

F. HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

This section discusses the hazardous materials issues associated with the proposed project site and proposed project operations. The hazardous materials issues evaluated include: past hazardous materials use and potential build-up of associated toxic substances in site soil and groundwater; past onsite and offsite storage and release of fuels; hazardous waste contamination of the site during construction; and the potential of the project to handle hazardous materials, generate hazardous wastes, or produce discharges.

DEFINITIONS

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.¹ In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground, resulting in soil and groundwater contamination. Federal and state laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The California Code of Regulations, Title 22, §66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste.

BACKGROUND AND CURRENT SITE CONDITIONS

The project site occupies nearly two full city blocks (approximately five acres), bounded by 24th Street to the north, West Grand Avenue to the south, Valley Street to the west and Broadway to the east. Parcel A, the smaller of the two blocks, is located between West Grand Avenue and 23rd Street, while Parcel B is located to the north, between 23rd and 24th Streets. The project site is paved mainly with asphalt with a few areas of concrete, and contains single- and two story buildings used for showrooms and garage bays, a building used for business offices (439 23rd Street), and a two story apartment building (the Casa Blanca Apartments) on Parcel B. Open areas in the project area are mainly used for vehicle storage. The most prevalent surrounding land uses are commercial with automotive services; however, there are multi-family residential buildings and a children’s day-care center across Valley Street from the project site. Other non-automotive commercial land uses are also present in the area.

¹ State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

Based on previous review of Sanborn Fire Insurance maps, the project area was first developed in the early 1920s for commercial use. Prior businesses on the project site included a construction company, metal work shop, hotel, bowling alley and car rental.

A preliminary site assessment, commonly referred to as a “Phase I” investigation, identifies whether petroleum and chemical contamination at a project site and surrounding area necessitates a detailed subsurface soil and groundwater sampling investigation, referred to as a “Phase II” investigation. During the Phase I investigation, environmental professionals research the site history, perform a regulatory database review and conduct a site reconnaissance for the site and surrounding area. Various methods to obtain historical information pertaining to the site are used including the review of historical aerial photographs and topographical maps and use of other historical information such as Sanborn maps. Each report lists offsite sources of contamination that may be of potential environmental concern due to proximity to the project site.

The following Phase I reports were completed:

- Environmental Assessment, Broadway – West Grand Avenue Property, 2551 Broadway, Oakland, California, prepared by Dames & Moore, April 1997
- Phase I Environmental Site Assessment Performed on: Negherbon Auto Center, 2345 Broadway, Oakland, California, prepared by Ninyo & Moore, March 2001.

In addition to the above Phase I reports, brief preliminary environmental reviews for specific parcels (439 23rd Street, 449 23rd Street, and 461 24th Street) were prepared. These reports are not as detailed as the Phase I reports and are not prepared to ASTM standards required of Phase I investigations.

Soil and Groundwater Investigations

Based on findings of the Phase I investigations, Treadwell & Rollo (2003) conducted a Phase II Soil and Groundwater investigation for the project site. Soil and groundwater samples were obtained from eight soil borings on Parcel A and 10 soil borings from Parcel B. The 2003 Phase II investigation did not include the 439 23rd Street and 449 23rd Street properties on Parcel A or the 461 24th Street Property on Parcel B. In 2004, Treadwell & Rollo conducted a limited soil analyses for the property located at 449 23rd Street.

Parcel A (2003 Soil and Groundwater Investigation) – Twenty-four soil samples and four groundwater samples were submitted for analysis. Elevated lead results in shallow soil samples indicate that localized areas of fill material may contain lead that may require disposal at a Class I landfill. Arsenic concentrations were above the Preliminary Remediation Goals (PRGs) for residential sites based on the human-health risk. However, arsenic is a naturally occurring background metal in San Francisco Bay soils, and the concentrations of arsenic detected in Parcel A soils are considered typical of background levels in the Bay Area. Minor concentrations of petroleum and volatile organic compounds (VOCs) were detected in the soil samples, all at very low concentrations that are below the established screening criteria for human health.

Analysis from groundwater samples from Parcel A detected several VOCs commonly associated with motor and parts degreasing solvents and with dry cleaning fluids. All concentrations were below the risk-based screening level² values established to protect indoor air quality for residential buildings overlying contaminated groundwater that could release volatile compounds into the air.³ One sample (6.2 micrograms per liter) slightly exceeded the Maximum Contaminant Level (MCL) for drinking water of 5.0 micrograms per liter; however, the shallow groundwater below the project site is not considered a drinking water source (Treadwell & Rollo, 2003).

Parcel A (2004 Soil Investigation) – The limited soil analyses at the 449 23rd Street parcel included two soil borings completed to approximately 16 feet below ground surface. A total of six soil samples were submitted to the laboratory for analyses. Minor concentrations, less than 2 milligrams per kilogram (mg/kg) of total petroleum hydrocarbon as diesel (TPH as diesel) were detected in two soil samples. Analysis of lead detected background levels only. Analytical tests detected 54 micrograms per kilogram (µg/kg) of methylene chloride (a common solvent) from one soil sample at 4 feet below ground surface. The reported concentration is low, and appears to be an isolated detection or laboratory contamination. The presence of this solvent at this concentration in soil will not affect handling or disposal options (Treadwell & Rollo, 2004b).

Parcel B – Twenty soil samples and three groundwater samples were submitted for analysis. One soil sample exceeded the threshold for lead that requires Class I disposal. Arsenic concentrations were above the Preliminary Remediation Goals (PRGs) for residential sites based on the human-health risk, but as noted for Parcel A, the concentrations of arsenic detected are considered typical of background levels in Bay Area soils. TPH as diesel fuel was detected in certain soil samples, at concentrations considered non-hazardous and below the levels that typically require remediation. Nevertheless, soil excavated may be restricted for offsite disposal and reuse. Similar to Parcel A, low levels of VOCs and one semi-volatile organic compound (SVOC) were detected in soil. The levels detected are less than established screening levels for human health risk.

Analysis from groundwater samples from Parcel B detected nine VOCs in groundwater samples from Parcel B. As with Parcel A, detected concentrations were all below the risk-based screening level values established to protect indoor air quality for residential buildings overlying contaminated groundwater.⁴ Also as with Parcel A, one sample (7.3 micrograms per liter) slightly exceeded the Maximum Contaminant Level (MCL) for drinking water of 5.0 micrograms per liter; as noted, groundwater at the site is not a drinking water source (Treadwell & Rollo, 2003).

² Risk-based screening levels are used to assess exposures of contaminants to buildings and occupants. Risk factors may be linked to an increase risk of an adverse health effect from an adverse building condition.

³ The highest VOC concentrations recorded in the site testing, relative to residential RSBL levels, were less than 0.5 µg /L of 1,1-dichloroethene detected in grab groundwater samples, compared to the residential RSBL level of 9.6 µg /L, and 6.2 µg /L of 1,1-dichloroethane detected in grab groundwater samples, compared to the residential RSBL level of 1,700 µg /L for groundwater.

⁴ The highest VOC concentrations recorded in the site testing, relative to residential RSBL levels, was 1.4 µg /L of 1,1-dichloroethene detected in a grab groundwater sample, compared to the residential RSBL level of 9.6 µg /L for groundwater.

Structural and Building Components

Asbestos

Asbestos is a naturally-occurring fibrous material that was used as a fireproofing and insulating agent in building construction before such uses were banned by the federal Environmental Protection Agency (EPA) in the 1970s.

Parcel A – Based on limited visual observations of 2251 Broadway, the existing building contains potential asbestos containing materials (ACMs) in acoustical ceiling tiles in two garage areas. The roof was not accessible and therefore not inspected. Additionally potential ACMs were observed in the drywall and ceiling tiles in the garage and office areas (Dames & Moore, 1997). Although a formal evaluation of asbestos containing materials was not completed at 439 23rd Street or 449 23rd Street, based on the age of the building it is likely that ACMs may be present (Treadwell & Rollo, 2004b). No other results of ACM surveys for Parcel A were provided.

Parcel B – During renovation of 2315 – 2323 Broadway, suspected floor tiles and carpeting materials containing suspected ACMs were removed. A previous asbestos survey was conducted by MA Linquist. It is reported that four showrooms in these buildings were inspected and that no ACMs remained in the flooring. Suspected tile containing ACMs were observed in the former parts department of 421 24th Street. No other results of ACM surveys for Parcel B were provided. Although a formal evaluation of ACMs was not completed at 461 24th Street, based on the age of the building it is likely that ACMs may be present (Treadwell & Rollo, 2004b, 2004c)

Polychlorinated Biphenyls (PCBs)

PCBs are synthetic organic oils that were historically used in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. No transformers or other potentially containing PCB equipment were observed during any of the Phase I investigations (Dames & Moore, 1997; Ninyo & Moore, 2000; Treadwell & Rollo, 2004b).

Lead and Lead-Based Paint

Soils beneath the surface of the site consist of a combination of artificial fill and native alluvial soils. The presence of lead in soils above natural background levels can be a common occurrence in areas that were created by fill and in former industrial areas. Lead concentrations can also be elevated in fill materials similar to those that underlie portions of the project site because fill can originate from building and industrial rubble containing or affected by sources of lead such as piping, coatings, and other construction materials. Because some of the buildings were constructed in the 1920s, there is a potential for lead based paint (LBP) to be present onsite (Ninyo & Moore, 2000; Treadwell & Rollo, 2004b) such as painted surfaces, such as drywall, ceilings, and exterior stucco. Treadwell & Rollo submitted three brick samples (two brick fragments from a retaining wall and one sample from a brick fragment recovered from the soil sample) and one exterior paint sample for analysis of total and soluble lead. The brick sample recovered from the soil sample contained soluble lead that exceeds the state's criteria for hazardous waste. Similar brick fragments were observed in soil samples throughout the project

site (Treadwell & Rollo, 2004b). Formal testing for lead and lead based paint were not conducted at 439 23rd Street, 449 23rd Street, or 461 24th Street.

Underground Storage Tanks

Parcel A – An undocumented UST was located in the sidewalk area along the west side of Broadway, approximately 75 feet south of 23rd Street. The UST port is covered by a cover labeled as “Oil Storage System.” The UST plan dimensions are approximately 11 feet by 13 feet. A thin layer of product was detected floating on the water in the UST port piping. Chemical analyses indicate that this material consists of ethylbenzene, xylenes, and trimethylbenzenes. The UST appears to be under the sidewalk only and does not extend onto Parcel A (Treadwell & Rollo, 2004a)

Three USTs consisting of one 500-gallon waste oil tank, one 5,000-gallon gasoline tank, and one 10,000-gallon gasoline tank were reportedly removed from the subject property in August 1989. According to the Alameda County Department of Environmental Health no further action is required relating to soil contamination associated with the former USTs (Dames & Moore, 1997). Treadwell & Rollo did not observe any indications of current or past USTs at the 449 23rd Street site (Treadwell & Rollo, 2004b).

Parcel B – Based on interviews with the owner and service personnel conducted during the Phase I investigation no USTs are on the property. However, an abandoned dispenser island for a former gasoline tank was observed. In addition, a possible vent pipe for a UST was observed along the west exterior wall of one building (Ninyo & Moore, 2000).

REGULATORY AGENCY-LISTED SITES

Results of a regulatory database search that included a list of sites adjacent to and in the subject property vicinity that are listed on agency files as having documented use, storage, or releases of hazardous materials or petroleum products, are discussed below.

Project Site

A government records search revealed that a portion of the project site (Negherbon Auto Center, 2345 Broadway) is listed on the State Water Resources Control Board’s Leaking Underground Storage Tank (LUST) list, a database of sites that have contamination as the result of a leaking tank, and therefore is listed on the Cortese List. The Cortese List is a compilation of information from various sources listing potential and confirmed hazardous waste and hazardous substance sites in California and is maintained by DTSC⁵. No other sites within the project area are listed in any other database searched including the HAZNET database which is a state list of generators appearing on hazardous waste manifests, the State of California Hazardous Waste and Substances

⁵ The Cortese List was last compiled and published by the California Environmental Protection Agency (Cal EPA) in 2001. The DTSC, State Water Resources Control Board, and the California Integrated Waste Management Board previously submitted information annually to Cal EPA for generation of the Cortese List; since 2001 these three agencies have largely maintained their respective data sections independently.

List (Cortese List), the Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS), and the Spill, Leaks, Investigation and Cleanup List (SLIC). CERCLIS contains general information on contaminated sites, including location, status, contaminants, and actions taken. Information in the CERCLIS database can be found on sites being assessed under the Superfund Program, hazardous waste sites, and potential hazardous waste sites. SLIC is a list of groundwater contamination sites and is maintained by the State Water Resources Control Board.

Nearby Sites

Nearby sites (within 1/8 mile of the project site) were identified in the previously conducted environmental site investigations in the following regulatory databases: LUST; HAZNET; UST; RCRIS, SWF/LS; CERCLIS; Cal-Sites; and CHMIRS. Table IV.F-1 provides a detailed list of project sites and nearby regulatory listed sites.

REGULATORY CONTEXT

The use of hazardous materials is subject to numerous laws and regulations at all levels of government. These controls are summarized in Appendix B.

IMPACTS AND MITIGATION MEASURES

INTRODUCTION

Hazardous wastes and hazardous materials, if mishandled, could pose risks to the public. Potential health and safety impacts typically can stem from interactions of construction workers, the public or future occupants with hazardous materials and wastes encountered during project construction activities or project operations.

SIGNIFICANCE CRITERIA

Appendix G of the *CEQA Guidelines* provides that a project would result in a significant hazardous materials impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

**TABLE IV.F-1
NEARBY REGULATORY LISTED SITES^a**

| Site Name | Site Location | Regulatory List |
|-----------------------------------|-------------------------------------|------------------------|
| Negherbon Lincoln Mercury | 2345 Broadway | LUST, SQG |
| Former Chrysler | 2417 Broadway | LUST, UST |
| Catering by Andre | 434 25 th Street | LUST, UST |
| 1 X United Glass | 477 25 th Street | LUST |
| Foreign Body Shop | 2350 Webster Street | LUST |
| RMC Lonestar | 333 23 rd Ave. | ERNS, UST |
| Quaker State Refinery | 2507 Broadway | ERNS |
| Broadway Ford | 2560 Webster | UST, LUST |
| All Pro Transmissions | 2424 Broadway | SQG |
| Atlantic garage | 2500 Webster St | SQG, |
| Broadway Motors | 2560 Webster Street | LUST |
| Western Pioneer Insurance Company | 2770 Broadway | UST |
| Hertz Corporation | 2251 Broadway | UST |
| Lake Merritt Towers I | 155 Grand Ave | LUST |
| Lake Merritt Towers II | 155 Grand | CORTESE, LUST |
| Heyman Properties | 2341 Valley St | UST |
| Broadway Motors Ford | 437 25 th St | SQG, LQG |
| Val Strough Lexus | 447 25 th St | SQG |
| Oakland Tribune Old | 2302 Valdez | CORTESE, LUST |
| Oakland Tribune | 2300 Valdez | UST |
| Wagner Pigozzi, Inc. | 465 25 th St | UST |
| United Glass Company | 477 25 th St | UST |
| Residential Apartment Complex | 498 25 th St | UST |
| Johnson Plating | 2526 Telegraph | RCRA, SQG |
| Gulf | 460 Grand Ave | CORTESE, UST |
| Texaco | 500 Grand Ave | UST, CORTESE |
| Dave's Complete Auto Service | 2250 Telegraph | CORTESE, UST, LUST |
| Tony's Beacon Station | 2250 Telegraph | UST |
| Exxon Service Station | 2225 Telegraph | UST, LUST, CORTESE |
| Caltrans District 4 | 111 Grand Ave | UST, SQG |
| Custom Care Cleaners | 2430 Telegraph | SQG |
| Unknown | 24 th St and Telegraph | ERNS |
| Bauer Porsche Repair | 375 26 th St | UST |
| The Benz Shop | 381 26 th St | UST |
| HR Auto Finishing | 381 26 th St | UST |
| Pacific Bell | 2150 Webster St | SQG |
| Webster Street Partner | 2101 Webster and 2 nd St | ERNS, UST |

^a As reported in previous Phase I Environmental Site Assessments

^b CORTESE: Hazardous Waste and Substances Sites.

^b LUST: Leaking Underground Storage Tank – contains an inventory of reported leaking underground storage tank incidents. The data comes from the State Water Resources Control Board.

^c HAZNET: Hazardous Waste Information System. DTSC database that records annual hazardous waste shipments, as required by RCRA. All businesses that use and dispose of hazardous materials are entered into the HAZNET database, and each occurrence of a disposal and/or transfer of a hazardous waste is entered into the database as a record.

^d UST: Registered Underground Storage Tanks maintained by either State Water Resources Control Board or the County.

^e SQG: Resource Conservation and Recovery Information System (RCRIS)– Small Quantity Generator (RCRIS includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act).

^f LQG: Resource Conservation and Recovery Information System (RCRIS)– Large Quantity Generator (RCRIS includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act).

SOURCES: Dames & Moore, 1997; Ninyo and Moore, 2001

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or
- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

APPROACH TO THE ANALYSIS

This impact analysis focused on potential effects of hazardous materials or waste associated with the project site. The evaluation was made in light of project plans, current conditions at the project site, applicable regulations and guidelines, and previous environmental site assessments and investigations.

PROJECT CONSTRUCTION

Impact F.1: Disturbance and release of contaminated soil, groundwater, or building materials during demolition and construction phases of the project could expose construction workers, the public, or the environment to adverse conditions related to hazardous substance handling. (Significant)

Excavation for installation of project-related utilities, building footings, and regrading would occur at the project site. If any hazardous contaminants in excavated soils or in groundwater should go undetected, health and safety risks to workers and the public could occur. Exposure to hazardous wastes could cause various short-term and/or long-term health effects. Possible health effects could be acute (immediate, or of short-term severity), chronic (long-term, recurring, or resulting from repeated exposure), or both. Acute effects, often resulting from a single exposure, could result in a range of effects from minor to major, such as nausea, vomiting, headache, dizziness, or burns. Chronic exposure could result in systemic damage or damage to organs, such as the lungs, liver, or kidneys. Health effects would be specific to each hazardous substance.

In general, the results of the soil and groundwater investigation indicate that the shallow soil and groundwater quality would not be expected to cause excess risks to human health. Concentrations of these constituents in general were below the risk-based screening levels⁶ developed and assembled by the San Francisco Regional Water Quality Control Board as well as

⁶ As stated in footnote 2, p. IV.F-2, risk-based screening levels are used to assess exposures of contaminants to buildings and occupants.

City of Oakland-specific risk-based screening levels developed by the City of Oakland, U.S. EPA Preliminary Remediation Goals (PRGs)⁷.

Asbestos

Asbestos could be encountered during structural demolition of the existing buildings and would require disposal. Buildings to be demolished would need appropriate abatement of identified asbestos prior to demolition or renovation. Asbestos-containing material is regulated both as a hazardous air pollutant under the federal Clean Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. The renovation or demolition of buildings containing asbestos would require the use of contractors who are licensed to conduct asbestos abatement work and notification of the Bay Area Air Quality Management District (BAAQMD) ten days prior to initiating construction and demolition activities.

Potential exposure to asbestos, and its related chronic adverse health effects, is possible throughout demolition if materials that contain hazardous substances are present during operations. Suspected asbestos-containing materials (ACMs) have been previously identified in 2251 Broadway and 2315 – 2323 Broadway. Although testing of ACMs was not conducted in other buildings in the project, based on the age of the building and construction materials used, asbestos containing materials are likely present.

Lead and Lead-based Paint

Lead-based paint could become separated from building materials during the demolition process. Separated paint can be classified as a hazardous waste if the lead content exceeds 1,000 parts per million and would need to be disposed of accordingly. Additionally, lead-based paint chips can pose a hazard to workers and adjacent sensitive land uses. Both the federal and California OSHA regulate all worker exposure during construction activities that impact lead-based paint. Interim Final Rule found in 29 CFR Part 1926.62 covers construction work where employees may be exposed to lead during such activities as demolitions, removal, surface preparation for re-painting, renovation, clean up and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, training etc.

Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified ten days in advance of any proposed demolition or abatement work.

⁷ The United States EPA Region 9 Preliminary Remediation Goals (PRGs) are tools for evaluating and cleaning up contaminated sites. Chemical concentrations above PRG levels suggest that further evaluation of the potential risks that may be posed by site contaminants is appropriate.

Demolition could create exposure to lead-based paint present in building structures. Dust generating activities that include removal of walls, sanding, welding, and material disposal could produce airborne quantities of lead-laden material. These materials could expose workers and persons in close proximity, including occupants of off-site locations. The project site contains buildings with painted surfaces, such as drywall, ceilings, and exterior stucco, which could contain lead-based paint. The project site is also underlain by artificial fill, which could contain lead.

PCB-containing Materials

The presence of PCB-containing materials was not observed during the Phase I investigations or other site reconnaissances. However, it is possible that PCB-containing materials may exist in the buildings to be demolished. If present, demolition of these structures could disturb these materials.

Underground Storage Tanks

One UST is present in the sidewalk along the west side of Broadway, approximately 75 feet south of 23rd Street (Treadwell & Rollo, 2004a). The UST will need to be removed prior to construction activities in the immediate area. Additional USTs may also be present at the project site. Prior to UST regulations in the 1980s, USTs were commonly installed without being recorded. Therefore, additional unknown USTs, such as the one encountered, that were installed prior to UST regulations could be encountered during project construction.

Soil

Previously unknown contamination may also be encountered during project development. Environmental investigations conducted at the project site were based on available historical land use information, such as aerial photographs, fire insurance maps, and evidence of historical hazardous material use apparent during site inspections. Because hazardous material records were not required to be maintained until relatively recently, hazardous materials that may have been used, stored, or disposed of in areas outside of the areas of concern identified during previous environmental investigations may be encountered. If significant releases of hazardous materials are discovered during construction activities, additional investigation, remediation, and/or coordination with regulatory agencies may be required.

Mitigation Measure F.1a: A pre-demolition ACM survey shall be performed prior to demolition of the structures. The survey shall include sampling and analysis of suspected ACMs identified in the 1997 and 2000 Phase I investigations and areas that were previously not surveyed (439 23rd Street, 449 23rd Street, and 461 24th Street).

Mitigation Measure F.1b: An asbestos abatement plan developed by a state-certified asbestos consultant shall be prepared. All asbestos-containing materials (ACMs) shall be removed and appropriately disposed of in accordance with the asbestos abatement plan prior to demolition of the existing buildings in accordance with federal and State

construction worker health and safety regulations, the regulations and notification requirements of the Bay Area Air Quality Management District (BAAQMD).

Mitigation Measure F.1c: Prior to the issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the Planning and Zoning Division written documentation that any asbestos-containing materials (ACMs) have been removed from the project site prior to the start of any demolition activities. A licensed asbestos firm shall conduct the removal of ACMs in accordance with BAAQMD's Regulation 11 Rule 2.

Mitigation Measure F.1d: The project sponsor shall implement a lead-based paint abatement plan, which shall include the following components:

- Development of an abatement specification approved by an Certified Project Designer.
- A site Health and Safety Plan, as needed.
- Containment of all work areas to prohibit off-site migration of paint chip debris.
- Removal of all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities per the recommendations of the survey. The demolition contractor shall be identified as responsible for properly containing and disposing of intact lead-based paint on all equipment to be cut and/or removed during the demolition.
- Appropriately remove paint chips by vacuum or other approved method.
- Collection, segregation, and profiling waste for disposal determination.
- Appropriate disposal of all hazardous and non-hazardous waste.

Mitigation Measure F.1e: Prior to the issuance of any demolition, grading, or building permit, the applicant shall demonstrate to the satisfaction of the Fire Department, Office of Emergency Services, that the site has been investigated for the presence of lead and does not contain hazardous levels of lead.

Mitigation Measure F.1f: In the event that electrical equipment or other PCB-containing materials are identified prior to demolition activities they shall be removed and disposed of by a licensed transportation and disposal facility in a Class I hazardous waste landfill.

Mitigation Measure F.1g: The underground storage tank present along the west side of Broadway shall be removed prior to construction activities in the immediate area. The Alameda County Local Oversight Program (LOP) shall be contacted to oversee removal and determine appropriate remediation measures. Removal of the UST shall require, as deemed necessary by the LOP, over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree sufficient to the oversight agency. In the event that additional USTs are encountered the same procedures described above shall apply.

Mitigation Measure F.1.h: The project applicant shall develop and implement a project-specific worker Health and Safety Plan (HSP). The HSP shall identify the following, but not be limited to:

- **Description of contamination,**
- **Decontamination procedures,**
- **Nearest hospital with directions, and**
- **Emergency notification procedures.**

Mitigation Measure F.1i: Prior to the issuance of any demolition, grading, or building permit, the applicant shall provide to the Planning and Zoning Division written verification that the appropriate State, Federal, or County authorities have granted all required clearances and confirmed compliance with all applicable conditions imposed by said authorities, for all previous contamination at the site, if applicable.

Significance after Mitigation: Less than Significant.

Impact F.2: Improper disposal of contaminated soil components from the demolition and excavation phases of the project could expose construction workers, the public, or the environment to adverse conditions. (Significant)

Based on the results of the soil and groundwater investigation (Treadwell & Rollo, 2003) some of the soil on site may contain soluble lead that may require Class I or Class II disposal. Other soils generated by construction activities on the project site may be reused on-site without constituting an excess health risk to construction workers or future residents or workers.

Mitigation Measure F.2a: The sponsor shall perform additional soluble lead analyses of soil prior to on-site reuse or off-site disposal to confirm the acceptability for reuse and/or classification of the soils as a California hazardous waste material. If the soils are classified as a California hazardous waste, the project sponsor shall dispose of the soils at a Class I disposal facility in California or an out of state non-RCRA facility permitted to accept wastes at concentrations of the excavated soils.

Mitigation Measure F.2b: Soil generated by construction activities shall be stockpiled onsite in a secure and safe manner, and sampled prior to reuse or disposal at an appropriate facility. Specific sample procedures (i.e. frequency, etc.) for reuse and disposal shall be determined within a Soil Management Plan.

Mitigation Measure F.2c: Per the regulatory standards of the City Environmental Services Division of the Public Works Agency, the project sponsor shall sample the soil on the site to determine whether any further remediation is required. Based on the test results, the project sponsor shall submit any and all applicable documentation and plans required by the Regional Water Quality Control Board, the Alameda County Public Health Department, and the City's Fire Department, Office of Emergency Services, regarding

remediation of any remaining contaminated soil and/or groundwater that may be identified on the site. These documents and plans shall be submitted to the Environmental Services Division, and shall demonstrate to the satisfaction of each agency with jurisdiction that all applicable standards and regulations have been met for the construction and site work to be undertaken pursuant to the permit. If warranted, the project sponsor must develop and submit for review by the Environmental Services Division a Soil and Groundwater Management Plan for construction and development activities at the site. The plan shall include, as required, any special health and safety precautions to mitigate worker exposure to contaminated soils, dust control measures to prevent the generation of dust that could migrate off-site, stormwater runoff controls to minimize migration of soils to storm drains, measures to ensure the proper treatment and disposal of groundwater during dewatering activities, steps for ensuring compliance with applicable state and federal regulations governing the transportation and disposal of hazardous wastes, and general protocol for addressing any unexpected hazardous materials conditions in the subsurface encountered during construction.

Significance after Mitigation: Less than Significant.

Impact F.3: Hazardous materials used on-site during construction activities (i.e., solvents) could be released to the environment through improper handling or storage. (Significant)

Construction activities would require the use of certain hazardous materials such as fuels, oils, solvents, and glues. Inadvertent release of large quantities of these materials into the environment could adversely impact soil, surface waters, or groundwater quality. However, the onsite storage and/or use of large quantities of materials capable of impacting soil and groundwater are not typically required for a project of the proposed size and type.

Mitigation Measure F.3: The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- **Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;**
- **Avoid overtopping construction equipment fuel gas tanks;**
- **During routine maintenance of construction equipment, properly contain and remove grease and oils.**
- **Properly dispose of discarded containers of fuels and other chemicals.**

Significance after Mitigation: Less than Significant

PROJECT OPERATION

Impact F.4: Project operations would generate general commercial, household, and maintenance hazardous waste. (Less than Significant)

The project proposes to develop approximately two city blocks, and would contain up to 475 residential units and 40,000 square feet of ground-floor commercial space. Commercial activities would use hazardous chemicals common in commercial and office settings. These chemicals would include familiar materials such as toners, correction fluid, paints, lubricants, kitchen and restroom cleaners, and other maintenance materials. Hazardous wastes used in the residential or maintenance areas may include small quantities of lubricants or fuels used in maintaining personal resident's vehicles, pesticides or herbicides, solvents, paints, and lubricants. These common consumer products would be used for the same purposes as in any commercial or residential setting. Because these types of hazardous materials are generally handled in small quantities the health effects associated with them are generally not as serious as industrial uses. Implementation of the proposed project would not cause an adverse effect on the environment with respect to the use, storage, or disposal of general commercial and household hazardous substances generated from proposed building uses, and therefore the impact would be considered less than significant.

Mitigation: None required.

CUMULATIVE IMPACTS

Impact F.5: Development proposed as part of the project, when combined with other foreseeable development in the vicinity, could result in cumulative hazardous materials impacts. (Less than Significant)

The proposed project development, with implementation of the identified mitigation measures above, would have a less than significant hazardous materials impact to the public or the environment within the vicinity of the project area. Other foreseeable development within the area, although likely increasing the potential to disturb existing contamination and the handling of hazardous materials, would be required to be in compliance with the same regulatory framework as the proposed project. Therefore, cumulative development would not create a cumulative impact to which the project would contribute.

Mitigation: None required.

REFERENCES – Hazardous Materials

Dames & Moore, *Environmental Assessment, Broadway-West Grand Avenue Property, 2551 Broadway, Oakland, California*, April 1997.

Ninyo & Moore, *Phase I Environmental Site Assessment Performed on: Negherbon Auto Center, 2345 Broadway, Oakland, California, March 2001.*

Treadwell & Rollo, *Preliminary Environmental Review, Proposed Negherbon Mix-Use Development, 439 23rd Street (a.k.a. Breen Out Parcel), Oakland, California, November 2003.*

Treadwell & Rollo, *Phase II Environmental Site Assessment Negherbon Mixed-Use Project, 24th Street and West Grand Avenue, Oakland, California, December 2003.*

Treadwell & Rollo, *Addendum to Phase II Environmental Site Assessment, Negherbon Mixed-Use Project, 24th Street and West Grand Avenue, Oakland, California, July 2004a.*

Treadwell & Rollo, *Preliminary Environmental Review and Soil Analyses, Proposed Negherbon Mixed-Use Development (Parcel A) 449 23rd Street, Oakland, California, January 2004b.*

Treadwell & Rollo, *Preliminary Environmental Review, Proposed Negherbon Mix-Use Development, 461 24th Street (a.k.a. Casa Blanca Apartments), Oakland, California, April 2004c.*