ND | ND | NE | NE |
| 1,3,5-Trimethylbenzene | 0.0035 | ND | ND | ND | ND | 0.012 | ND | ND | NE | NE |
| o-Xylene | 0.011 | 0.0039 | 0.0098 | ND | ND | 0.0078 | 0.0043 | 0.0043 | 15 | 3.5 |
| p/m-Xylene | 0.028 | 0.010 | ND | ND | ND | 0.013 | 0.011 | 0.033 | 5 | 3.5 |

ESL = environmental screening level; ID = identification; ND = not detected; NE = not established; µg/L = micrograms per liter. Concentrations in **bold font** exceed the residential ESLs. Concentrations in shaded cells exceed the commercial ESLs.

There appear to be several potential issues related to the previous soil and soil vapor sampling conducted on the Property. These include:

- The locations sampled generally did not coincide with the items of potential environmental concerns that were identified in the Phase I ESAs completed by either Alta or CBRE (i.e., the ammonia AST, the transformers on power poles west of the building, the suspect vent pipe on the west exterior of the building, the former septic tanks, and the former gas UST and fuel dispenser). Three of the four borings were located in the southwest corner of the Property, around the perimeter of a geophysical anomaly assumed to be the probable former location for the former gasoline UST.

However, the locations as identified on the scaled plot plan dated 1959 would appear to be more reliable. B1 was the only boring located in the general vicinity of the gas UST location as shown on the plot plan.

- The soil samples that were analyzed were all collected at depths of 5 or 10 feet bgs. These depths might be appropriate for assessing potential underground leakage from a UST but would not be optimal depths for assessing potential release of contaminants at the ground surface from sources that could include the transformers, the former fuel dispenser, release of lead paint from former buildings or the exterior of the existing building, or releases from vehicles in parking lot areas.
- The concentrations for several of the soil vapor samples exceed current ESLs. The significance of these exceedances is increased as a result of the previous samples apparently not being collected at locations where highest concentrations would likely be present.

*Draft Phase I/II Investigation, Targeted Brownfields Assessment Report – 2316 South Elm Avenue, Fresno, Fresno County, California, prepared for USEPA Region 9, USEPA START Contract No. EP-S5-13-02, November 2016 (Weston, 2016a)*

Weston Solutions Inc. (Weston) completed a combined Phase I/II Investigation on behalf of USEPA Region 9 and SRBC to further assess environmental impacts and RBMs at the subject property, which included both the Property and the adjacent vacant lot and former gas station property to the north. A copy of the report designated as a "draft" was made available for review by Stantec, on which the following summary is based. The scope of work for the Phase I/II included the following elements:

- Completion of a Phase I ESA.
- Completion of a survey, sampling, and analysis for ACM and LBP within the warehouse building on the Property (a copy of which is provided in **Appendix B**). The analyses included 36 bulk asbestos samples and 17 paint chip samples. The survey did not assess other types of potential RBMs and also did not include "destructive sampling" to access potential ACM hidden behind walls or beneath multiple layers of roofing.
- Completion of geophysical surveys to confirm the findings of the survey completed by Alta in 2014. On the Property, the surveys appear to have included electromagnetic surveys of all outdoor areas and use of ground penetrating radar (GPR) in the vicinity of the borings sampled by Alta in 2014.
- Investigation of geophysical anomalies by advancing borings using air-vacuum excavation or hand auger techniques.
- Collection of soil samples from seven (7) select air-vacuum or hand auger borings and laboratory analysis for TPH-g, TPH-d, TPH as motor oil (TPH-mo), VOCs, and lead. Only one of the locations sampled (UST-10, 6 ft) is located on the Property.
- Collection of shallow (0-0.5 foot bgs) soil samples on a grid-pattern throughout the former gas station parcel, with analysis of samples from 20 grid nodes for total lead. None of the locations sampled are located on the Property. The samples were collected and analyzed to evaluate potential impacts to surface soil from LBP and former buildings. Eight of the samples were

subsequently subjected to California Waste Extraction Tests (CA-WETs) to determine the soluble threshold limit concentrations (STLCs) for lead, and four samples were subject to the toxicity characteristic leaching procedure (TCLP) to determine leachable lead concentrations.

The results associated with investigative activities completed on the Property are summarized below:

- Lead concentrations of 2.2 to 5.2% by weight were measured in 3 of the 17 paint chip samples. Concentrations in the other samples were 0.30% by weight or less. The materials included yellow metal exterior posts, railings, and doors; red metal exterior posts and awning supports; and beige exterior wood awning ceiling.
- ACM was confirmed in four types of building materials: an estimated 5,720 square feet (SF) of "skim coat over foam insulation," an estimated 650 SF of cement board, an estimated 1,540 SF of drywall system with joint compound, and an estimated 75 SF of penetration mastic on roofs.
- The condition of ACM and LBP was assessed to be non-friable at the time of the inspection and deemed to "not pose an immediate hazard unless disturbed." Hazardous materials (compressed gas cylinder and R717 Ammonia stored in a 500-gallon emergency discharge tank) and petroleum (used oil drum and new oil drum) were also found at the Property.
- For the soil sample analyzed from UST-10 (6 ft), the only detections were 12 mg/kg of TPH-mo, 7.4 mg/kg of lead, and 7.0 µg/kg of octene, all of which were well below applicable California Department of Toxic Substances Control (DTSC) soil screening levels.

*Draft ABCA – 2316 South Elm Avenue, Fresno, Fresno County, California, prepared for USEPA Region 9, USEPA START Contract No. EP-S5-13-02, January 2016 (Weston, 2016b)*

An ABCA was completed for the Property by Weston in 2016. A copy of the ABCA marked as a "draft" was made available for review by Stantec, as is summarized herein. The ABCA was prepared on behalf of USEPA Region 9 and SRBC to further assess environmental impacts and RBMs present on both the Property and the adjacent vacant lot and former gas station property to the north. The ABCA identified and compared various cleanup scenarios to address contaminants identified during the Phase I/II Investigation completed by Weston (2016a), and evaluated the cleanup scenarios are based on effectiveness, implementability, and cost. A copy of a table summarizing and comparing the cleanup alternatives is provided below. Alternatives 1 through 3 on the table relate to impacted soil documented on the adjoining parcel to the north, whereas Alternatives A and B relate to RBMs in the building on the Property.

**Table ES-1**
**Summary and Comparison of Cleanup Alternatives**

| Alternative | Actions | Effectiveness | Implementability | Approximate Cost[1] | Considerations |
|---|---|---|---|---|---|
| 1: No Action | None | Low | Easy | None | Unable to reuse Site for planned use. |
| 2: Capping | Install an impermeable cover (asphalt pavement, concrete, etc.) to mitigate exposure to lead impacted soil. | Moderate | Easy | $125,000 | The contaminated soil would remain in place. Over time the cover will degrade and if it is not repaired, it will no longer mitigate exposure. |
| 3: Soil excavation, confirmation sampling, and off-site disposal | Excavate to a depth of 1 foot in areas where soil in excess of the ABCA screening level (80 milligrams per kilogram for lead). Perform confirmation soil sampling and analysis to confirm that the cleanup goals are achieved, characterize excavated soil for disposal in accordance with the receiving facility requirements, and transport excavated soil for disposal at the appropriate facility in accordance with applicable regulations. | Moderate to High | Moderately Easy | $115,000 | Based on preliminary soil waste profile sampling, excavated soil may be a California hazardous waste. The soil would be transported to an appropriate landfill. |
| A: No Action | None | Low | Easy | None | Unable to demolish or remodel the building. |
| B: ACM, LBP, and refrigerant abatement | Seal the building to prevent contaminant migration, remove the ACM and LBP and dispose of at an appropriately licensed facility. The refrigerant will be recovered by a certified professional and disposed of with an EPA-certified refrigerant reclaimer. Confirmation sampling will verify that all ACM, has been removed. | High | Moderate | $80,000 | |

Notes:
[1] The cost estimates presented in this ABCA are rough order of magnitude estimates prepared solely for the comparison of the identified alternatives and should not be used as design-level estimates.

The analysis by Weston did not include potential soil vapor concerns on the Property.

*Sampling and Analysis Plan for Supplemental Phase II Environmental Site Assessment, 2316 South Elm Avenue, Fresno, California, prepared for the City of Fresno, May 25, 2021 (Stantec, 2021a)* **and** *Supplemental Phase II Environmental Site Assessment Report, 2316 South Elm Avenue, Fresno, California, prepared for the City of Fresno, August 13, 2021 (Stantec, 2021b)*

A supplemental Phase II ESA was completed by Stantec in 2021 to address the data gaps (noted earlier in this section) in the previous ESAs completed for the Property. Specific objectives for the Phase II ESA were to: 1) further evaluate potential on-site sources of impacts to soil vapor; 2) assess the potential presence of vapor-phase VOCs beneath the existing building slab; 3) assess indoor and outdoor air conditions, if warranted; and 4) evaluate the presence of RBMs (i.e., asbestos and lead) and agricultural chemicals in shallow soil. Site investigation activities were funded by the City of Fresno's Fiscal Year 2019 USEPA Brownfield Coalition Assessment Grant.

The scope of work included: 1) collecting and analyzing soil vapor samples from four outdoor locations for VOCs, 2) collecting and analyzing five sub-slab soil vapor samples from locations beneath the existing building for VOCs, 3) collection and analysis of one indoor air sample for VOCs, 4) collection and analysis of shallow soil samples from 11 outdoor locations for arsenic, lead, and asbestos, and 5) analysis of select soil samples for pesticides and herbicides. Sample locations are illustrated on **Figure 3**.

Based on the soil data, it was concluded that shallow soil does not appear to be impacted by lead, arsenic, asbestos, or pesticides/herbicides at concentrations that would require any specific soil management or mitigation measures. No evidence of VOC impacts to soil vapor was found in the vicinity of a former UST and septic system. One VOC (tetrachloroethene [PCE]) was detected in one sub-slab vapor sample at a concentration slightly exceeding the risk-based screening level. It was also detected at low concentrations in all four of the outdoor soil vapor samples – suggesting that its presence might be due to a local or regional condition and/or unknown sources located off-site. No PCE was detected in the indoor air sample, and it was concluded that vapor mitigation measures are not warranted based on the detected VOC concentrations.

*Mold Assessment for Saint Rest Food to Share, 2316 South Elm St., Fresno, CA, prepared for Mark Wilson Construction, November 30, 2021 (All Hazard EHS, 2021)*

A mold assessment was completed for the building by All Hazard EHS in 2021. Testing was performed when it became apparent that abatement of mold (if present) would need to be incorporated into planning and performed in conjunction with abatement of ACMs in the ceiling of the building. Six samples were collected from ceiling areas in the two large storage rooms (three samples per room) and submitted to the EMSL Analytical, Inc. laboratory in San Leandro, CA for "Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Tape Samples (EMSL Method MICRO-SOP-200)." The lab results are summarized on the table below.

| Sample # | Location | Mold Spore Count | Predominant Spore Types |
|---|---|---|---|
| 001 | Room 1 Ceiling | High | Cladosporium |
| 002 | Room 1 Ceiling | High | Cladosporium |
| 003 | Room 1 Ceiling | None detected | |
| 004 | Room 2 Ceiling | High | Cladosporium, Epicoccum |
| 005 | Room 2 Ceiling | None detected | |
| 006 | Room 2 Ceiling | Rare | Ascospores, Epicoccum, Myxomycetes, Bispora |

The report concluded: "*Results for samples collected from the ceiling of room 1 and room 2 both reported high levels of Cladosporium type mold spores present at the time of sampling. Cladosporium type fungi are typically found indoors in high concentrations in water damaged building materials. The presence of Cladosporium and other mold types may lead to poor indoor air quality causing allergy and hay fever like symptoms in exposed individuals. Symptoms may worsen after repeated exposures and in some cases lead to infection and cause other illnesses, especially in those with compromised immune systems. Mold may also cause increased food spoilage in areas where perishable food items are stored*."

The report included the following recommendations:

- *The roof should be inspected by a professional to determine if any water damage to the ceiling has occurred due to roofing failure or leaks.*

- *Areas above the ceiling should be inspected to ensure there are no plumbing lines present. If lines are present, a plumber should inspect to ensure that the lines are not the cause of water intrusion.*
- *If roofing or any plumbing is found to need repair, repairs should be made prior to the remediation of mold impacted building materials.*
- *After all repairs have been made, a contractor experienced in mold remediation should perform all remediation work (see Remediation Plan).*
- *Materials suspect of asbestos should be sampled for asbestos prior to the start of remediation work, if not sampled previously, by a Certified Asbestos Consultant (CAC).*
- *Post remediation air clearances should be performed to determine if remediation efforts were effective after final cleaning of the remediated areas.*

# 2.0 REDEVELOPMENT PLAN

The Property will be renovated as the "St. Rest + Food to Share Hub" and is the focus for two complementary projects being funded through the TCC grant. An artist's rendering of the planned development is presented below and shows the renovated former Farmer John Meat Company Warehouse building on the right, a new two-story office and training center on the left, and elements of the Urban Heat Island Mitigation project landscape and other elements throughout outdoor areas.


The first floor of the 3,800 square-foot office/training center building will house offices as well as a classroom and meeting center. The second floor will have a certified commercial kitchen where classes can be held for nutrition education as well as teaching space for entrepreneurs. A rooftop garden will overlook Elm Avenue.

Information on the project, as copied from the Transform Fresno website, is summarized on the tables below:

| |
|---|
| **Project No. and Name:** Project #16: St. Rest + Food to Share Hub: Urban Heat Island Mitigation |
| **Project Summary:** The project will plan, permit and improve the immediate site surrounding the old Farmer John Meat Company Warehouse building which will house the St. Rest + Food to Share Hub with related building enhancements to achieve urban greening goals, desirable urban heat island mitigation, and site-building attractiveness, including appropriate landscapes, hardscapes, tree planting, irrigations systems, drainage, site surface and associated required building improvements to function as a Healthy Community Food Hub. |
| **Project Details:** The St. Rest + Food to Share Hub project will repair and improve an aged and underutilized 5,852 square foot building on the St. Rest campus, the former Farmer John Meat Company Warehouse facing Elm Avenue, transforming it into a community and metropolitan area serving Food to Share food recovery, storage, office, and distribution center along with construction of a much needed commercial community kitchen area. Project #16 improves the 13,588 square feet of parcel surrounding |

| |
|---|
| the Food Hub building. Because St. Rest + Food to Share Hub is part of a 3.14 acre campus master plan included in the City of Fresno's Elm Avenue Revitalization Strategy, A Brownfields Area-Wide Plan, and this project helps implement that City approved strategy as a Catalyst Site 1 for the Elm Avenue. |
| **Project Partners:** Fresno Metro Ministry, St. Rest Baptist Church |
| **Project Committed Funds:** TCC Grant = $62,200; Other = $141,859; Total = $204,059 |
| **Project Status:** In progress with estimated completion in March 2022. |
| **Project Weblink:** https://www.transformfresno.com/projects/st-rest-food-to-share-hub-urban-heat-island-mitigation/ |

| |
|---|
| **Project No. and Title:** Project #17: St. Rest + Food to Share Hub: Healthy Food Rescue and Redistribution |
| **Project Summary:** Project #17 will plan, permit and improve the existing former Farmer John Meat Company Warehouse building for expanded capacities as Healthy Food Rescue/Redistribution Hub & Commercial Kitchen Operations Center; Coordinate and integrate the St. Rest + Food to Share Hub into the daily metropolitan scale operations of an existing and growing city-wide network of food donor & food recipient organizations; and Operate and expand Healthy Food Rescue/Redistribution, and Cooking Skills & Nutrition Classes using the community commercial kitchen space. |
| **Project Details:** The St. Rest + Food to Share Hub project will repair and improve an aged and underutilized 5,852 square foot building on the St. Rest campus, the former Farmer John Meat Company warehouse facing Elm Avenue, transforming it into a metropolitan area serving Food to Share food recovery, storage, office, and distribution center along with construction of a much needed commercial community kitchen area. Because St. Rest + Food to Share Hub is part of a 3.14 acre campus master plan included in the City of Fresno's Elm Avenue Revitalization Strategy, it will help implement that City approved strategy as a Catalyst Site for the Elm Avenue.<br><br>Improving the facility, operating it as a key Food to Share network hub in Southwest Fresno, and connecting it with metropolitan area Food to Share activities, will result in the annual recovery of over 1 million pounds of nutritious food, that would otherwise be wasted, and get that food to families that face daunting food hardship and lack the financial means to purchase healthy food. This food rescue and distribution to underserved and disadvantaged families will reduce greenhouse gas (GHG) emissions by 2.2 million pounds annually.<br><br>This St. Rest + Food to Share Hub partnership will leverage Food to Share's relationships with a growing network of food donors (28 Fresno Unified School District [FUSD] schools, 4 retail outlets, farmers, packers, etc.) and 49 community-based food receiver organizations to use this site as a storage and distribution center for the Fresno/Clovis metropolitan area. With the increased storage capacity, Food to Share will be able to take on greater direct food recoveries from farmers, packers, and warehouses. Having regular access to a food-safe facility with refrigerators, freezers and non-perishable storage will allow Food to Share designate a school recovery route specifically for Southwest Fresno. This would allow us to increase our number of daily school recoveries on this route, and store food overnight or longer to better meet the delivery and distribution requirements of various Receiver Organizations. The |

| |
|---|
| day following full routes, designated Food to Share Drivers will start their day at St. Rest and distribute the food to the surrounding West Fresno Receiver Organizations to increase Food Access in 93706.<br><br>There are many additional co-benefits of this project. The much needed community kitchen element of the St. Rest + Food to Share Hub will also equip families with the confidence and knowledge to utilize healthy food, while shopping on a budget to take charge of their own health. A food hub at this location will also increase St. Rest's capacity to receive Food to Share rescued food and distribute to disadvantaged community members in the City and County of Fresno through monthly Food Giveaways coordinated by their Food Ministry. Additionally, having access to a commercial kitchen at a location in Southwest Fresno that hosts multiple Food Distributions would increase the effectiveness of Cooking Matters courses in 93706. Another way we at Fresno Metro Ministry and Food to Share engage with the Southwest Community is through participation at the Yo'Ville community garden and urban farm incubator. We will be able to recruit participants through outreach at St. Rest's Food Distributions at this facility. Overall, this project not only expands capacities to meet significant health and nutrition needs in Southwest Fresno and across the metropolitan area, but also provides the significant GHG emission reductions creating substantive environmental and climate stability benefits sought by Strategic Growth Council (SGC) Transformative Climate Community funding objectives as well. |
| **Project Partners:** Fresno Metro Ministry, St. Rest Baptist Church |
| **Project Committed Funds:** TCC Grant = $1,488,280; Other = $604,002; Total = $2,092,282 |
| **Project Status:** In progress with estimated completion in March 2022. |
| **Project Weblink:** https://www.transformfresno.com/projects/st-rest-food-to-share-hub-healthy-food-rescue-and-redistribution/ |

A copy of current design plans for renovation of the building are provided in **Appendix C**.

# 3.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

## 3.1 CLEANUP OVERSIGHT RESPONSIBILITY

Site cleanup and redevelopment should be conducted in compliance with applicable laws, regulations, and procedures outlined below.

## 3.2 APPLICABLE CLEANUP STANDARDS FOR KEY CONTAMINANTS

Cleanup standards for key contaminants at the Site include the following:

LBP – Building materials containing lead in paint or other surface coating material containing lead are defined by the U.S. Department of Housing and Urban Development (HUD) and USEPA as greater than or equal to 5,000 parts per million or 0.5% by weight (HUD, 1997). The cleanup standards are assumed to equal this level.

Asbestos – Cleanup standard for asbestos are based on the USEPA Asbestos-Containing Materials in Schools, Final Rule and Notice (USEPA, 1987). Although this rule is in place primarily to protect child-occupied facilities, following the guidelines within the rule is encouraged for all building renovations for the overall protection of human health.

## 3.3 LAWS AND REGULATIONS APPLICABLE TO CLEANUP

This section is provided for informational purposes only and the property owner (or contractor implementing the cleanup) is responsible for ensuring compliance with all applicable laws and regulations.

Cleanup activities at the Site should be conducted by contractors operating in accordance with the U.S. Department of Labor Occupational Safety & Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) standard codified at 29 Code of Federal Regulations 1910.120. The HAZWOPER standard applies to cleanup operations required by federal, state, local, or other governmental body involving hazardous substances. Additionally, the California OSHA “Lead in Construction Standard” codified in Title 8 California Code of Regulations Section 1532.1, is applicable to construction work where an employee may be exposed to lead.

National Emission Standards for Hazardous Air Pollutants (NESHAP) are outlined in the Code of Federal Regulations (CFR) Title 40 Chapter I Subchapter C Part 61 Subpart M. OSHA regulations regarding asbestos exposure during construction activities (i.e., renovation and demolition) are outlined in CFR Title 29 Subtitle B Chapter XVII Part 1926.1101, whereas OSHA regulations regarding respiratory protection are outlined in CFR Title 29 Subtitle B Chapter XVII Part 1910.134. A NESHAP notification form must be submitted at least 10 working days prior to the beginning of renovation or demolition activities involving ACMs. This notification form must include information regarding the company that performed the ACM survey, the analytical laboratory, the company performing the demolition or renovation activities, the

company transporting waste that contains asbestos, and the landfill where the waste that contains asbestos will be disposed.

The Asbestos Hazard Emergency Response Act (AHERA) was designed to address the presence of asbestos in school buildings. AHERA also tasked the USEPA with developing a plan for accrediting individuals responsible for performing asbestos surveys and remediation. AHERA protocols are considered the best industry practice for asbestos surveys and remediation, and these protocols are typically applied to non-school buildings. Although no school buildings are located at the Property, it is recommended that remediation be performed by a company that utilizes AHERA-certified personnel for asbestos demolition and remediation activities. AHERA is outlined in CFR Title 40 Chapter I Subchapter R Part 763 Subpart E.

Permitting for abatement of asbestos in Fresno County is subject to the requirements of the San Joaquin Valley Air Pollution Control District.

The USEPA has adopted the Renovation, Repair, and Painting (RRP) Rule (40 CFR 745.80) to minimize exposure from LBP dust by training contractors to make sure they follow lead-safe work practices during renovation of a structure. Although this rule is in place primarily to protect child-occupied facilities, following the guidelines within the rule is encouraged for all building renovations for the overall protection of human health. In addition to this rule, contractors are required to follow the HUD Lead Safe House Rule and all local and state specific requirements. The RRP Rule requires that renovators be USEPA-certified, accredited, and follow specific work practices.

The RRP Rule does not apply to the total demolition of structures. It is recommended that a certified lead inspector be on-site to oversee demolition activities and appropriate disposal of materials. Demolition work should be conducted by a lead-certified company trained to handle and dispose of LBP materials.

Federal laws and regulations applicable to this cleanup include the Small Business Liability Relief and Brownfields Revitalization Act and the Davis-Bacon Act. Federal, state, and local laws regarding procurement of contractors to conduct the cleanup are also applicable.

## 3.4 GENERAL BROWNFIELDS REDEVELOPMENT BEST PRACTICES APPLICABLE TO CLEANUP

There are several general brownfields redevelopment “best practices” that can be incorporated into redevelopment plans that help to mitigate risks associated with potential or probable undocumented areas of impacts that may be present. These may or may not be relevant to the Property, depending on the specific redevelopment plans:

1. Designing site grading plans in a manner that minimizes or eliminates the need to remove soil from the Property.
2. Avoiding building designs that include construction of basements or underground parking structures, which, if included in the design, would typically result in: (a) the need to manage much greater quantities of soil, (b) an increase in the potential for needing to take excess soil off-site, (c) an increase in the potential for on-site workers to come into contact with impacted soil at depth, and (d) an increase in the potential for migration of contaminated soil vapors into the building.

3. Avoiding building designs that will require use of basement sumps (which could unknowingly draw contaminated groundwater towards the building).
4. Designing building and parking/driveway area layouts to maximize the extent to which the pavement for these can serve as a long-term engineered barrier that will prevent direct contact with both documented and undocumented areas of impacted soil.
5. Assuming that any soil in areas or depth intervals that have not specifically been tested may be impacted, and either landfilling this soil, or conducting additional sampling and screening of the soil for contaminants, before disposing of the soil at a site other than a landfill.
6. Avoiding the siting of buildings directly on top of former known or suspected areas impacted by VOCs (to help further reduce potential future concerns with contaminated vapors migrating into enclosed occupied spaces).
7. Siting stormwater ponds in areas least likely to have undocumented soil or groundwater impacts.
8. Planning for the potential presence of: (a) poorly consolidated fill materials within the footprints of former buildings, (b) concrete foundations associated with former buildings, and (c) abandoned sewer lines or other undocumented former underground utility lines.

# 4.0 EVALUATION OF BROWNFIELDS CLEANUP ALTERNATIVES

## 4.1 CLEANUP ACTION OBJECTIVES

The general cleanup action objective is to mitigate the identified contaminants (i.e., ACM, LBP, mold, refrigerants, and other hazardous materials present within the building) as necessary to be protective of human health in a planned commercial use exposure scenario.

## 4.2 CLEANUP ALTERNATIVES CONSIDERED

The evaluation of cleanup alternatives in this section is focused solely on ACMs and mold present within the building. LBP as well as some hazardous materials within the building (i.e., refrigerants, compressed gas cylinders, and several drums containing petroleum products) were documented as part of previous assessment activities but have either already been removed or are present in such limited quantities as to have negligible impact on site development costs. Based on the Supplemental Phase II ESA completed by Stantec (2021a, 2021b), there appears to be no need for remedial measures to address documented concentrations of select constituents detected in soil and/or soil vapor.

The most significant ACM requiring abatement within the building is a skim-coat over foam insulation containing 1.2% chrysotile which is present on the upper walls and ceiling of the two storage rooms, and covering surfaces with an estimated area of 5,720 square feet. The ceilings (with an area of approximately 4,600 square feet) show signs of water damage and the skim-coat was damaged in many areas. This material was classified as a regulated ACM. Mold was also documented to be present on the ceiling areas.

The cost estimates presented in this document are based on quotes obtained from local vendors but should be independently verified. A description of each alternative and the results of the comparative analysis are presented below.

### 4.2.1 Alternative 1 – No Action

The No Action Alternative is included as a baseline for comparison to the other proposed alternatives. The No-Action Alternative assumes that all ACM and mold within the building would remain in place.

### 4.2.2 Alternative 2 – Encasement/Enclosure

This option consists of the following activities:

1. Inspecting and repairing the roof as well as any plumbing lines located above the ceiling to make certain that there are no continuing sources of water leaks above the ceiling.

2. Establishing appropriate containment, barrier, and air-filtration systems as necessary for workers in appropriate protective clothing to work in areas subject to mold and ACM.

3. Treating all accessible areas with mold using a microbial cleaning agent.

4. Encasing the existing ceiling with a new lower drywall ceiling.

5. Abating limited ACM in other areas of the building as needed.

Note: The first activity is considered a general building rehabilitation activity and not one specific to cleanup but is listed as it is a necessary prerequisite action for the four subsequent listed cleanup activities.

### 4.2.3 Alternative 3 – Removal

This option consists of the following activities:

1. Inspecting and repairing the roof.

2. Establishing appropriate containment, barrier, and air-filtration systems as necessary for workers in appropriate protective clothing to work in areas subject to mold and ACM.

3. Removing the ceiling and disposing of appropriately as regulated ACMs

4. Repairing or rerouting any plumbing or water lines located in areas above the ceiling.

5. Treating all exposed framing and studs with evidence of mold with a microbial cleaning agent.

6. Constructing a new ceiling with required structural reinforcements.

7. Abating limited ACM in other areas of the building as needed.

Note: The first and fourth activities are considered to be general building rehabilitation activities and not cleanup activities but are listed as they are necessary prerequisite actions for the other five listed cleanup activities.

## 4.3 EVALUATION OF CLEANUP ALTERNATIVES

The following criteria were used to evaluate the three cleanup alternatives:

- Effectiveness
- Implementability
- Cost.

In addition, consideration was also given to climate change impacts, equity and environmental justice concerns, and green and sustainable remediation guidance.

### 4.3.1 Effectiveness

Effectiveness has both short-term and long-term components. The short-term effectiveness of a remedial alternative is evaluated relative to its effect on human health and the environment during the implementation of the remedial action. Potential risks to the community, potential impacts on workers, the effectiveness and reliability of protective measures, potential environmental impact of the remedial action and the effectiveness/reliability of the mitigation measures during implementation, etc. are some of the factors that are typically considered. Long-term effectiveness and permanence of a remedial alternative are evaluated

with respect to the following factors: magnitude of residual risk to human health and environment from the untreated or residual waste at the completion of remedial activities; an assessment of type, degree, and adequacy of long-term management (engineering controls, monitoring, maintenance, etc.) required for untreated or residual waste; an assessment of the long-term reliability of long-term management practices to provide continued protection from the untreated/residual waste; and the potential need for replacement of the remedy and continuing need for repairs to maintain the performance of the remedy.

#### 4.3.1.1 Effectiveness – Alternative 1 (No Action)

No action is considered the least effective option as it would not address the threats to human health posed by the hazardous materials and would not make it possible to renovate the building or achieve any of the reuse objectives.

#### 4.3.1.2 Effectiveness – Alternative 2 (Encasement/Enclosure)

Encasement/enclosure is considered to be an effective method in addressing ACMs within the ceiling. However, it is considered to be less effective in addressing mold – as removal of the ceiling was recommended by the mold abatement contractor in order to fully and effectively access and treat mold in areas above the ceiling that may also have been subject to water infiltration. The long-term effectiveness could also be compromised by problems with a leaking roof that could develop in the future. Another drawback is that the facility would need to "maintain" asbestos in the ceiling in perpetuity and to develop and implement a site-specific asbestos operations and maintenance plan. There would also be an on-going future need to provide annual notifications to employees and occupants.

#### 4.3.1.3 Effectiveness – Alternative 3 (Removal)

Removal is considered the most effective method for addressing both ACMs within the ceiling and mold on or above the ceiling. There would be no need to manage ACMs as part of any future ceiling repairs, as well as no on-going maintenance, monitoring, or notification requirements.

### 4.3.2 Implementability

Implementability refers to the technical and administrative feasibility of implementing an alternative, and the various materials and services required during its implementation. Examples of such factors for implementation of an alternative include ability to construct, operate and monitor; time required to obtain necessary permits and approval; and availability of equipment, material, contractor, etc.

#### 4.3.2.1 Implementability – Alternative 1 (No Action)

No action is the most easily implementable alternative since it involves no activities.

#### 4.3.2.2 Implementability – Alternative 2 (Encasement/Enclosure)

Encasement/enclosure is also considered relatively implementable. Both the ACMs and mold abatement would have similar requirements in terms of establishing appropriate containment, barrier, and air-filtration

systems – assuming that a single remedial contractor can be used to perform both types of abatement. However, leaving the ceiling in place would likely complicate efforts to inspect, repair, or treat the roof and areas above the ceiling. In addition, it would result in the on-going future maintenance, monitoring, or notification requirements.

#### 4.3.2.3 Implementability – Alternative 3 (Removal)

Removal is considered relatively easy to implement and would provide advantages (over Alternative 2) as a result of the area above the ceiling up to the roof becoming fully visible and accessible. Some additional construction work would be needed for the structural reinforcements, but this work could likely be performed after ACMs and mold have been abated and thereby not require specialized safety equipment to protect the workers constructing the reinforcements.

### 4.3.3 Costs

Cost estimates are presented in this section based on estimates obtained from qualified contractors for this type of work.

#### 4.3.3.1 Costs – Alternative 1 (No Action)

There is no direct cost associated with this alternative. However, it carries a significant opportunity cost given that abatement is required to proceed with a >$1 million building renovation project that when complete will provide benefits to thousands of area residents.

#### 4.3.3.2 Costs – Alternative 2 (Encasement/Enclosure)

A cost estimate for the encasement/enclosure alternative was provided by Mark Wilson Construction on 11/17/2021 and is summarized below.

| Item Description | Cost |
|---|---|
| Asbestos abatement and demo | $76,500 |
| Contractor “general conditions and requirements” | $11,500 |
| Remove lights @ ceiling | $2,900 |
| Install ¼-inch drywall encasement ceiling, tape, and texture | $37,180 |
| Re-install lights @ ceiling | $3,000 |
| **SUBTOTAL** | **$131,080** |
| Contingency (10% of Subtotal) | $13,108 |
| General Contractor Insurance, Fees, & Bonding | $10,286 |
| Contingency for Mold Abatement | $10,000 |
| **TOTAL** | **$164,474** |

#### 4.3.3.3 Costs – Alternative 3 (Removal)

A cost estimate for the removal alternative was provided by Mark Wilson Construction on 12/17/2021 and is summarized below.

| Item Description | Cost |
|---|---|
| Asbestos removal and disposal | $44,500 |
| Rough carpentry for new ceiling and structural retrofit | $31,547 |
| Replacement ceiling (5/8-inch gypsum board – materials and installation; 4,600 SF @ $5.54/SF) | $25,500 |
| Painting of replacement ceiling (4,600 SF @ $1.50/SF) | $6,900 |
| Contractor "general conditions and requirements" | $23,000 |
| General Contractor Insurance, Fees, & Bonding | $9,201 |
| Architect/Engineering Fee & Development Costs | $25,000 |
| **TOTAL** | **$165,648** |

### 4.3.4 Consideration of Climate Change Impacts

Scientific evidence demonstrates that the climate is changing at an increasingly rapid rate, outside the range to which society has adapted in the past. These changes can pose significant challenges to USEPA's ability to fulfill its mission. USEPA must adapt to climate change if it is to continue fulfilling its statutory, regulatory, and programmatic requirements. USEPA is therefore anticipating and planning for future climate changes to ensure it continues to fulfill its mission of protecting human health and the environment even as the climate changes.

In 2014, USEPA released its Climate Change Adaptation Plan to the public (USEPA, 2014a). The plan relies on peer-reviewed scientific information and expert judgment to identify vulnerabilities to USEPA's mission and goals from climate change. The Region 9 Climate Change Adaption Implementation Plan (USEPA, 2014b) identifies vulnerabilities in three different "regions" within Region 9. Fresno is located within the "Southwest Region" for which identified vulnerabilities included:

1. *Warmer temperatures will reduce mountain snowpacks, and peak spring runoff from snow melt will shift to earlier in the season, leading to and increasing the shortage of fresh water during the summer. A longer and hotter warm season will likely result in longer periods of extremely low flow and lower minimum flows in late summer. Water supply systems that have no storage or limited storage (e.g., small municipal reservoirs) may suffer seasonal shortages in summer.*
2. *The magnitude of projected temperature increases for the Southwest, particularly when combined with urban heat island effects for major cities such as Phoenix, Albuquerque, Las Vegas, and many California cities, represents significant stresses to health, energy, and water supply in a region that already experiences very high summer temperatures.*
3. *Reduced ground water supply due to a lack of recharge will be of concern.*

4. *Warmer ocean temperatures may decrease productivity by stopping entrainment of deep supplies of nutrients. The resulting reductions in commercial species will need to be addressed to support continued production of fisheries and aquatic life.*
5. *Increased frequency and altered timing of flooding will increase risks to people, ecosystems, and infrastructure. Increased flood risk is likely to result from a combination of decreased snow cover on the lower slopes of high mountains, and an increased percentage of winter precipitation falling as rain and therefore running off more rapidly.*
6. *Sea levels are rising and contributing to the loss of wetlands and infrastructure located along coastal corridors.*
7. *The magnitude and frequency of wildfires have increased over the last 30 years which severely impacts water quality in streams, creeks, rivers, lakes, and estuaries.*

Based on its location and hydrogeologic setting, the vulnerabilities related to temperature increases and urban heat island effects (item #2 above) and Increased frequency and altered timing of flooding (item #5) are potentially relevant to planning for the Property. The Property is within the 0.2% annual probability flood hazard zone and could be at increased risk of future flooding in response to increases in extreme rainfall events. Removal of hazardous materials from flood-prone areas (as would occur through Alternative 3) would reduce environmental risks associated with the presence of these materials. The cleanup will help advance the components of the project that are specifically designed to help mitigate urban heat island effects.

### 4.3.5 Consideration of Equity and Environmental Justice Concerns

Alternative 3 (the recommended cleanup option) is considered the most favorable in terms of environmental justice concerns. It will fully remove the environmental hazards from the neighborhood and eliminate potential future exposure to area residents.

### 4.3.6 Consideration of Green and Sustainable Remediation Guidance

When implemented effectively, green, and sustainable remediation practices enhance the environmental benefits offered by federal cleanup and redevelopment programs such as the USEPA Brownfields Program. The principles governing green and sustainable remediation for USEPA cleanup programs have been outlined in greater detail in USEPA's Principles for Greener Cleanups (USEPA, 2009), but generally seek to "evaluate cleanup actions comprehensively to ensure the protection of human health and the environment and to reduce the environmental footprint of cleanup activities, to the maximum extent possible." The following five general elements were identified by USEPA as principles to be considered in designing the cleanup process:

- Minimize total energy use and maximize use of renewable energy.
- Minimize air pollutants and greenhouse gas emissions.
- Minimize water use and impacts to water resources.
- Reduce, reuse, and recycle material and waste.

- Protect land and ecosystems.

USEPA also references the ASTM International Standard Practice E2893-16 "Standard Guide for Greener Cleanups" as a guide to be considered in designing greener cleanups. Although a total of 155 best management practices are referenced in the guide – none are focused on abatement of ACMs or mold.

For the two primary alternatives considered in this ABCA (encasement/enclosure versus removal of ACMs within the ceiling), encasement/enclosure would potentially be greener in terms of reducing the amount of waste materials generated. However, the negatives associated with encasement/enclosure regarding its effectiveness, as well as environmental justice considerations, offset the "green benefits." In addition, the waste generation from removal/replacement of the ceiling (which likely forms 5% or less of the building's total structure), is an activity that will facilitate reuse of the other 95% of the building's structure.

## 4.4 RECOMMENDED REMEDIAL ALTERNATIVE

The recommended remedial alternative is removal (Alternative 3). This alternative is considered the most effective of the options evaluated and the most implementable (excluding the no action option). The costs for Alternatives 2 and 3 are similar, but Alternative 3 provides significant additional advantages that include: 1) greater likelihood of achieving effective abatement of mold, particularly above the ceiling, 2) elimination of on-going future maintenance, monitoring, or notification requirements related to ACM in the ceiling (if enclosed/encapsulated as would occur under Alternative 2), and 3) enhanced long-term structural integrity for the roof.

# 5.0 DISCLAIMER AND LIMITATIONS

This ABCA was completed in accordance with generally accepted practices of the profession for performing similar studies at the same time and in the same geographical area. Stantec observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions. No other warranty is expressed or implied.

Stantec observations, findings, and opinions must not be considered as scientific certainties, but only an opinion based on our professional judgment concerning the significance of the data gathered during the investigation. Specifically, Stantec does not and cannot represent that the Site contains no hazardous or toxic materials or other latent condition beyond that observed by Stantec.

Stantec does not warrant that this submittal represents an exhaustive study of all possible environmental concerns at the project area. The items investigated as part of this study represent likely sources of environmental concerns at the project area and are consequently believed to adequately address the public at risk at the present time. All costs presented as estimated, and actual costs may vary significantly from these estimates based on the availability of local contractors and numerous other factors.

# 6.0 REFERENCES


All Hazard EHS. 2021. Mold Assessment for Saint Rest Food to Share, 2316 South Elm St., Fresno, CA. November 30.

Alta Environmental (Alta). 2013. Phase I Environmental Site Assessment Report, 2316 South Elm Avenue, Fresno, California, prepared for Clougherty Packing Company, LLC. December.

Alta. 2014. Limited Phase II Environmental Site Assessment Report, 2316 South Elm Avenue, Fresno, California, prepared for Clougherty Packing Company, LLC. June.

California Department of Water Resources (DWR). 2006. Bulletin 118, San Joaquin Valley Groundwater Basin, Kings Subbasin Number: 5-22.08. January.

CBRE, Inc. 2013. Phase I Environmental Site Assessment Report, Cold Storage Facility, 2316 South Elm Avenue, Fresno, California 93706, prepared for St. Rest Baptist Church. December 30.

Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map, Fresno County, California and Incorporated Areas, Panel 2110 of 3525, Map number 06019C2110H. February 18.

Stantec Consulting Services, Inc. (Stantec). 2021a. Sampling and Analysis Plan for Supplemental Phase II Environmental Site Assessment, 2316 S. Elm Avenue, Fresno, CA. May 25.

Stantec Consulting Services, Inc. (Stantec). 2021b. Supplemental Phase II Environmental Site Assessment, 2316 S. Elm Avenue, Fresno, CA. August 13.

U.S. Environmental Protection Agency (USEPA). 1987. 40 Code of Federal Regulations (CFR) Part 763; Asbestos-Containing Materials in Schools; Final Rule. October.

USEPA. 2009. Office of Solid Waste and Emergency Response. Principles for Greener Cleanups. August 27.

USEPA. 2014a. Climate Change Adaption Plan. Publication No. EPA 100-K-14-001. June.

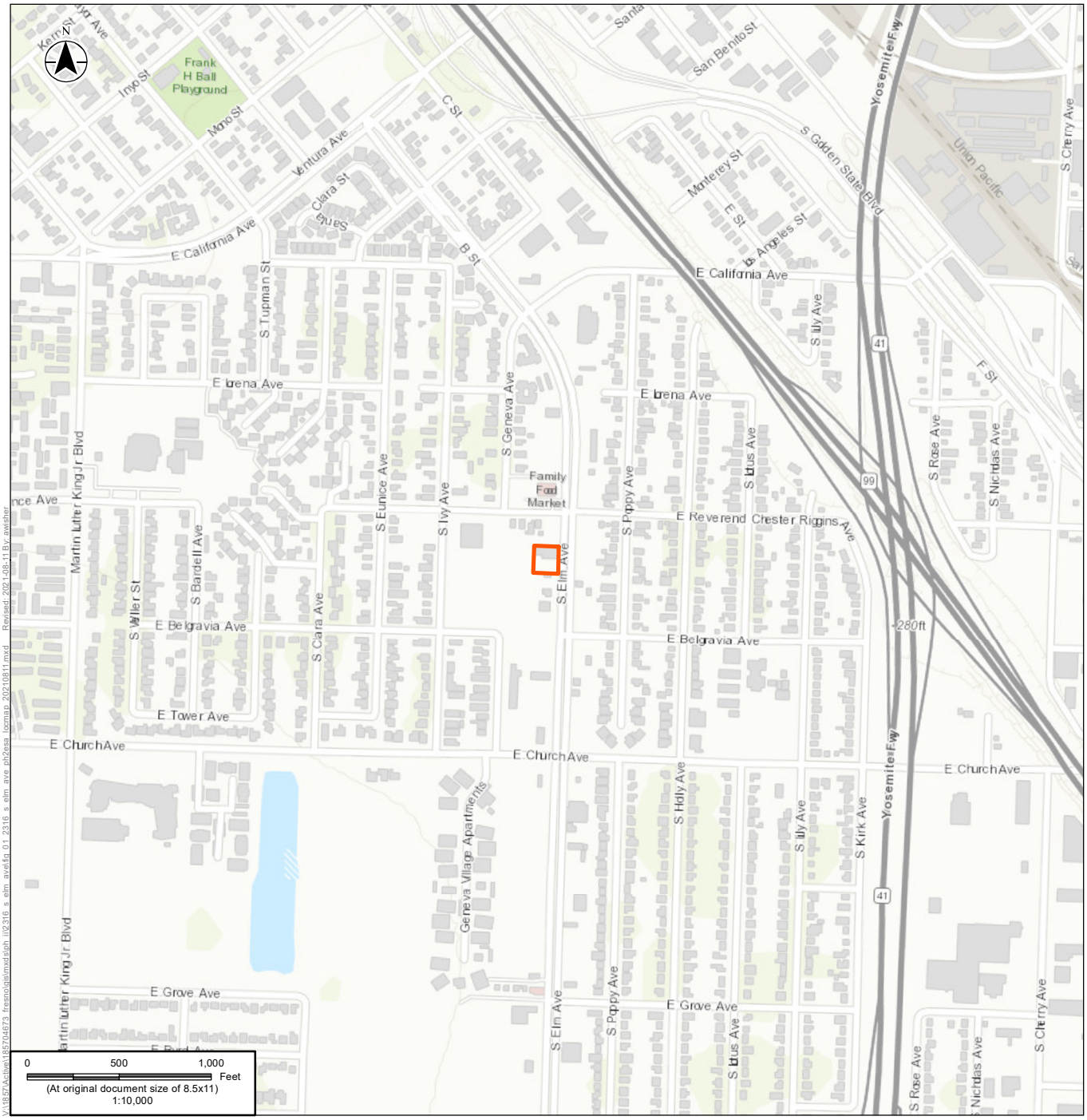
USEPA. 2014b. EPA Region 9 Climate Change Adaption Implementation Plan. Publication No. EPA 100-K-14-001P. May.

U.S. Department of Housing and Urban Development. 1997. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Chapter 7: Lead-Based Paint Inspection.

U.S. Geological Survey (USGS). 1972. Croft, M.G., Subsurface Geology of the Late Tertiary and Quaternary Water-Bearing Deposits of the Southern Part of the San Joaquin Valley, California, Geological Survey Water Supply Paper 1999-H.

Weston Solutions, Inc. 2016. Draft Phase I/II Investigation Targeted Brownfield Assessment Report, Fresno – S. Elm Avenue, Fresno, Fresno County, California. November.

# FIGURES







Approximate Property Location

Stantec

*Project Location*
2316 South Elm Avenue
Fresno, California 93706
APN 478-18-307

*Client/Project* 185704673
City of Fresno California
EPA Brownfield Coalition Assessment Grant
Analysis of Brownfield Cleanup Alternatives

*Title*
**Site Location Map**

*Figure No.*
**1**

***Notes***
**1.** Coordinate System: NAD 1983 UTM Zone 11N
**2.** Data Sources: City of Fresno, CA
**3.** Background: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Approximate Property Location

**Notes**

**1.** Coordinate System: NAD 1983 UTM Zone 11N
**2.** Data Sources: City of Fresno, CA
**3.** Background: Esri, Garmin, GEBCO, NOAA NGDC, and other contributors © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus DS © 2021 TomTom

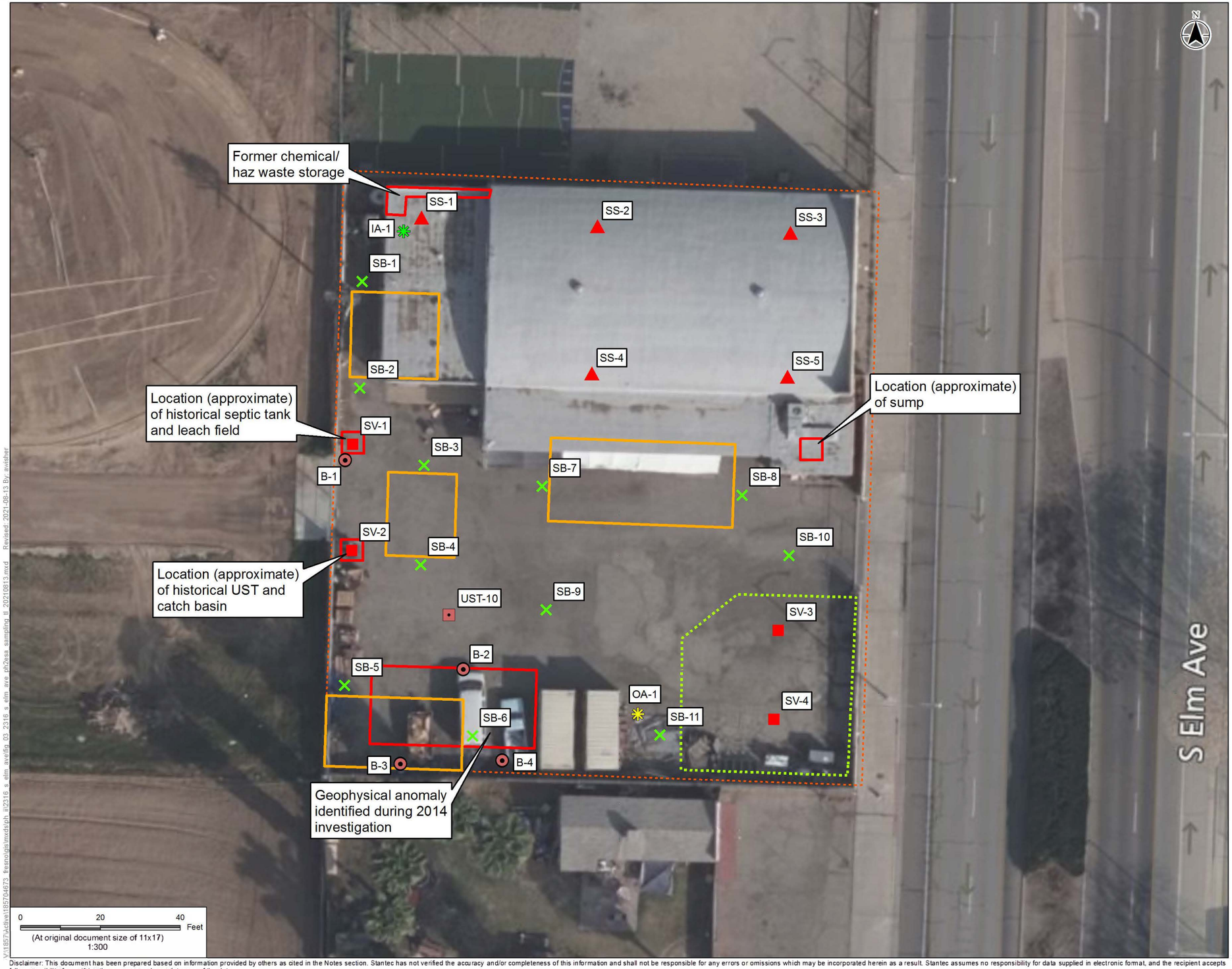
Stantec

*Project Location*
2316 South Elm Avenue
Fresno, California 93706
APN 478-18-307

*Client/Project* 185704673
City of Fresno California
EPA Brownfield Coalition Assessment Grant
Analysis of Brownfield Cleanup Alternatives

*Title*
**Site Plan and Surrounding Properties**

*Figure No.*
**2**




Revised: 2021-08-13 By: avistner
V:\1857\Active\185704673_fresnoglsmxdsIsh_ii\2316_s_elm_ave\fig_03_2316_s_elm_ave_ph2esa_sampling_ll_20210813.mxd



Stantec

- Shallow Soil Sample Location (2021)
- Soil Vapor Sample Location (2021)
- Sub-Slab Vapor Sample Location (2021)
- Indoor Air Sample Location (2021)
- Outdoor Air Sample Location (2021)
- Previous Borehole Location (Alta, 2014)
- Previous Borehole Location (Weston, 2016)
- Locations (approximate) of Site Structures in 1937 (Weston, 2016)
- Approximate Property Boundary
- Proposed Building Footprint

***Notes***

1. Coordinate System: NAD 1983 UTM Zone 11N
2. Data Sources: City of Fresno, California
3. Background: Esri, Garmin, GEBCO, NOAA NGDC, and other contributors © 2021 Microsoft Corporation © 2021 Maxar ©CNES (2021) Distribution Airbus


*Project Location*
2316 South Elm Avenue
Fresno, California 93706
APN 478-18-307

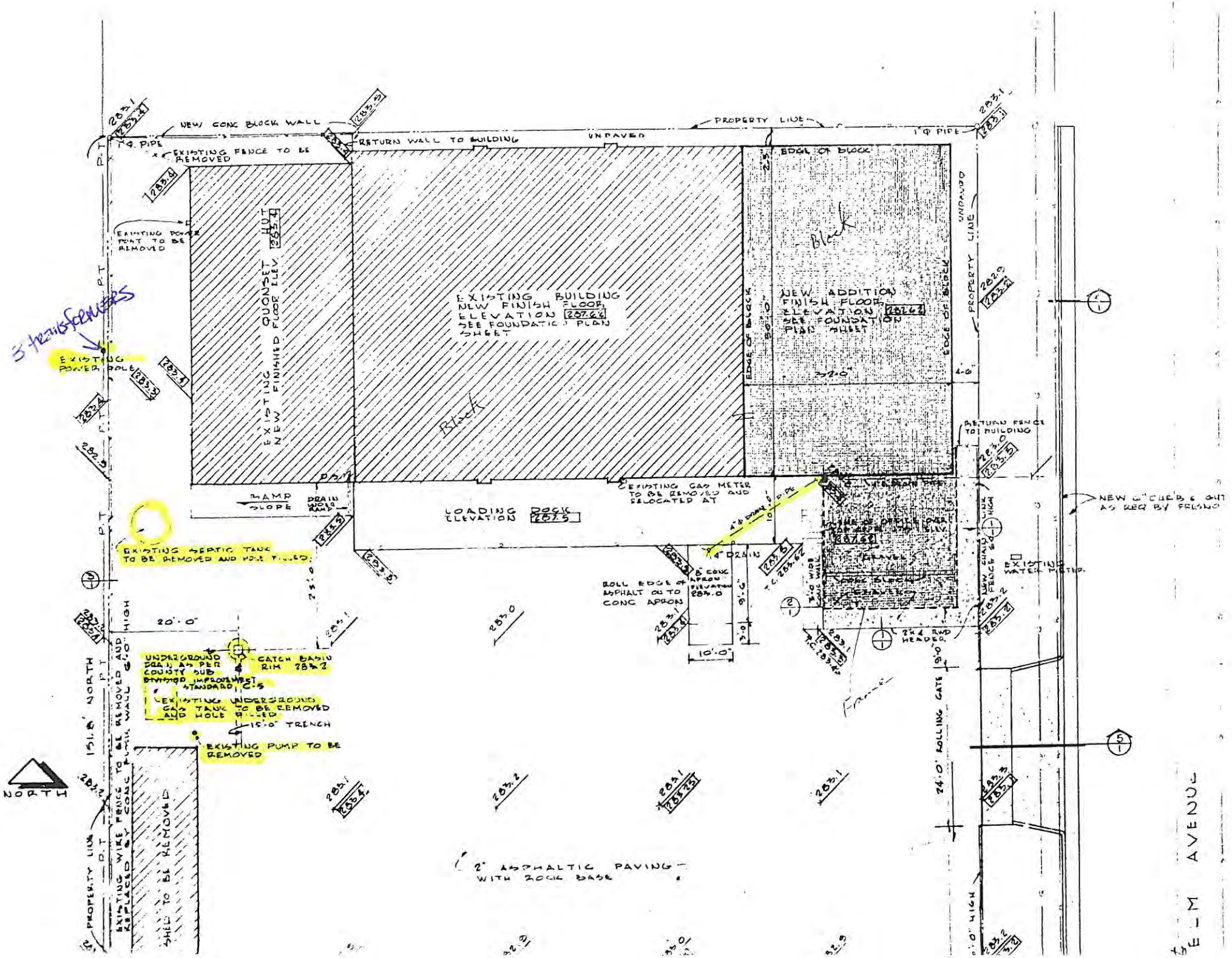
*Client/Project* 185704673
City of Fresno California
EPA Brownfield Coalition Assessment Grant
Analysis of Brownfield Cleanup Alternatives

*Title*
**Site Plan and Sampling Locations**

*Figure No.*
**3**

# APPENDICES

# APPENDIX A
# PLOT PLAN DATED 1959


NEW CONC BLOCK WALL
PROPERTY LINE
UNPAVED
1" Φ PIPE
EXISTING FENCE TO BE REMOVED
RETURN WALL TO BUILDING
EDGE OF BLOCK
EXISTING POWER POST TO BE REMOVED
EXISTING QUONSET HUT
NEW FINISH FLOOR ELEV. 287.64
EXISTING BUILDING NEW FINISH FLOOR ELEVATION 287.64 SEE FOUNDATION PLAN SHEET
NEW ADDITION FINISH FLOOR ELEVATION 287.64 SEE FOUNDATION PLAN SHEET
Block
3 transformers
EXISTING POWER POLE
RETURN FENCE TO BUILDING
EXISTING GAS METER TO BE REMOVED AND RELOCATED AT
RAMP SLOPE
DRAIN WOOD RAMP
LOADING DOCK ELEVATION 287.5
EXISTING SEPTIC TANK TO BE REMOVED AND HOLE FILLED
4" DRAIN
ROLL EDGE OF ASPHALT ON TO CONC APRON
6" CONC APRON ELEVATION 284.0
NEW 6" CURB & GUTTER AS REQ BY FRESNO
EXISTING GAS TANK TO BE REMOVED
20'-0"
UNDERGROUND DRAIN AS PER COUNTY SUB STANDARD 4 C-5
CATCH BASIN RIM 283.2
EXISTING UNDERGROUND GAS TANK TO BE REMOVED AND HOLE FILLED
15'-0" TRENCH
EXISTING PUMP TO BE REMOVED
EXISTING WIRE FENCE TO BE REMOVED & REPLACED BY CONC BLOCK WALL 6'-0" HIGH
SHED TO BE REMOVED
PROPERTY LINE
151.6' NORTH
NORTH
2" ASPHALTIC PAVING WITH ROCK BASE
24'-0" ROLLING GATE
10'-0" HIGH
E - M AVENUE

# APPENDIX B
# PREVIOUS RBM SURVEY REPORT

# APPENDIX H
# LIMITED ASBESTOS-CONTAINING MATERIALS AND LEAD-BASED PAINT SURVEY REPORT


CLARK SEIF CLARK, INC.
HEALTH & SAFETY • ENGINEERING • ENVIRONMENTAL

Project Number: 2002804

Re: Limited Asbestos Containing Materials and
Lead-Based Paint Survey Report
Farmer Johns Meatpacking
2316 S. Elm Avenue
Fresno, CA 93706

CSC Local Office: Clark Seif Clark, Inc.
275 Rose Avenue, Suite 206
Pleasanton, CA 94566
Office: 925-931-0100
Fax: 925-931-0108

Client: Weston Solutions, Inc.
Mr. Thomas Fortner
1340 Treat Boulevard Suite 210
Walnut Creek, CA 94597

Date Report Issued: July 13, 2016

# TABLE OF CONTENTS

**INTRODUCTION**.....3

**PURPOSE AND SCOPE**.....3

**SITE DESCRIPTION**.....3

**BACKGROUND**.....3

A. ASBESTOS.....3
B. LEAD-BASED PAINT.....4

**METHODS**.....5

A. ASBESTOS.....5
B. LEAD-BASED PAINT.....5

**RESULTS**.....6

A. ASBESTOS.....6
B. LEAD-BASED PAINT.....7

**CONCLUSION**.....7

A. ASBESTOS.....7
B. LEAD-BASED PAINT.....7

**RECOMMENDATIONS**.....8

A. ASBESTOS.....8
B. LEAD.....8

## Appendices

Appendix A.....Asbestos Laboratory Analytical Results and Chain of Custody
Appendix B.....Lead Laboratory Analytical Results, Chain of Custody and CDPH 8552 Form
Appendix C.....Site Photographs
Appendix D.....Site Sketch
Appendix E.....Accreditations and Certifications

## INTRODUCTION

Mr. Thomas Fortner of Weston Solutions, Inc. retained Clark Seif Clark, Inc. (CSC) to perform a limited asbestos-containing material (ACM) and Lead-Based Paint (LBP) survey at the commercial property located at 2316 S. Elm Avenue in Fresno, California. Mr. Ryan Terwilliger, California Certified Asbestos Consultant 11-4776 and California Department of Public Health (CDPH) Certified Lead Inspector/Assessor - 22479 of CSC conducted the survey on June 09, 2016.

CSC's report is for the exclusive use of Weston Solutions, Inc. and applies only to the building referenced above or portion thereof. No one other than Weston Solutions, Inc. or those contracted by Weston Solutions, Inc. may utilize, reference, or otherwise rely on this report without prior written consent from CSC.

## PURPOSE AND SCOPE

The purpose of this investigation was to identify accessible ACM and LBP at the site that may be impacted by the proposed renovation activities at the site. CSC's scope of work included:

- A visual inspection of the readily accessible impacted areas at the site to evaluate the possible presence of ACM and LBP.
- Collection of bulk samples of suspect ACM and submittal of samples to a National Voluntary Laboratory Accreditation Program (NVLAP) and California State accredited environmental laboratory for analysis.
- Assessment of the condition of suspect ACM.
- Collection of paint chip samples of potential LBP.
- Assessment of the condition of potential LBP.
- Preparation of this report, which presents our data and summarizes the assessed materials

## SITE DESCRIPTION

The subject property is an approximately 6,250 square foot, 1-story, commercial building constructed circa 1960. In general, the construction materials consist of wooden frame construction on a combination concrete slab and raised foundation with wood siding and cinderblock exterior finish and roll on asphalt roof sheeting on a combination sloped and flat roof. The interior finishes consist of a combination of drywall walls and ceilings in the main office and bathroom, stucco and plaster skim coat over foam insulation in the main storage rooms and exposed wood beaming in the food storage room. The floors are covered with vinyl floor tile and exposed concrete.

## BACKGROUND

### A. ASBESTOS:

Currently, asbestos-containing materials are being removed and/or encapsulated in schools and public buildings because of the cancer risk associated with breathing asbestos.

Much of what is known about asbestos-related diseases comes from studying workers in the various asbestos industries. Exposure to levels of airborne asbestos has been linked with a debilitating lung disease called asbestosis; a rare cancer of the chest and abdominal lining called mesothelioma; and cancers of the lung, esophagus, stomach, colon, and other organs.

The relationship between exposure level and health risk is complex. The potential for disease appears to be related to the physical and chemical characteristics of asbestos fibers as well as to the concentration of fibers in the air and each person's genetic susceptibility. However, the U.S. Government through the U.S. Department of

Health and Human Services, has stated that, "evaluation of all available human data provides no evidence for a threshold or for a "safe" level of asbestos exposure."

Federal, State, and Local laws require that building owner(s) and/or their representatives, prior to any demolition and/or renovation operations that may disturb any asbestos-containing materials in their buildings, must meet the following requirements: Notifications; removal techniques for asbestos-containing materials; clean-up procedures and waste storage and disposal requirements.

The Occupational Safety & Health Administration (OSHA) must be notified 24 hours prior to the start of any asbestos-abatement project.

## B. LEAD-BASED PAINT:

Lead is a heavy metal, which accumulates in the body when ingested. It interferes with chemical reaction in the body and can result in reduced performance in school, kidney problems, liver damage, high blood pressure, immune system failure, coma, convulsions, brain damage, and in severe cases death. In pregnant women, lead poisoning, nerve damage, impaired blood formation, and infant mortality.

An estimated 3 to 4 million American children have damaging levels of lead in their blood. According, to the National Health and Nutrition Examination Survey, 50% (one half) of the adults and 88% of preschool children tested had high blood lead levels. Of those, 9% of the children met the center for Disease Control standards for lead poisoning.

Children usually are exposed through household dust contaminated by peeling, flaking, or chalking paint. Young children also may be poisoned during teething by mouthing on windowsills that contain leaded paint.

Pottery and glassware containing lead is quite common. Lead paint and glaze were commonly used on items made in the U.S. before 1970 and are still used on imported ceramics. When those pieces are fired at temperatures below 1,200 degrees centigrade, the lead can be released into food. The most common sources of contaminated pottery and ceramics are Mexico and Italy. Research performed by the Food and Drug Administration indicated that nearly 10% of imported ceramics might release lead into blood.

The American Academy of Pediatrics recommends that children be screened for lead poisoning at 12 months of age and also that middle age men should have their blood level tested because of their susceptibility to hypertension.

According to public health experts, preventive measures should be taken to avoid lead poisoning. These measures include testing for lead in paint, pottery, ceramic dishes, and drinking water.

California OSHA (CAL/OSHA) requires a lead-work pre-job notification if the quantities of lead-containing materials to be disturbed exceeds 100 square feet or 100 linear feet OR if the tasks include torch cutting or welding exceeding 1 hour in any shift OR if the percentage of lead in the material to be disturbed exceeds 0.5% by weight (5,000 ppm), or 1.0 mg/square centimeter. The information and form required for notification can be found in 8CCR1532.1.

# METHODS

## A. ASBESTOS

Suspect asbestos materials are sampled and later identified using the Polarized Light Microscopy (PLM) method in accordance with the EPA Interim method of the Determination of Asbestos in Bulk Samples (EPA/600/R-93/116, July 1993). Sampling was performed in accordance with 40 CFR 763.86. Homogeneous areas were based on the total functional space. Number of samples per homogeneous area was taken as recommended under said section "Sampling Procedures".

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one (1) percent asbestos. Because the State of California recognizes asbestos-containing building material (ACBM) as any material, which contains greater than or equal to one tenth of one percent (.1) asbestos, materials containing "trace" amounts of asbestos are reported as ACBM in the State of California. CSC recommends Transmission Electron Microscopy (TEM) analysis for asbestos samples with one percent (l%) or less asbestos content and Point Count Method with results ranging between two percent (2%) and ten percent (10%) when analyzed via PLM.

Documentation of the laboratory results should be retained as a reference for general building safety and maintenance, and for any future renovation/ demolition activities.

INSPECTION PROCEDURE (763.85)

Areas Inspected: In each area of the building, the inspector performed a preliminary walk-through to designate the functional spaces. He also noted which areas had homogeneous materials.

The inspector then visually inspected each accessible room or space in the building. The inspector touched suspect materials to determine if they were friable. For each suspect material, the inspector noted its condition and the potential for disturbance.

Quantities: Suspect asbestos-containing materials identified at the site were quantified. For extensive materials such as the transite siding and roof panels, general functional space measurements were used. Such measurements provide "approximate square or linear footage" (763.93 (d)(2)(ii)).

Suspect Asbestos-Containing Materials: were sampled for laboratory analysis or were visually identified as ACM.

## B. LEAD-BASED PAINT

The objective of this screening was to determine and report the existence and location of lead-based paint. As part of this screening, samples of suspect paint were collected from various surfaces throughout the interior of the spaces and submitted to EMSL Laboratories for total lead analysis utilizing Flame AAS (SW 846 3050B*/7000B).

Sampling locations were chosen by a Department of California Department of Public Health (CDPH) Certified Lead Inspector/Risk Assessor. Testing followed modified HUD/EPA Methodology. The modifications included not testing every wall but to perform a representative survey of the painted components.

Currently, the State of California, HUD, and the Environmental Protection Agency (EPA) define lead-based paint as paint or other surface coating with lead content equal to or greater than 1.0 milligram per square centimeter (mg/cm2) of surface area (via XRF instrumentation) or greater than or equal to 0.5% by weight, 5000 ppm, or 5000 mg/kg. The Cal/OSHA "Lead in Construction" standard recognizes *any detectable (quantifiable)* concentrations of lead as regulated materials.

When performing lead-related construction activities, workers must be protected when exposed to levels above the current permissible exposure limit (PEL) of 50ug/cm$^2$, regardless of the content of lead in paint.

## RESULTS

### A. ASBESTOS

Thirty six (36) bulk samples were collected and analyzed for a total of seventy two (72) analyses on a layer-by-layer basis using polarized light microscopy (PLM). Three (3) samples were then further analyzed by 1000-point count plm. The following table summarizes the suspect-asbestos-containing building materials identified at the site and the analytical results of the materials sampled. A complete list of sample results can be found in the laboratory sheets at the end of this report.

**Table 1: Bulk Sampling Results**

| Suspect Asbestos-Containing Materials | % Asbestos | Location of Material (all locations where material is present) | Est. Ft$^2$ |
|---|---|---|---|
| Drywall system (Drywall, joint compound, skim coat, paint) | 2% Chrysotile | Food storage room restroom walls and ceiling | 600 |
| 4" Black covebase with adhesive | NAD | Main office lower walls | 80 LF |
| 12" Brown vinyl floor tile with clear mastic | NAD | Main office floor | 400 |
| Drywall system (Drywall, joint compound, skim coat, paint) | 2% Chrysotile | Main office walls and ceiling | 940 |
| Cement board | 8% Chrysotile | Exterior east wall of storage room 2 and walls of storage room 2 office, hallway ceiling | 650 |
| Skim coat over foam insulation | 1.2%* Chrysotile | Storage room 1 upper walls and ceiling, Storage room 2 ceiling and parts of upper walls | 5,720 |
| Plaster over foam insulation | NAD | Storage room 1 lower walls, storage room 2 walls | 2,720 |
| TSI Pipe wrap | NAD | Storage room 1 and 2 piping by coolers | 65 |
| Roofing material (Multilayer) | NAD | Food storage roof | 1,250 |
| Penetration mastic | 10-15% Chrysotile | All roofs | 75 |
| Roofing material (Multilayer) | NAD | Awning room and office | 850 |
| Roofing material (Multilayer) | NAD | Main storage roof | 4,500 |

NAD=No Asbestos Detected
*Confirmed by 1000 point count
See the laboratory report and chain custodies for the complete list materials tested and the sampling locations.

Clark Seif Clark, Inc. does not perform destructive sampling. Areas sampled are those accessible to visual inspection and per client's request. Should any future renovation activities reveal additional suspect asbestos-containing materials; work must stop until the suspect materials are tested for asbestos content.

## B. LEAD-BASED PAINT

The following are the results of the testing combinations that tested positive for lead-based paint at $\geq$0.7 mg/cm$^2$.

**TABLE II: LBP Results**

| Sample # | Paint Color | Substrate | Condition | Location | Results |
|---|---|---|---|---|---|
| 804L-01 | Red | Wood | Fair | Exterior eaves | 0.30% wt. |
| **804L-02** | **Yellow** | **Metal** | **Fair** | **Exterior posts, railings and doors** | **3.9% wt.** |
| 804L-03 | Red | Metal | Fair | Exterior doors and door frames | <0.010% wt. |
| **804L-04** | **Red** | **Metal** | **Fair** | **Exterior posts and awning support** | **5.2% wt.** |
| 804L-05 | Red | Wood | Intact | Exterior office walls | 0.27% wt. |
| 804L-06 | Gray | Metal | Fair | Interior main storage room doors | <0.029% wt. |
| 804L-07 | Beige | Cinderblock | Fair | Exterior north wall | 0.033% wt. |
| 804L-08 | Beige | Cinderblock | Fair | Exterior north wall | 0.22% wt. |
| 804L-09 | Multicolor | Cinderblock | Intact | Exterior south wall mural | 0.047% wt. |
| 804L-10 | Beige | Cinderblock | Intact | Exterior south wall | 0.052% wt. |
| 804L-11 | White | Drywall | Intact | Interior main office walls and ceiling | <0.025% wt. |
| 804L-12 | Black | Cinderblock | Intact | Storage room 2 office S. wall | <0.024% wt. |
| 804L-13 | Red | Wood | Intact | Restroom door | <0.010% wt. |
| 804L-14 | White | Drywall | Intact | Restroom walls and ceiling | 0.057% wt. |
| 804L-15 | White | Cinderblock | Intact | Interior main office N. wall | 0.049% wt. |
| 804L-16 | White | Metal | Intact | Interior main office N. door | 0.094% wt. |
| **804L-17** | **Beige** | **Wood** | **Fair** | **Exterior awning ceiling** | **2.2% wt.** |

Note: Painted surfaces generally contain lead at various levels, which are lead containing and not considered lead based paint. It is advised that all work where painted surfaces are impacted is conducted in a manner to minimize the generation of dust.

# CONCLUSION

## A. ASBESTOS

According to the bulk sample results and visual inspection, asbestos-containing materials were identified during the site survey that will be impacted by the proposed renovation project.

## B. LEAD-BASED PAINT

Based on the field assessment and sample analysis, there is lead based paint and/or lead containing components in the impacted areas of the building.

## RECOMMENDATIONS

### A. ASBESTOS

According to bulk sampling and visual inspection, asbestos-containing materials were present in the house that may require abatement or special handling by a licensed asbestos abatement contractor.

To assist in the management, handling, or reporting of ACM identified in this report, a description and quantity of said materials is presented in Table 2 below. Materials are described by type (i.e., Thermal System Insulation or Surfacing Material or Miscellaneous Material) and category (i.e., Regulated Asbestos-Containing Material or Category I Non-friable ACM or Category II Non-friable ACM). The quantities are expressed in terms of square-feet (sf), lineal-feet (lf), or cubic feet (cf).

**Table III: Description and Quantity of Asbestos-Containing Materials**

| Description of Asbestos-Containing Material | Thermal System Insulation | Surfacing Material | Miscellaneous Material | Regulated Asbestos-Containing Material | Category I Non-friable ACM* | Category II Non-friable ACM* | Quantity of ACM** |
|---|---|---|---|---|---|---|---|
| Drywall system with joint compound | | | X | | X | | 600 SF |
| Drywall system with joint compound | | | X | | X | | 940 SF |
| Cement board | | | X | | | X | 650 SF |
| Skim coat over foam insulation | | X | | X | | | 5,720 SF |

*Indicates condition of material at the time of sampling. Material may become friable and, thus, a Regulated Asbestos-Containing Material depending on the method of renovation or demolition and/or age. Material should be re-evaluated at the time of the project.

**Quantities are approximate and are not intended for bidding or reporting purposes, and must be field verified.

It will be necessary to comply with federal, state, and local regulations per EPA, OSHA and Fresno APCD prior to and during any removal or repair activities that may disturb the asbestos-containing materials.

### B. LEAD

Based on the field assessment and lab analysis, there is lead based material in the yellow metal exterior posts, railings and doors; red metal exterior posts and awning supports; and beige exterior wood awning ceiling.

Although there are no present state or federal laws dealing with mandatory abatement following the identification of lead-containing materials prior to disturbance of said materials, the Occupational Safety and Health Administration has promulgated legislation (29 CFR 1926.62 and 8 CCR 1532.1) entitled “Lead Exposure in the

Construction Industry", which deals with worker exposure to lead. This legislation requires that any task that may potentially expose workers to any concentration of lead, be monitored to determine workers eight-hour time weighted average (TWA) exposure to lead. Further, prior to initiation of activities that may generate a lead exposure, such workers must have appropriate medical surveillance, hazard communication training and be property fitted with respiratory protection and protective clothing until TWA results reveal exposures below the Action Level.

At this time, there are two forms of controls: 1) One control method is abatement, a "permanent" means of treatment that has an expected life of at least 20 years; 2) the other control method is interim controls, a short-term plan to control the lead hazards. Abatement measures include building component replacement, enclosure, paint removal (by heat gun, chemical, or contained abrasive), encapsulation (with patch tests and 20 year warranty), permanent soil covering (paving); and soil replacement. Interim controls measures include, paint film stabilization, friction and impact reduction treatments, dust removal, general cleanup of contaminated areas, and soil covering using non-permanent means (grass, mulch, gravel).

All work involving potential and identified LBP/LCSC surfaces should be conducted in accordance with Title 8, California Code of Regulations, Section 1532.1, 29 CFR 1926.62 and AB 2784.

Any cutting and/or heating of interior metal surfaces, containing toxic lead should be conducted in accordance with 29 CFR 1926.354. This regulation requires surfaces covered with toxic preservative, and in enclosed areas, be stripped of all toxic coatings for a distance of at least 4 inches, in all directions, from the area of heat application prior to the initiation of such heat application.

Contractor must perform all work in compliance with the most recent edition of all applicable federal, state, and local regulations, standards, and codes governing abatement, transport, and disposal of lead-containing/contaminated materials.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating ACM and /or assumed ACM, LBP and/or lead-containing paint, and universal waste. The quantities of materials identified in this report are only estimates and should not be used for bidding or developing costs for abatement. It should be the responsibility of the asbestos abatement contractor to calculate actual quantities and develop removal costs accordingly.

Should materials similar to those identified in this report or, other forms of suspect hazardous materials be discovered during the renovation process, the contractor should be instructed to cease all work activities which may initiate an exposure episode and notify the appropriate management personnel.

Clark Seif Clark, Inc. prepared this asbestos survey under contract with Weston Solutions, Inc.. No warranties expressed or implied, are made by Clark Seif Clark, Inc. or its employees as to the use of any information, apparatus, product or process disclosed in this report. Though reasonable efforts have been made to assure correctness, if a Contractor is employed he should bring any discrepancies to the immediate attention of Clark Seif Clark, Inc.

We have employed state-of-the-art practices to perform this analysis of risk and identification, but this evaluation is severely limited in scope to areas accessible to a visual inspection or through reasonable means of the areas evaluated. No demolition or product review was performed in attempts to reveal material compositions. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles and practices and are designed to provide an analytical tool to assist the client. Clark Seif Clark or those representing Clark Seif Clark bear no responsibility for the actual condition of the structure or safety of a site pertaining to asbestos and/or asbestos contamination regardless of the actions taken by the client.

Clark Seif Clark appreciated having the opportunity to inspect your property. If you have any questions regarding this survey or other environmental hazards, please don't hesitate to contact us at (818) 727-2553 or (800) 807-1118.

Report written and approved by:

Ryan Terwilliger – Project Manager
CAC No. 11-4776 and CDPH LRCIA No. 22479
Clark Seif Clark, Inc. (CSC, Inc.)

Report reviewed by:

Christian Goerrissen - Senior Project Manager
CAC No. 00-2804
Clark Seif Clark, Inc. (CSC, Inc.)

# APPENDIX A

# ASBESTOS LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY

# EMSL Analytical, Inc.

**464 McCormick Street San Leandro, CA 94577**
Tel/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com


**EMSL Order:** 091611239
**Customer ID:** CLRK80
**Customer PO:**
**Project ID:**

**Attention:** Ryan Terwilliger
Clark Seif Clark
275 Rose Avenue
Suite 206
Pleasanton, CA 94566
**Project:** Farmer Johns Meatpacking - 2316 S Elm Ave, Fresno CA 93706

**Phone:** (925) 931-0100
**Fax:** (925) 931-0108
**Received Date:** 06/13/2016 9:30 AM
**Analysis Date:** 06/23/2016
**Collected Date:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 804B-01<br>*091611239-0001* | Joint Compound - Food Storage Room Restroom Walls + Ceiling | Tan<br>Non-Fibrous<br>Homogeneous | | 70% Ca Carbonate<br>28% Non-fibrous (Other) | 2% Chrysotile |
| 804B-02<br>*091611239-0002* | Joint Compound - Food Storage Room Restroom Walls + Ceiling | Tan<br>Non-Fibrous<br>Homogeneous | | 80% Ca Carbonate<br>18% Non-fibrous (Other) | 2% Chrysotile |
| 804B-03<br>*091611239-0003* | Drywall - Food Storage Room Restroom Walls + Ceiling | White<br>Non-Fibrous<br>Homogeneous | 5% Cellulose | 80% Gypsum<br>15% Non-fibrous (Other) | None Detected |
| 804B-04<br>*091611239-0004* | Drywall - Food Storage Room Restroom Walls + Ceiling | White<br>Fibrous<br>Homogeneous | 5% Cellulose | 80% Gypsum<br>15% Non-fibrous (Other) | None Detected |
| 804B-05-Cove Base<br>*091611239-0005* | 4" Black Covebase + Adhesive - Office Lower Walls | Black<br>Non-Fibrous<br>Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-05-Adhesive<br>*091611239-0005A* | 4" Black Covebase + Adhesive - Office Lower Walls | Tan<br>Non-Fibrous<br>Homogeneous | | 50% Ca Carbonate<br>50% Non-fibrous (Other) | None Detected |
| 804B-06-Cove Base<br>*091611239-0006* | 4" Black Covebase + Adhesive - Office Lower Walls | Black<br>Non-Fibrous<br>Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-06-Adhesive<br>*091611239-0006A* | 4" Black Covebase + Adhesive - Office Lower Walls | Tan<br>Non-Fibrous<br>Homogeneous | | 50% Ca Carbonate<br>50% Non-fibrous (Other) | None Detected |
| 804B-07-Cove Base<br>*091611239-0007* | 4" Black Covebase + Adhesive - Office Lower Walls | Black<br>Non-Fibrous<br>Homogeneous | | 80% Matrix<br>20% Non-fibrous (Other) | None Detected |
| 804B-07-Adhesive<br>*091611239-0007A* | 4" Black Covebase + Adhesive - Office Lower Walls | Tan<br>Non-Fibrous<br>Homogeneous | | 30% Ca Carbonate<br>50% Matrix<br>20% Non-fibrous (Other) | None Detected |
| 804B-08-Vinyl Floor Tile<br>*091611239-0008* | 12" Brown VFT w/Clear Mastic - Office Floor | Brown<br>Non-Fibrous<br>Homogeneous | | 35% Ca Carbonate<br>65% Non-fibrous (Other) | None Detected |
| 804B-08-Mastic<br>*091611239-0008A*<br>*Result includes a small amount of inseparable attached material* | 12" Brown VFT w/Clear Mastic - Office Floor | Clear<br>Non-Fibrous<br>Homogeneous | | 65% Matrix<br>35% Non-fibrous (Other) | None Detected |
| 804B-09-Vinyl Floor Tile<br>*091611239-0009* | 12" Brown VFT w/Clear Mastic - Office Floor | Brown<br>Non-Fibrous<br>Homogeneous | | 35% Ca Carbonate<br>65% Non-fibrous (Other) | None Detected |
| 804B-09-Mastic<br>*091611239-0009A*<br>*Result includes a small amount of inseparable attached material* | 12" Brown VFT w/Clear Mastic - Office Floor | Clear<br>Non-Fibrous<br>Homogeneous | | 65% Matrix<br>35% Non-fibrous (Other) | None Detected |

Initial Report From: 06/27/2016 11:33:54

**EMSL Analytical, Inc.**
**464 McCormick Street San Leandro, CA 94577**
Tel/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

**EMSL Order:** 091611239
**Customer ID:** CLRK80
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 804B-10-Vinyl Floor Tile<br>*091611239-0010* | 12" Brown VFT w/Clear Mastic - Office Floor | Brown<br>Non-Fibrous<br>Homogeneous | | 50% Ca Carbonate<br>50% Non-fibrous (Other) | None Detected |
| 804B-10-Mastic<br>*091611239-0010A* | 12" Brown VFT w/Clear Mastic - Office Floor | Clear<br>Non-Fibrous<br>Homogeneous | | 60% Matrix<br>40% Non-fibrous (Other) | None Detected |
| 804B-11<br>*091611239-0011* | Joint Compound - Office Walls + Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 80% Ca Carbonate<br>18% Non-fibrous (Other) | 2% Chrysotile |
| 804B-12<br>*091611239-0012* | Joint Compound - Office Walls + Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 80% Ca Carbonate<br>18% Non-fibrous (Other) | 2% Chrysotile |
| 804B-13<br>*091611239-0013* | Drywall - Office Walls + Ceiling | White<br>Fibrous<br>Homogeneous | 5% Cellulose | 80% Gypsum<br>15% Non-fibrous (Other) | None Detected |
| 804B-14-Texture<br>*091611239-0014* | Drywall - Office Walls + Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 80% Ca Carbonate<br>20% Non-fibrous (Other) | None Detected |
| 804B-14-Drywall<br>*091611239-0014A* | Drywall - Office Walls + Ceiling | White<br>Fibrous<br>Homogeneous | | 5% Ca Carbonate<br>80% Gypsum<br>15% Non-fibrous (Other) | None Detected |
| 804B-15<br>*091611239-0015* | Cement Board - Exterior E Wall Storage 2 - Walls Storage 2 Office | Gray<br>Non-Fibrous<br>Homogeneous | | 60% Ca Carbonate<br>32% Non-fibrous (Other) | 8% Chrysotile |
| 804B-16<br>*091611239-0016* | Cement Board - Exterior E Wall Storage 2 - Walls Storage 2 Office | Gray<br>Fibrous<br>Homogeneous | | 60% Ca Carbonate<br>32% Non-fibrous (Other) | 8% Chrysotile |
| 804B-17<br>*091611239-0017* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 65% Ca Carbonate<br>35% Non-fibrous (Other) | <1% Chrysotile |
| 804B-18<br>*091611239-0018* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 65% Ca Carbonate<br>35% Non-fibrous (Other) | <1% Chrysotile |
| 804B-19<br>*091611239-0019* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 15% Quartz<br>60% Ca Carbonate<br>25% Non-fibrous (Other) | <1% Chrysotile |
| 804B-20-Skim Coat<br>*091611239-0020* | Plaster Over Foam - Storage Room 1 Lower Walls - Storage Room 2 Walls | White<br>Non-Fibrous<br>Homogeneous | | 30% Ca Carbonate<br>70% Non-fibrous (Other) | None Detected |
| 804B-20-Plaster<br>*091611239-0020A* | Plaster Over Foam - Storage Room 1 Lower Walls - Storage Room 2 Walls | Gray<br>Non-Fibrous<br>Homogeneous | | 30% Quartz<br>70% Non-fibrous (Other) | None Detected |
| 804B-21<br>*091611239-0021* | Plaster Over Foam - Storage Room 1 Lower Walls - Storage Room 2 Walls | Gray<br>Non-Fibrous<br>Homogeneous | | 30% Quartz<br>70% Non-fibrous (Other) | None Detected |
| 804B-22-Skim Coat<br>*091611239-0022* | Plaster Over Foam - Storage Room 1 Lower Walls - Storage Room 2 Walls | White<br>Non-Fibrous<br>Homogeneous | | 30% Ca Carbonate<br>70% Non-fibrous (Other) | None Detected |

Initial Report From: 06/27/2016 11:33:54

**EMSL Analytical, Inc.**
**464 McCormick Street San Leandro, CA 94577**
Tel/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

**EMSL Order:** 091611239
**Customer ID:** CLRK80
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 804B-22-Plaster<br>*091611239-0022A* | Plaster Over Foam - Storage Room 1 Lower Walls - Storage Room 2 Walls | Gray<br>Non-Fibrous<br>Homogeneous | | 30% Quartz<br>70% Non-fibrous (Other) | None Detected |
| 804B-23<br>*091611239-0023* | TSI Pipe Wrap - Storage Room 1+2 Piping by Coolers | White/Silver<br>Fibrous<br>Homogeneous | 45% Cellulose<br>2% Glass | 53% Non-fibrous (Other) | None Detected |
| 804B-24<br>*091611239-0024* | TSI Pipe Wrap - Storage Room 1+2 Piping by Coolers | White<br>Fibrous<br>Homogeneous | 30% Cellulose<br>3% Glass | 67% Non-fibrous (Other) | None Detected |
| 804B-25-Felt<br>*091611239-0025* | Roofing material/multilayer - Roof - Food Storage | Black<br>Fibrous<br>Homogeneous | 60% Cellulose<br>2% Glass | 38% Non-fibrous (Other) | None Detected |
| 804B-25-Tar<br>*091611239-0025A* | Roofing material/multilayer - Roof - Food Storage | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-25-Felt 2<br>*091611239-0025B* | Roofing material/multilayer - Roof - Food Storage | White<br>Non-Fibrous<br>Homogeneous | 30% Glass | 60% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-25-Insulation<br>*091611239-0025C* | Roofing material/multilayer - Roof - Food Storage | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 804B-26-Felt<br>*091611239-0026* | Roofing material/multilayer - Roof - Food Storage | Black<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| 804B-26-Tar<br>*091611239-0026A* | Roofing material/multilayer - Roof - Food Storage | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-26-Felt 2<br>*091611239-0026B* | Roofing material/multilayer - Roof - Food Storage | Black<br>Fibrous<br>Homogeneous | 10% Glass | 60% Matrix<br>30% Non-fibrous (Other) | None Detected |
| 804B-26-Insulation<br>*091611239-0026C* | Roofing material/multilayer - Roof - Food Storage | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 804B-27-Felt<br>*091611239-0027* | Roofing material/multilayer - Roof - Food Storage | Black<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| 804B-27-Tar<br>*091611239-0027A* | Roofing material/multilayer - Roof - Food Storage | Black<br>Non-Fibrous<br>Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-27-Felt 2<br>*091611239-0027B* | Roofing material/multilayer - Roof - Food Storage | Black<br>Non-Fibrous<br>Homogeneous | 10% Glass | 65% Matrix<br>25% Non-fibrous (Other) | None Detected |
| 804B-27-Insulation<br>*091611239-0027C* | Roofing material/multilayer - Roof - Food Storage | White<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-28-Mastic<br>*091611239-0028* | Penetration Mastic - Roof - Penetrations | Black<br>Fibrous<br>Homogeneous | | 80% Matrix<br>5% Non-fibrous (Other) | 15% Chrysotile |
| 804B-28-Insulation<br>*091611239-0028A* | Penetration Mastic - Roof - Penetrations | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 804B-29-Mastic<br>*091611239-0029* | Penetration Mastic - Roof - Penetrations | Black<br>Fibrous<br>Homogeneous | | 70% Matrix<br>20% Non-fibrous (Other) | 10% Chrysotile |
| 804B-29-Insulation<br>*091611239-0029A* | Penetration Mastic - Roof - Penetrations | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Initial Report From: 06/27/2016 11:33:54

**EMSL Analytical, Inc.**
**464 McCormick Street San Leandro, CA 94577**
Tel/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

**EMSL Order:** 091611239
**Customer ID:** CLRK80
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 804B-30-Mastic<br>*091611239-0030* | Penetration Mastic - Roof - Penetrations | Black<br>Non-Fibrous<br>Homogeneous | | 70% Matrix<br>20% Non-fibrous (Other) | 10% Chrysotile |
| 804B-30-Insulation<br>*091611239-0030A* | Penetration Mastic - Roof - Penetrations | Yellow<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-31-Felt<br>*091611239-0031* | Roofing Material Multilayer - Roof - Awning + Office | Gray/Black<br>Fibrous<br>Homogeneous | 25% Glass | 65% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-31-Tar<br>*091611239-0031A* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-31-Felt 2<br>*091611239-0031B* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Fibrous<br>Homogeneous | 65% Cellulose | 35% Non-fibrous (Other) | None Detected |
| 804B-32-Felt<br>*091611239-0032* | Roofing Material Multilayer - Roof - Awning + Office | Gray/Black<br>Fibrous<br>Homogeneous | 30% Glass | 40% Matrix<br>30% Non-fibrous (Other) | None Detected |
| 804B-32-Tar<br>*091611239-0032A* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-32-Felt 2<br>*091611239-0032B* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Fibrous<br>Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| 804B-33-Felt<br>*091611239-0033* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Non-Fibrous<br>Homogeneous | 15% Glass | 5% Quartz<br>60% Matrix<br>20% Non-fibrous (Other) | None Detected |
| 804B-33-Tar<br>*091611239-0033A* | Roofing Material Multilayer - Roof - Awning + Office | Black<br>Non-Fibrous<br>Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-33-Insulation<br>*091611239-0033B* | Roofing Material Multilayer - Roof - Awning + Office | White<br>Non-Fibrous<br>Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-34-Felt<br>*091611239-0034* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Fibrous<br>Homogeneous | 65% Cellulose | 35% Non-fibrous (Other) | None Detected |
| 804B-34-Tar<br>*091611239-0034A* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-34-Felt 2<br>*091611239-0034B* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Fibrous<br>Homogeneous | 20% Glass | 50% Matrix<br>30% Non-fibrous (Other) | None Detected |
| 804B-34-Insulation<br>*091611239-0034C* | Roofing Material Multilayer - Roof - Main Storage | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| 804B-35-Felt<br>*091611239-0035* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Fibrous<br>Homogeneous | 50% Cellulose | 50% Non-fibrous (Other) | None Detected |
| 804B-35-Tar<br>*091611239-0035A* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Non-Fibrous<br>Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |
| 804B-35-Felt 2<br>*091611239-0035B* | Roofing Material Multilayer - Roof - Main Storage | Black<br>Fibrous<br>Homogeneous | 20% Glass | 50% Matrix<br>30% Non-fibrous (Other) | None Detected |
| 804B-35-Insulation<br>*091611239-0035C* | Roofing Material Multilayer - Roof - Main Storage | White<br>Non-Fibrous<br>Homogeneous | | 100% Non-fibrous (Other) | None Detected |

Initial Report From: 06/27/2016 11:33:54

**EMSL Analytical, Inc.**
**464 McCormick Street San Leandro, CA 94577**
Tel/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

**EMSL Order:** 091611239
**Customer ID:** CLRK80
**Customer PO:**
**Project ID:**

## *Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy*

| | | | Non-Asbestos | | Asbestos |
|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** |
| 804B-36-Felt<br>*091611239-0036* | Roofing Material Multilayer - Roof - Main Storage | Black Fibrous Homogeneous | 60% Cellulose | 40% Non-fibrous (Other) | None Detected |
| 804B-36-Tar<br>*091611239-0036A* | Roofing Material Multilayer - Roof - Main Storage | Black Non-Fibrous Homogeneous | | 90% Matrix<br>10% Non-fibrous (Other) | None Detected |
| 804B-36-Felt 2<br>*091611239-0036B* | Roofing Material Multilayer - Roof - Main Storage | Black Non-Fibrous Homogeneous | 20% Glass | 65% Matrix<br>15% Non-fibrous (Other) | None Detected |
| 804B-36-Insulation<br>*091611239-0036C* | Roofing Material Multilayer - Roof - Main Storage | White Non-Fibrous Homogeneous | | 95% Matrix<br>5% Non-fibrous (Other) | None Detected |

Analyst(s)

*Christie Villanueva (52)*
*Cecilia Yu (20)*

Chris Dojlidko, Laboratory Manager
or Other Approved Signatory



Initial Report From: 06/27/2016 11:33:54

**EMSL Analytical, Inc**
**464 McCormick Street, San Leandro, CA 94577**
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

| | |
|---|---|
| EMSL Order: | 091611239 |
| CustomerID: | CLRK80 |
| CustomerPO: | |
| ProjectID: | |

Attn: **Ryan Terwilliger**
**Clark Seif Clark**
**275 Rose Avenue**
**Suite 206**
**Pleasanton, CA 94566**

| | |
|---|---|
| Phone: | (925) 931-0100 |
| Fax: | (925) 931-0108 |
| Received: | 06/13/16 9:30 AM |
| Analysis Date: | 7/7/2016 |
| Collected: | |

Project: **Farmer Johns Meatpacking - 2316 S Elm Ave, Fresno CA 93706**

## Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation using the 1,000 Point Count Procedure

| | | | Non-Asbestos | | Asbestos | |
|---|---|---|---|---|---|---|
| **Sample** | **Description** | **Appearance** | **% Fibrous** | **% Non-Fibrous** | **% Type** | |
| 804B-17<br>*091611239-0017* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 98.80% Non-fibrous (other) | **1.20%** | **Chrysotile** |
| 804B-18<br>*091611239-0018* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 99.10% Non-fibrous (other) | **0.90%** | **Chrysotile** |
| 804B-19<br>*091611239-0019* | Skim Coat over foam Insulation - Storage Room 1+2 Upper Walls and Ceiling | White<br>Non-Fibrous<br>Homogeneous | | 99.20% Non-fibrous (other) | **0.80%** | **Chrysotile** |

Analyst(s)

*Matthew Batongbacal (3)*

Chris Dojlidko, Laboratory Manager
or other approved signatory

Some samples may contain asbestos fibers present in dimensions below PLM resolution limits.The limit of detection as stated in the method is 0.1%. EMSL Analytical Inc suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc liability is limited to the cost of sample analysis.The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from 07/07/2016 12:41:05

OrderID: 091611239

Requested Turn around time

CLARK SEIF CLARK, INC.
HEALTH & SAFETY • ENGINEERING • ENVIRONMENTAL

091611239

# Chain of Custody Form- Bulk Sampling

2 week

| CSC Job # | Sampling By | Date Taken | # Samples | Page # | | Total Pages |
|---|---|---|---|---|---|---|
| 2002804 | Ryan Terwilliger | 6/9/16 | 36 | 1 | of | 2 |

| Job Name & Location | Customer Id No.: |
|---|---|
| Farmer Johns Meatpacking | (2000586) |
| 2316 S. Elm Avenue | |
| Fresno, CA 93706 | |

**Sample Analysis:** PLM – Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

**Lab Submitted to:** EMSL

| ID # | Material Description | HM | Location of Sample | Condition | Friable | Quantity |
|---|---|---|---|---|---|---|
| 8048-01 | Joint compound | A | Storage Room Restroom walls + ceilings | Int | N | 600sf |
| -02 | ↓ | ↓ | Food | ↓ | ↓ | ↓ |
| -03 | Drywall | | ↓ | | | |
| -04 | ↓ | ↓ | | | | |
| -05 | 4" Black Coveboard + Adhesive | B | Office lower walls | | | 80LF |
| -06 | ↓ | ↓ | ↓ | | | ↓ |
| -07 | ↓ | ↓ | | | | |
| -08 | 12" Brown VFT w/ clear mastic | C | floor | | | 400 SF |
| -09 | ↓ | ↓ | ↓ | | | ↓ |
| -10 | ↓ | ↓ | | | | |
| -11 | Joint compound | D | walls + ceiling | | | 940 SF |
| -12 | ↓ | ↓ | ↓ | | | ↓ |
| -13 | Drywall | | | | | |
| -14 | ↓ | ↓ | ↓ | | | ↓ |
| -15 to 16 | Cement board | E | Exterior E. wall Storage 2 walls storage 2 office | | | 650 SF |

| CONDITION CODE | | | FRIABLE CODE | | HOMOGENEOUS CODE | QUANTITY CODE | |
|---|---|---|---|---|---|---|---|
| G= GOOD | F= FAIR | P= POOR | Y= YES | N= NO | HA= HOMOGENEOUS MATERIAL | SF= Square Ft | LF = LINEAR Ft. |

**INSPECTION COMMENTS:** Starting sample #5, Multiple samples of same Homogenous Material will be on the same line.

| Relinquished By: | Date & Time |
|---|---|
| Ryan Terwilliger | 6/10/16 1000 |
| **Received By:** | **Date & Time** |
| ARD | 6/13/16 915 EFE |

Clark Seif Clark

OrderID: 091611239

Requested Turn around time

CLARK SEIF CLARK, INC.
HEALTH & SAFETY • ENGINEERING • ENVIRONMENTAL

091611239

2 weeks

# Chain of Custody Form- Bulk Sampling

| CSC Job # | Sampling By | Date Taken | # Samples | Page # | | Total Pages |
|---|---|---|---|---|---|---|
| 2002804 | Ryan Terwilliger | 6/9/16 | 36 | 2 | of | 2 |

| Job Name & Location | Customer Id No.: |
|---|---|
| Farmer Johns Meatpacking | (2000586) |
| 2316 S. Elm Avenue | |
| Fresno, CA 93706 | |

| Sample Analysis: | PLM – Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy | Lab Submitted to: | |
|---|---|---|---|

| ID # | Material Description | HM | Location of Sample | Condition | Friable | Quantity |
|---|---|---|---|---|---|---|
| 804-17-14 | Skimcoat over Foam Insulation | F | Storage Rm 1 & 2 upper walls and ceiling | Fair | Y | 4920 SF |
| -20-22 | Plaster over Foam | G | Storage Rm 1 lower walls Storage Rm 2 walls | Intact | | 2720 SF |
| -23-24 | TSI Pipe wrap | H | Storage Rm 1 & 2 Piping by 600 Lbrs | | | 65 Lnft |
| 25-27 | Roofing Material / Multilayer | I | ROOF - Food Storage | | | |
| 28-30 | Penetration Mastic | J | - Penetrations (All roofs) | | | |
| 31-33 | Roofing Material Multilayer | K | - Awning & office | | | |
| 34-36 | ↓ | L | ↓ - Main storage | | | |

| CONDITION CODE | | | FRIABLE CODE | | HOMOGENEOUS CODE | QUANTITY CODE | |
|---|---|---|---|---|---|---|---|
| G= GOOD | F= FAIR | P= POOR | Y= YES | N= NO | HA= HOMOGENEOUS MATERIAL | SF= Square Ft. | LF = LINEAR Ft |

**INSPECTION COMMENTS:**

| Relinquished By: | Date & Time |
|---|---|
| | |
| **Received By:** | **Date & Time** |
| ATEO | 6/13/16 915 |

Clark Seif Clark

# APPENDIX B

# LEAD LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY

**EMSL Analytical, Inc**
**464 McCormick Street, San Leandro, CA 94577**
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

| | |
|---|---|
| EMSL Order: | 091610807 |
| CustomerID: | CLRK80 |
| CustomerPO: | 2002804 |
| ProjectID: | |

Attn: **Ryan Terwilliger**
**Clark Seif Clark**
**275 Rose Avenue**
**Suite 206**
**Pleasanton, CA 94566**

| | |
|---|---|
| Phone: | (925) 931-0100 |
| Fax: | (925) 931-0108 |
| Received: | 06/13/16 9:15 AM |
| Collected: | 6/9/2016 |

Project: **FARMER JOHNS/2002804**

# Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

| Client SampleDescription | Collected | Analyzed | RDL | Lead Concentration |
|---|---|---|---|---|
| 804L-01 | 6/9/2016 | 6/22/2016 | 0.010 % wt | 0.30 % wt |
| *091610807-0001* | Site: EXTERIOR EAVES RED PAINT | | | |
| 804L-02 | 6/9/2016 | 6/22/2016 | 0.30 % wt | 3.9 % wt |
| *091610807-0002* | Site: EXTERIOR POSTS RAILING, DOOR | | | |
| 804L-03 | 6/9/2016 | 6/22/2016 | 0.010 % wt | <0.010 % wt |
| *091610807-0003* | Site: EXTERIOR DOORS + DOOR FRAMES | | | |
| 804L-04 | 6/9/2016 | 6/22/2016 | 0.42 % wt | 5.2 % wt |
| *091610807-0004* | Site: EXTERIOR POSTS + AWNING SUPPORT | | | |
| 804L-05 | 6/9/2016 | 6/22/2016 | 0.010 % wt | 0.27 % wt |
| *091610807-0005* | Site: EXTERIOR WALLS - OFFICE | | | |
| 804L-06 | 6/9/2016 | 6/22/2016 | 0.029 % wt | <0.029 % wt |
| *091610807-0006* | Site: INTERIOR STORAGE RM DOORS | | | |
| 804L-07 | 6/9/2016 | 6/22/2016 | 0.010 % wt | 0.033 % wt |
| *091610807-0007* | Site: EXT N WALL BEIGE CINDER BLOCK | | | |
| 804L-08 | 6/9/2016 | 6/22/2016 | 0.010 % wt | 0.22 % wt |
| *091610807-0008* | Site: EXT N WALL BEIGE CINDER BLOCK | | | |
| 804L-09 | 6/9/2016 | 6/22/2016 | 0.013 % wt | 0.047 % wt |
| *091610807-0009* | Site: EXTERIOR S WALL MULTICOLOR | | | |
| 804L-10 | 6/9/2016 | 6/22/2016 | 0.011 % wt | 0.052 % wt |
| *091610807-0010* | Site: EXT S WALL BEIGE | | | |
| 804L-11 | 6/9/2016 | 6/22/2016 | 0.025 % wt | <0.025 % wt |
| *091610807-0011* | Site: INTERIOR DRYWALL OFFICE | | | |

Chris Dojlidko, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 06/22/2016 15:31:16

**EMSL Analytical, Inc**
**464 McCormick Street, San Leandro, CA 94577**
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

| | |
|---|---|
| EMSL Order: | 091610807 |
| CustomerID: | CLRK80 |
| CustomerPO: | 2002804 |
| ProjectID: | |

Attn: **Ryan Terwilliger**
**Clark Seif Clark**
**275 Rose Avenue**
**Suite 206**
**Pleasanton, CA 94566**

| | |
|---|---|
| Phone: | (925) 931-0100 |
| Fax: | (925) 931-0108 |
| Received: | 06/13/16 9:15 AM |
| Collected: | 6/9/2016 |

Project: **FARMER JOHNS/2002804**

# Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

| *Client SampleDescription* | *Collected* | *Analyzed* | *RDL* | *Lead Concentration* |
|---|---|---|---|---|
| 804L-12 | 6/9/2016 | 6/22/2016 | 0.024 % wt | <0.024 % wt |
| *091610807-0012* | Site: INTERIOR STORAGE RM 2 OFFICE S WALL | | | |
| 804L-13 | 6/9/2016 | 6/22/2016 | 0.010 % wt | <0.010 % wt |
| *091610807-0013* | Site: INTERIOR RESTROOM DOOR | | | |
| 804L-14 | 6/9/2016 | 6/22/2016 | 0.019 % wt | 0.057 % wt |
| *091610807-0014* | Site: INTERIOR RESTROOM WALLS | | | |
| 804L-15 | 6/9/2016 | 6/22/2016 | 0.023 % wt | 0.049 % wt |
| *091610807-0015* | Site: INTERIOR OFFICE N WALL CINDERBLOCK | | | |
| 804L-16 | 6/9/2016 | 6/22/2016 | 0.011 % wt | 0.094 % wt |
| *091610807-0016* | Site: INTERIOR OFFICE N DOOR | | | |
| 804L-17 | 6/9/2016 | 6/22/2016 | 0.25 % wt | 2.2 % wt |
| *091610807-0017* | Site: EXTERIOR AWNING CEILING | | | |

Chris Dojlidko, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 06/22/2016 15:31:16

OrderID: 091610807

EMSL Analytical, Inc.
464 McCormick Street

San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# Lead (Pb) Chain of Custody

**EMSL Order ID** *(Lab Use Only):* 091616807

| | | | |
|---|---|---|---|
| **Company:** Clark Seif Clark, Inc. | | **EMSL-Bill to:** ☑ Different ☐ Same<br>If Bill to is Different note instructions in Comments**<br>*Third Party Billing requires written authorization from third party* | |
| **Street:** 275 Rose Avenue, Suite 206 | | | |
| **City:** Pleasanton | **State/Province:** CA | **Zip/Postal Code:** 94566 | **Country:** US |
| **Report To (Name):** Ryan Terwilliger | | **Telephone #:** 925-931-0100 | |
| **Email Address:** rterwilliger@csceng.com | | **Fax #:** | **Purchase Order:** 2002804 |
| **Project Name/Number:** Farmer Johns/2002804 | | **Please Provide Results:** ☐ FAX ☑ E-mail ☐ Mail | |
| **U.S. State Samples Taken:** CA | | **CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt | |

**Turnaround Time (TAT) Options* - Please Check**

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☑ 2 Week

*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide

| Matrix | Method | Instrument | Reporting Limit | Check |
|---|---|---|---|---|
| **Chips** ☑ % by wt. ☐ mg/cm² ☐ ppm | SW846-7000B | Flame Atomic Absorption | 0.01% | ☑ |
| **Air** | NIOSH 7082 | Flame Atomic Absorption | 4 µg/filter | ☐ |
| | NIOSH 7105 | Graphite Furnace AA | 0.03 µg/filter | ☐ |
| | NIOSH 7300 modified | ICP-AES/ICP-MS | 0.5 µg/filter | ☐ |
| **Wipe*** ASTM ☐ non ASTM ☐ *If no box is checked, non-ASTM Wipe is assumed | SW846-7000B | Flame Atomic Absorption | 10 µg/wipe | ☐ |
| | SW846-6010B or C | ICP-AES | 1.0 µg/wipe | ☐ |
| | SW846-7000B/7010 | Graphite Furnace AA | 0.075 µg/wipe | ☐ |
| **TCLP** | SW846-1311/7000B/SM 3111B | Flame Atomic Absorption | 0.4 mg/L (ppm) | ☐ |
| | SW846-1131/SW846-6010B or C | ICP-AES | 0.1 mg/L (ppm) | ☐ |
| **Soil** | SW846-7000B | Flame Atomic Absorption | 40 mg/kg (ppm) | ☐ |
| | SW846-7010 | Graphite Furnace AA | 0.3 mg/kg (ppm) | ☐ |
| | SW846-6010B or C | ICP-AES | 2 mg/kg (ppm) | ☐ |
| **Wastewater** Unpreserved ☐ Preserved with $HNO_3$ pH < 2 ☐ | SM3111B/SW846-7000B | Flame Atomic Absorption | 0.4 mg/L (ppm) | ☐ |
| | EPA 200.9 | Graphite Furnace AA | 0.003 mg/L (ppm) | ☐ |
| | EPA 200.7 | ICP-AES | 0.020 mg/L (ppm) | ☐ |
| **Drinking Water** Unpreserved ☐ Preserved with $HNO_3$ pH < 2 ☐ | EPA 200.9 | Graphite Furnace AA | 0.003 mg/L (ppm) | ☐ |
| | EPA 200.8 | ICP-MS | 0.001 mg/L (ppm) | ☐ |
| **TSP/SPM Filter** | 40 CFR Part 50 | ICP-AES | 12 µg/filter | ☐ |
| | 40 CFR Part 50 | Graphite Furnace AA | 3.6 µg/filter | ☐ |
| **Other:** | | | | ☐ |

**Name of Sampler:** Ryan Terwilliger **Signature of Sampler:** [signature]

| Sample # | Location | Volume/Area | Date/Time Sampled |
|---|---|---|---|
| 804L-01 | Exterior eaves - Red Paint | Wood - Fair | 6/9/16 |
| -02 | Exterior Posts, Railings, door - Yellow Paint - Metal Fair | | |
| -03 | Exterior Doors + Door Frames - Red Paint - Metal - " | | |
| -04 | Exterior Posts + Awning Support - Red Paint - Metal - " | | |
| -05 | Exterior walls - Office - Red Paint - Wood - Int. | | |

**Client Sample #'s** - **Total # of Samples:**

| | | | | | |
|---|---|---|---|---|---|
| **Relinquished (Client):** | [signature] | **Date:** | 6/10/16 | **Time:** | 1000 |
| **Received (Lab):** | ARD | **Date:** | 6/13/16 | **Time:** | 915EFE |

**Comments:**
BillTo: Clark Seif Clark, Inc., 275 Rose Avenue, Suite 206, Pleasanton, CA, 94566, US
Attention: Ryan Terwilliger Phone: 925-931-0100 Email: RTerwilliger@csceng.com Purchase Order:

OrderID: 091610807

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

# LEAD (Pb) CHAIN OF CUSTODY

**EMSL ORDER ID** *(Lab Use Only)*:

EMSL Analytical, Inc.
464 McCormick Street

San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

*Additional Pages of the Chain of Custody are only necessary if needed for additional sample information*

| Sample # | Location | Volume/Area | Date/Time Sampled |
|---|---|---|---|
| L-06 | Interior Storage Rm Doors - Metal - Gray Paint, Fair | | 6/9/16 |
| -07 | Exterior - N. Wall - Beige Paint - Cinder Block | | |
| -08 | " " " - | | |
| -09 | " - S. wall - Multicolor - | - Mural Int | |
| -10 | " - " - Beige - | Ext | |
| -11 | Interior - DU - wall - office - white Paint | Int | |
| -12 | " - Storage Rm 2 office - S. wall - Blk Paint Cinderblock - Int | | |
| -13 | " - Restroom Door - wood - Red - Int | | |
| -14 | " - " walls - Drywall - White - Int | | |
| -15 | ~~Exterior~~ Interior - office - N. wall - Cinderblock - white - Int | | |
| -16 | " " " N Door - ~~Door~~ Metal - White - Int | | |
| -17 | Exterior - Awning Ceiling - Fair - Beige - wood | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Comments/Special Instructions:**
BillTo: Clark Seif Clark, Inc., 275 Rose Avenue, Suite 206, Pleasanton, CA, 94566, US
Attention: Ryan Terwilliger Phone: 925-931-0100 Email: RTerwilliger@csceng.com Purchase Order:

ARD 6/13/16 915 EPC

Page 2 of 2 pages

# APPENDIX C

# SITE PHOTOGRAPHS

Photo 1: View of the building looking north

Photo 2: View of the south wall of the building

Photo 3: View of storage room 2 with ACM skimcoat

Photo 4: View of the office in storage room 2

Photo 5: View of the hallway between storage room 1 and 2

Photo 6:View of storage room 1with ACM skim coat on the upper walls and ceiling

Photo 7: View of the west side of the food storage building

Photo 8: View of the restroom inside the food storage building

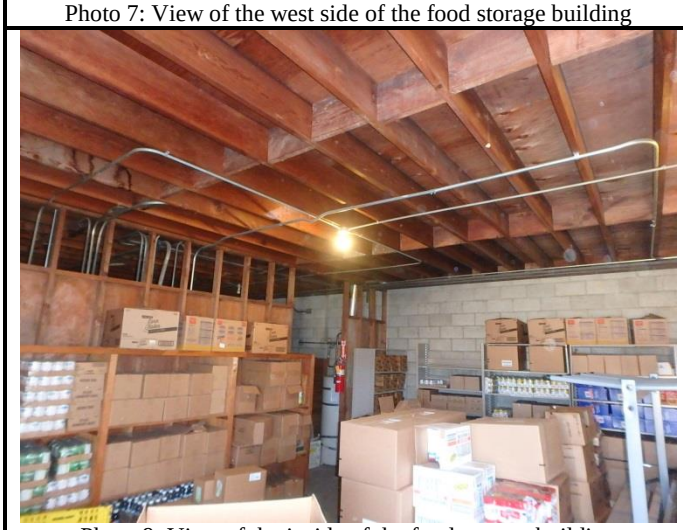


Photo 9: View of the inside of the food storage building

Photo 10: View of the main office

Photo 11: View of the food storage building roof

Photo 12:View of the main roof

# APPENDIX D

# SITE SKETCH


1
A-1
FLOOR PLAN
SCALE: NTS

N

CLARK SEIF CLARK, INC.
HEALTH & SAFETY • ENGINEERING • ENVIRONMENTAL

21732 DEVONSHIRE ST., SUITE B, CHATSWORTH, CA 91311
PO BOX 4299, CHATSWORTH, CA 91313

TEL. 818-727-2553
FAX. 818-727-2556

CSC PROJECT NO.: 2002804

PROJECT TITLE:

Former Farmer Johns Meatpacking

2316 S. Elm Avenue
Fresno, California 93706

CLIENT:

WESTON SOLUTIONS

1340 Treat Boulevard
Suite 210
Walnut Creek, CA 94597

# NOTES

Legend
X = Sample Location
= Non-ACM
= Non Friable ACM
= Friable ACM

TOTAL INTERIOR FLOOR AREA = 6,250 SQUARE FEET

***CONTRACTOR MUST VERIFY ALL QUANTITIES BEFORE BIDDING***

TITLE:

# FLOOR PLAN

DATE ISSUED:

DRAWING SCALE:

Drawing Number:

A-1

Sheet: of

# APPENDIX E

# ACCREDITATIONS AND CERTIFICATIONS

State of California
Division of Occupational Safety and Health
**Certified Asbestos Consultant**

**John R Terwilliger**
Name

Certification No. 11-4776

Expires on 07/20/17

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

| Certificate Type | Expiration Date |
|---|---|
| Inspector/Assessor | 04/05/2017 |
| Project Monitor | 04/05/2017 |

27623

John R. Terwilliger ID #: 22479

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL ANALYTICAL, INC.
464 McCormick St.
San Leandro, CA 94577
Andrew Pereze Phone: (510) 895-3675

ENVIRONMENTAL

Valid To: January 31, 2018 Certificate Number: 2845.09

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform recognized EPA methods using the following testing technologies and in the analyte categories identified below; for the test methods applicable to the National Environmental Lead Laboratory Accreditation Program (NLLAP) and tests on children's products**:**

**ENVIRONMENTAL LEAD**

| **Test** | **Test Method(s)** |
|---|---|
| Total Lead (Pb) in Soil | Soil, EPA 7000B – (FLAA), EMSL Analytical, Inc. LM-007A 3050 (Modified Hotblock Digestion) |
| Total Lead (Pb) in Paint Chips | Chips, EPA7000B – (FLAA), EMSL Analytical, Inc. LM-007B 3050 (Modified Hotblock Digestion) |
| Total Lead (Pb) in Dust Wipes | Wipes, EPA 7000B – (FLAA), EMSL Analytical, Inc. LM-007C 3050 (Modified Hotblock Digestion) |
| Total Lead (Pb) in Air | Air Cassettes, NIOSH 7082 |



5202 Presidents Court, Suite 220 | Frederick, MD 21703-8398 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

# Accredited Laboratory

A2LA has accredited

## EMSL ANALYTICAL, INC.

*San Leandro, CA*

for technical competence in the field of

## Environmental Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of any additional program requirements in the Environmental field. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 31st day of March 2016.

Senior Director of Quality and Communications
For the Accreditation Council
Certificate Number 2845.09
Valid to January 31, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Environmental Scope of Accreditation.*

**United States Department of Commerce**
**National Institute of Standards and Technology**

# Certificate of Accreditation to ISO/IEC 17025:2005

**NVLAP LAB CODE: 101048-3**

## EMSL Analytical, Inc.

San Leandro, CA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:*

## Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2016-07-01 through 2017-06-30

*Effective Dates*

*For the National Voluntary Laboratory Accreditation Program*

National Voluntary Laboratory Accreditation Program

# SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005


**EMSL Analytical, Inc.**
464 McCormick St.
San Leandro, CA 94577
Mr. Chris Dojlidko
Phone: 510-895-3675 Fax: (510) 895-3680
Email: cdojlidko@emsl.com
http://www.emsl.com


## ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 101048-3

### Bulk Asbestos Analysis

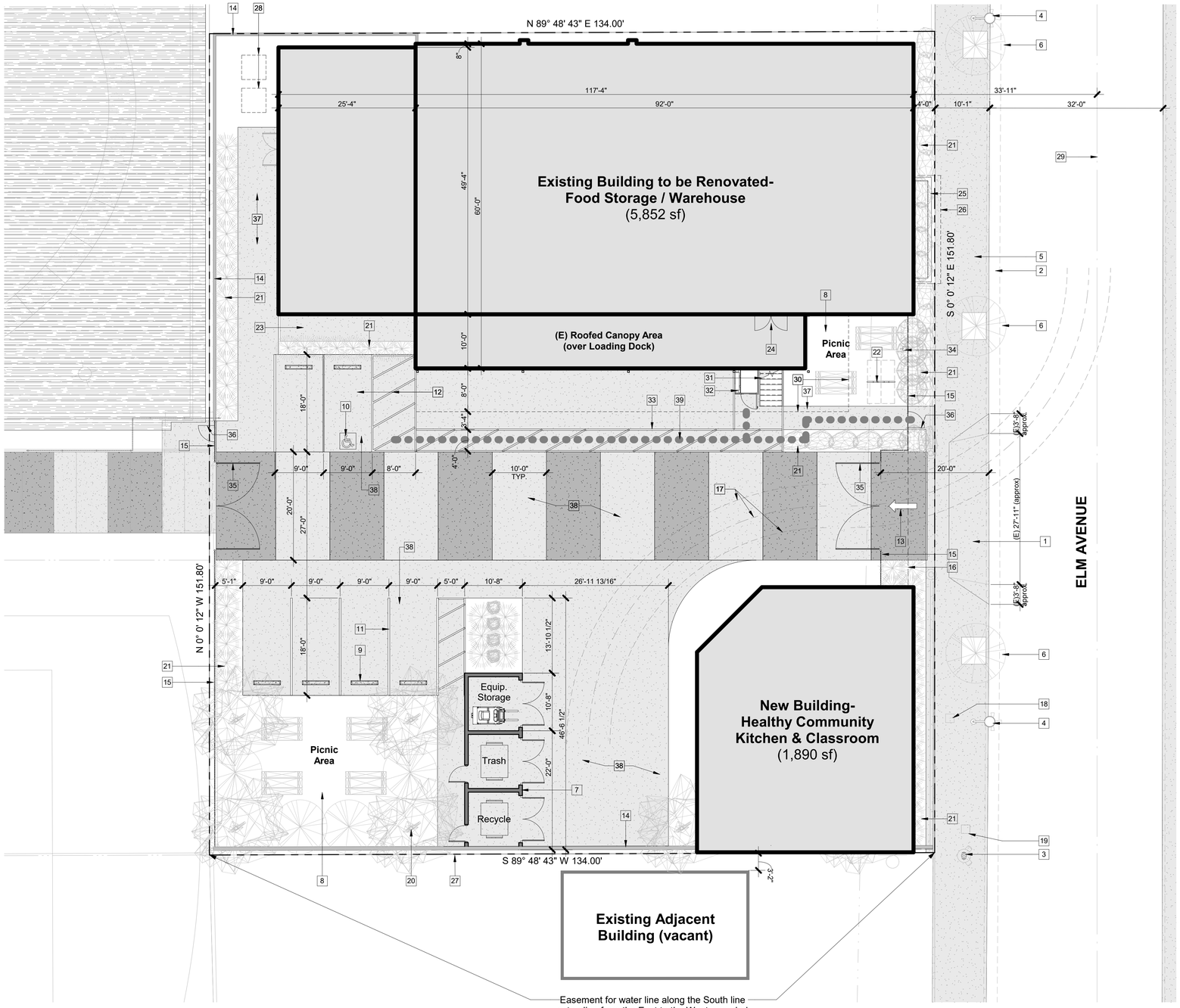
| *Code* | *Description* |
|---|---|
| 18/A01 | EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03 | EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials |

### Airborne Asbestos Analysis

| *Code* | *Description* |
|---|---|
| 18/A02 | U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A. |

*For the National Voluntary Laboratory Accreditation Program*

# APPENDIX C
# BUILDING/SITE RENOVATION PLANS




## 1 SITE PLAN - PROPOSED
1" = 10'-0"

TRUE NORTH

## PROJECT INFORMATION

| | |
|---|---|
| APN: | 47818307 |
| Address: | 2316 S. Elm Ave.<br>Fresno, CA 93706 |
| Site Area: | 0.46 acres (20,341 SF) |
| Zoning: | NMX (Neighborhood Mixed Use) |
| Lot Dimensions: | 151' X 134' |
| Building Height: | 1 story / 21' (existing) |
| Building Area: | 6,259 (existing building)<br>407 (to be demolished)<br>5,852 GSF - Building to Remain<br><br>1,890 GSF (new building) |
| Roofed Canopy Area: | 720 SF (at exsiting building) |
| Building Occupancy: | Existing Building<br>S-1 (moderate hazard storage)<br>New Building<br>B (Office / Demonstration Kitchen) |
| Construction Type: | Type VB |
| Fire Sprinklers: | Not Existing / Not Required |
| Fire Alarm: | Not Existing / Not Required |

## ZONING REQUIREMENTS

| | |
|---|---|
| Permitted Use: | Community and Religious Assembly<br>-Food Distribution<br>-Kitchen and Cooking Demonstration<br>-Office |
| Setbacks: | Front Yard (0' min. / 10' max)<br>Alley (3' min.)<br>No other setbacks for NMX |
| Accessory Structures: | Fence<br>-Located minimum 12" behind Front Yard Line<br>-Permitted at 6' Height<br>-Min. 80% Open<br>-Proposed wrought iron is a permitted material<br><br>Canopy (Detached)<br>-Not Located within Setbacks<br><br>Canopy (Attached)<br>-Not Located within Setbacks |
| Lighting: | All exterior doors, during the hours of darkness, shall be illuminated with a minimum of 0.5 foot candle of light<br><br>Maximum 20' Height, Cut-Off type, No Light Trespass |

## KEYNOTES

1 (E) Concrete drive approach to remain
2 (E) Concrete curb and gutter to remain
3 (E) Fire hydrant to remain
4 (E) Street light to remain
5 (E) Concrete sidewalk/flatwork to remain
6 (N) Street tree and tree well; see Landscape Drawings
7 (N) Trash enclosure per City of Fresno Standards P-33 and P-95
8 Decomposed gravel area, compressed to 95%
9 (N) Concrete wheelstop
10 (N) 36"x36" painted ISA, typ.
11 (N) Parking stall with 4" white stripes, typ.
12 (N) Accessible parking stall with 4" white border and 4" blue diagonal stripes @ 36" o.c.
13 (N) Painted directional arrow
14 (E) 6' CMU wall to remain; paint per schedule
15 6'-0" high wrought iron fence to match existing at adjacent Community Park
16 Dashed line indicates 12" front yard line setback
17 Dashed lines indicate truck turn w/ 44' radius at centerline, typ.
18 (E) Electrical box to remain
19 (E) Water meter in box to remain
20 Trees, typ.; see Landscape Drawings
21 Landscape area, typ.
22 Bicycle rack, typ.
23 (E) Concrete ramp serving loading dock to remain
24 Indicates main public building entry
25 CMU raised planter.; see Landscape Drawings
26 Prefab, wall-mounted aluminum shade/weather canopy above windows; see Exterior Elevations
27 Indicates property line / boundary, typ.
28 Outdoor mechanical unit; see Mechanical Drawings
29 Indicates street centerline
30 Prefab, post mounted cantilever aluminum shade/weather canopy surrounding Loading Dock; see Exterior Elevations
31 Metal pan stairs
32 Outdoor rated, commercial vertical wheelchair lift
33 (N) Path of travel striping with 4" white border and 4" white stripes @ 36" o.c.
34 (E) Gas meter to remain
35 16'-0" wide wrought iron access gate
36 3'-0" wide wrought iron accessible man gate
37 (N) 4" Concrete walk
38 (N) Concrete paving, reinforced for vehicular use; match adjacent property concrete coloring pattern as indicated
39 Accessible route

## ACCESSIBLE ROUTE

Accessible Route: Architect and contractor shall verify that there are no barriers in the accessible path indicated on drawings and shall meet the following:

A. Accessible route as indicated is a common barrier free route without any abrupt vertical changes exceeding 1/2" at 1:2 max slope, except that level changes do not exceed 1/4" vertical.
B. Accessible route is a minimum of 48" wide. The surface shall be firm, stable and slip resistant. Passing space at least 60" x 60" shall be located not more than 200' apart.
C. Accessible route shall not exceed 2% cross slope and 5% running slope in the direction of travel. Slopes greater than 5% to a maximum of 8.33% shall be considered as a ramp.
D. Accessible route with a continuous gradients shall have 60" level areas at intervals of 400' maximum.
E. There shall be no drop off greater than 4" along the edge of walk or landing.
F. Accessible route shall be maintained free of overhang obstructions and objects protruding greater than 4" from a wall, between 27" to 80" above finish grade.

PAUL HALAJIAN
**ARCHITECTS**
389 Clovis Ave, Suite 100
Clovis, CA 93612-1185
T: 559.297.7900 F: 559.297.7950
www.halajianarch.com

**NOT FOR CONSTRUCTION**



PROJECT:
# Fresno Metro Ministries
# Saint Rest Food to Share Renovation
2316 South Elm Avenue, Fresno, CA, 93706

SHEET: Site Plan - Proposed

DRAWING SET INFORMATION:

| | |
|---|---|
| 05.20.2021 | Progress Drawings |

REVISIONS:

| | | |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PROJECT NUMBER:
2020-20

SHEET NUMBER:
A102