3-9 HAZARDOUS MATERIALS

Changes Since the Draft EIS/EIR

<u>Subsequent to the release of the Draft EIS/EIR in April 2004, the Gold Line Phase II project has undergone several updates:</u>

Name Change: To avoid confusion expressed about the terminology used in the Draft EIS/EIR (e.g., Phase I; Phase II, Segments 1 and 2), the proposed project is referred to in the Final EIS/EIR as the Gold Line Foothill Extension.

Selection of a Locally Preferred Alternative and Updated Project Definition: Following the release of the Draft EIS/EIR, the public comment period, and input from the cities along the alignment, the Construction Authority Board approved a Locally Preferred Alternative (LPA) in August 2004. This LPA included the Triple Track Alternative (2 LRT and 1 freight track) that was defined and evaluated in the Draft EIS/EIR, a station in each city, and the location of the Maintenance and Operations Facility. Segment 1 was changed to extend eastward to Azusa. A Project Definition Report (PDR) was prepared to define refined station and parking lot locations, grade crossings and two rail grade separations, and traction power substation locations. The Final EIS/EIR and engineering work that support the Final EIS/EIR are based on the project as identified in the Final PDR (March 2005), with the following modifications. Following the PDR, the Construction Authority Board approved a Revised LPA in June 2005. Between March and August 2005, station options in Arcadia and Claremont were added.

<u>Changes in the Discussions:</u> To make the Final EIS/EIR more reader-friendly, the following format and text changes have been made:

<u>Discussion of a Transportation Systems Management (TSM) Alternative has been deleted since the LPA decision in August 2004 eliminated it as a potential preferred alternative.</u>

Discussions of the LRT Alternatives have eliminated the breakout of the two track configurations used in the Draft EIS/EIR (Double Track and Triple Track). The Final EIS/EIR reports the impacts of a modified triple track configuration (2 LRT tracks and 1 freight track with two rail grade separations) but focuses on the phasing/geographic boundaries included in the LPA decisions.

Two LRT alternatives in the Final EIS/EIR are discussed under the general heading "Build Alternatives," and are defined as:

1. Full Build (Pasadena to Montclair) Alternative: This alternative would extend LRT service from the existing Sierra Madre Villa Station in Pasadena through the cities of Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont, terminating in Montclair. The cities from Pasadena to Azusa are also referred to in the Final EIS/EIR as Segment 1. The cities from Glendora to Montclair are also referred to in the Final EIS/EIR as Segment 2. Key changes from the Draft EIS/EIR are the inclusion of Azusa in Segment 1, the elimination of the Pacific Electric right-of-way option between Claremont and Montclair, the inclusion of a 24-acre Maintenance and Operations facility in Irwindale (the site is smaller than in the Draft EIS/EIR), and the addition of two rail grade separations. Note that the Maintenance and Operations Facility is located in Segment 1 but is part of the Full Build Alternative. In other words, it would not be constructed as an element of the Build LRT to Azusa Alternative (described below). The length of the alternative is approximately 24 miles. One station (and parking) would be located in each city, except for Azusa, which would have

two. There are two options for the station locations in Arcadia and Claremont. Segment 1 would include 2 LRT tracks throughout and 1 freight track between the Miller Brewing Company in Irwindale and the eastern boundary of Azusa. The freight track that now exists west of Miller Brewing, which serves a single customer in Monrovia, would be removed from service following relocation of that customer by the City of Monrovia. Segment 2 would include two LRT tracks throughout and 1 freight track between the eastern boundary of Azusa and Claremont. In Claremont, the single freight track joins up with the double Metrolink tracks (which are also used for freight movement) and continues through to Montclair (and beyond). This alternative also includes two railroad grade separations (in Azusa and in Pomona) so that LRT tracks would pass above the at-grade freight track. These allow the LRT and freight services to operate independently (thus eliminating the time-constrained double track option discussed in the Draft EIS/EIR). Implementation of the alternative would include relocation of the existing freight track within the rail right-of-way, but there would be no changes in the service provided to customers. The alternative includes 8 new traction power substations in Segment 2, as well as the 8 in Segment 1.

2. Build LRT to Azusa Alternative: This alternative (also referred to as Segment 1) would extend LRT service from the existing Sierra Madre Villa Station in Pasadena through the cities of Arcadia, Monrovia, Duarte, Irwindale, and to the eastern boundary of Azusa. (The main change from the Draft EIS/EIR is the inclusion of the City of Azusa.) The length of the alternative is approximately 11 miles. One station (and parking facility) would be located in each city, except for Azusa, which would have two. There are two options for the station location in Arcadia. Segment 1 would include two LRT tracks throughout and 1 freight track between the Miller Brewing Company in Irwindale and the eastern boundary of Azusa. The freight track that now exists west of Miller Brewing, which serves a single customer in Monrovia, would be removed from service following relocation of that customer by the City of Monrovia. This alternative also includes the railroad grade separation in Azusa so that LRT tracks would pass above the at-grade freight track. This allows the LRT and freight services to operate independently (thus eliminating the time-constrained double track option discussed in the Draft EIS/EIR). Implementation of the alternative would include relocation of the existing freight track within the rail right-of-way, but there would be no changes in the service provided to customers. The alternative also includes 8 new traction power substations.

As in the Draft EIS/EIR, impact forecasts use 2025 conditions, except for traffic impacts, which reflects a 2030 forecast based on the recently adopted 2004 SCAG Regional Transportation Plan.

Summary of Impacts

An initial identification of potential hazardous materials was conducted only for the alignment and station areas of the LRT alternatives.

3-9.1 Existing Conditions

Since there is no construction related to the Foothill Extension in Phase I cities, no evaluation of hazardous materials in those cities was performed.

A draft Phase I Environmental Site Assessment (ESA) of the proposed Gold Line Foothill Extension right-of-way, station locations and parking areas was conducted. The purpose of the is draft ESA was to identify, to the extent feasible pursuant to the processes prescribed in American Society for Testing and Materials International (ASTM) International E1527-00, recognized environmental conditions in

connection with the subject property (Site). The scope of work for the draft Phase I ESA included: records review; site reconnaissance; interviews; and report preparation. The draft Phase I ESA is an appendix to the EIS/EIR and is available upon request.

An environmental database report prepared using the FirstSearchTM database was reviewed for local, state, and federal listings for properties within 1,000 feet of the rail alignment. Regulatory database lists were reviewed for cases pertaining to leaking USTs, hazardous waste sites, and abandoned sites. Historical information was obtained from a review of aerial photographs, Sanborn-Perris Maps, and historical topographic maps. The historical map review was conducted only on the railroad right-of-way.

During the Phase I ESA, each contaminated or potentially contaminated facility identified in the FirstSearchTM environmental database report system. Each facility was classified as high, moderate, or low after considering the potential impacts resulting from the type of operation, proximity to the Site, anticipated hydrogeologic gradient, field observations, and regulatory information. The classification criteria are:

<u>High</u> – facilities with known or probable soil/groundwater contamination (i.e. Leaking Underground Storage Tanks [LUSTs]), and facilities where remediation is incomplete or undocumented.

<u>Moderate</u> – facilities with identified or potential soil contamination (i.e. LUSTs), remediation is in progress, or groundwater contamination that does not appear to be migrating.

<u>Low</u> – facilities that have completed remediation or have historically utilized only small amounts of known contaminants (i.e. small quantity generators or underground storage tanks).

Since there would be no substantial construction in Phase I under any of the alternatives, information gathering was focused on the Phase II area. A summary of the areas of potential concern for each Segment of Phase II the Gold line Foothill Extension follows.

Onsite is the railroad right-of-way and properties to be used for stations and parking facilities. Offsite properties are properties within a 1,000-foot buffer zone on either side of the right-of-way and outside of the right-of-way.

A Phase II ESA was conducted within the railroad right-of-way to assess whether contamination is present in the soil that may be encountered during construction. Permission to access any properties outside the right-of-way was denied. The Phase II ESA further evaluated those properties classified as having High or Moderate potential for environmental impacts on the basis of the analytical results of soil samples collected within the right-of-way. The Phase II ESA is included as an appendix to the Final EIS/EIR.

The Azusa and Irwindale portions of the Site are located within or near an area of regional groundwater contamination, the San Gabriel Valley Superfund, Area 2 – Baldwin Park Operable Unit (BPOU). The BPOU includes parts of Azusa, Baldwin Park, Irwindale, West Covina, La Puente and the City of Industry (EPA, 2004). The Site is located within the cities of Azusa and Irwindale.

The primary contaminants in the BPOU are volatile organic compounds (VOCs) and rocket fuel components including, but not limited to tetrachloroethylene (PCE), trichloroethylene (TCE), carbon tetrachloride, perchlorate, and nitrosodimethylamine (NDMA). In general, depth to groundwater in the BPOU varies from approximately 150 to 350 feet below ground surface. Contaminated groundwater extents from the water table to a depth of more than 1,000 feet below ground surface.

3-9.1.1 Foothill Extension, Segment 1

Adjacent properties in the cities of Monrovia and Duarte were historically utilized for agricultural purposes, including orchards. Potential issues associated with agricultural areas and agricultural use can include pesticides, buried smudge pots, pipes, and buried transite piping (which may contain asbestos). The former agricultural use is considered a High potential to adversely affect the Site. The Phase II ESA did not identify any pesticides above regulatory standards. If any buried smudge pots, pipes, or transite piping is are encountered during construction, additional assessment may be warranted.

One "plugged and abandoned dry hole" oil well was determined to be located near the proposed project in the City of Duarte. Leighton Consulting requested information from the California Division of Oil, Gas, and Geothermal Resources. As of the date of this report a response has not yet been received from the Division of Oil and Gas. A potential oil well is considered a High potential to adversely affect the Site; however, this classification may change by the information obtained in the file review.

During site visits between November 10 and 24, 2003, <u>June 6 through June 24, 2005</u>, and <u>July 20, 2005</u>, evidence of staining and abandoned drums was observed within the railroad right-of-way. These areas are described below:

Approximately five batteries were observed within a concrete vault within the railroad right-of-way in the City of Pasadena. Staining was not observed beneath the batteries.

Approximate five square foot area of dark staining was observed on the northern portion of the railroad right-of-way, south of Flower Street in the City of Arcadia. The source of the staining is not known.

An area of staining was observed beneath a railcar within the railroad right-of-way in the City of Arcadia. The source of the staining is not known.

Dark staining was observed in a drainage area on the northern portion of the railroad right-of-way, south of the intersection of Flower Street and Saint Joseph Street in the City of Arcadia. The staining appears to have originated from offsite.

A dilapidated wall was observed south of a residential area located west of Monterey Avenue in the City of Monrovia. Stucco was observed to be crumbling onto the railroad right-of-way. It is possible that the stucco may contain asbestos. <u>During the Phase II ESA</u>, a sample of the stucco was collected and analyzed for asbestos. <u>Asbestos was not detected in the sample.</u> In addition, debris was observed along the wall. A battery was observed in the debris. Staining was not observed beneath the battery.

Approximately three small (less than one square foot) areas of dark staining were observed in the northern portion of the railroad right-of-way, east of Shamrock Avenue in the City of Monrovia. The source of the staining is not known.

An approximate 800 square foot area of gray staining was observed north of the railroad right-of-way in the City of Duarte. The source of the staining is not known.

Based on the review of the environmental database report prepared using FirstSearchTM, the following properties were identified onsite and offsite that have a classification criterion of classified as High:

Onsite:

The Azusa and Irwindale portions of the Foothill Extension are located within or near an area of regional groundwater contamination, the San Gabriel Valley Superfund, Area 2 – Baldwin Park Operable Unit (BPOU). The BPOU includes parts of Azusa, Baldwin Park, Irwindale, West Covina, La Puente and the City of Industry (EPA, 2004). The Site is located within the cities of Azusa and Irwindale.

The primary contaminants in the BPOU are volatile organic compounds (VOCs) and rocket fuel components including, but not limited to tetrachloroethylene (PCE), trichloroethylene (TCE), carbon tetrachloride, perchlorate, and nitrosodimethylamine (NDMA). In general, depth to groundwater in the BPOU varies from approximately 150 to 350 feet below ground surface. Contaminated groundwater extents from the water table to a depth of more than 1,000 feet below ground surface.

Onsite:

ABCO Metal Finishing located at 1617 through 1621 South Myrtle Avenue in Monrovia

Nu-Way Industries located at 145 West Duarte Road in Monrovia

Pacific Atlas Oil (ARCO) located at 1601 South Myrtle Avenue in Monrovia.

Based on the review of the environmental database report prepared by FirstSearchTM, the following properties identified offsite that have a classification criterion of were classified as Moderate:

Onsite:

Onsite is the railroad right-of-way and properties to be used for stations and parking facilities. Offsite properties are properties within a 1,000 foot buffer zone on either side of the right-of-way and outside of the right-of-way.

Offsite:

- Monrovia Nursery property located at 18331 E. Foothill Boulevard in the city of Azusa (offsite because the environmental issued associated with the property is not located on the portion of the Monrovia Nursery that will become parking)
- Nu Way Car Wash located at 123 West Duarte Road in Monrovia.
- Nu-Way Industries located at 145 West Duarte Road in Monrovia. During the Phase II ESA, soil samples were collected from the right-of-way near this property and Nu Way Industries. Arsenic was detected in concentrations that exceed the EPR Region 9 Preliminary Remediation Goal for Industrial Soil (PRG-1), but are within the expected background range.
- A large drum storage area was observed on the adjacent property to the south of the railroad right-of-way in association with Wynn Oil Company located at 1151 5th Street west in the City of Azusa. Staining was not observed beneath the drums from the railroad right-of-way. During the Phase II ESA, soil samples were collected from the right-of-way near this property. Arsenic was detected in concentrations that exceed the PRG-1 and in some samples, concentrations were above the expected background range.

- Additional drum storage was observed on the adjacent property to the north of the railroad right-ofway in the City of Azusa. The former use at the property where these drums were identified is not known. Staining was not observed beneath the drums from the railroad right-of-way.
- During the Phase II ESA, soil samples were collected from the right-of-way near this property. Arsenic was detected in concentrations that exceed the PRG-1 and in some samples, concentrations were above the expected background range.

3-9.1.2 Foothill Extension, Segment 2

Adjacent properties in the Cities of San Dimas, La Verne, Pomona, Claremont, and Montclair were historically utilized for agricultural purposes, including orchards. Potential issues associated with agricultural areas and agricultural use can include pesticides, buried smudge pots, pipes, and buried transite piping (which may contain asbestos). The former agricultural use is considered a High potential to adversely affect the Site. were historically utilized for agricultural purposes, including orchards. Potential issues associated with agricultural areas and agricultural use can include pesticides, buried smudge pots, pipes, and buried transite piping (which may contain asbestos). The former agricultural use is considered a High potential to adversely affect the Site. The Phase II ESA did not identify any pesticides above regulatory standards. Caution should be taken during construction activities. If any buried smudge pots, pipes, or transite piping is encountered during construction, additional assessment may be warranted.

During site visits between November 10 and 24, 2003, <u>June 6 through June 24, 2005</u>, and <u>July 20, 2005</u>, <u>evidence of staining and abandoned drums was observed within the railroad right-of-way.</u> <u>Evidence of staining and abandoned drums was observed within the railroad right-of-way during a field reconnaissance conducted visits between November 10 and 24, 2003. These areas are described below: These areas are described below:</u>

A large drum storage area was observed on the adjacent property to the south of the railroad right-of-way in association with Wynn Oil Company in the City of Azusa. Staining was not observed beneath the drums from the railroad right-of-way.

Additional drum storage was observed on the adjacent property to the north of railroad right-of-way in the City of Azusa. The former use at the property where these drums were identified is not known. Staining was not observed beneath the drums from the railroad right-of-way. A nursery was observed on the adjacent property to the north side of the rail alignment within the City of Glendora. The nursery also utilizes the railroad right-of-way to store plants. A sprinkler system was operating at the time of the site reconnaissance. In addition, an unlined ditch to the north of the railroad right-of-way collects water runoff from the nursery. Pesticides were not observed during the site reconnaissance.

Concrete which appeared to be painted blue was observed north of the railroad right-of-way in the City of Glendora. The purpose of the concrete is not known.

Aboveground Storage Tanks (ASTs) associated with Naked Juice, located at 533 Foothill Boulevard in the City of Glendora, were identified. The contents and size of the ASTs are not known. The ground surface beneath the ASTs could not be observed from the railroad right-of-way.

What appeared to be two drainage pipes were observed on the slope adjacent to the railroad right-of-way in the City of San Dimas. Staining was not observed beneath these pipes.

An area of stained soil was observed south of the railroad right-of-way between the rail line and an adjacent property within the City of San Dimas. The source of the staining is not known.

Drums were observed on the adjacent property to the south of the railroad right-of-way in the City of La Verne. The property these drums were associated with is not known. Staining was not observed beneath the drums from the railroad right-of-way.

An unlabeled 55-gallon drum was observed north of the rail line in the City of La Verne. Staining was observed beneath the drum and staining was also observed extending onto the railroad right-of-way from the adjacent property to the north.

A stockpile of soil and gravel was observed north of the rail line in the City of Pomona. The source of the soil is not known.

A mining operation was observed north of the railroad right-of-way in the City of Montclair. In this area an unlined drainage channel, a buried spur, and staining was observed. In addition a tar like substance was observed adjacent to the mining operations. This substance appears to have been dumped onsite.

A substation containing numerous transformers was observed south of the railroad right-of-way within the City of Montclair. Staining was not observed beneath the transformers from the railroad right-of-way.

Based on the review of the environmental database report prepared using FirstSearchTM, the following properties identified onsite and offsite have a classification criterion of were classified as High:

Onsite:

Regional Groundwater Contamination in Azusa and Irwindale

Orbital Sciences Group located at 2771 North Garey Avenue in Pomona

Apex Painting located at 2700 North Garey Avenue in Pomona

C.A.E. Wholesale is located at 2710 North Towne Avenue in Pomona.

Offsite:

Claremont College located at 303 1st Street East in Claremont.

Based on the review of the environmental database report prepared using FirstSearchTM, the following properties identified offsite have a classification criterion of were classified as Moderate:

Onsite:

Apex Painting located at 2700 North Garey Avenue in Pomona

Orbital Sciences Group located at 2771 North Garey Avenue in Pomona. This property was reclassified as Moderate as a result of the Phase II ESA.

Offsite:

Wynn Oil Company located at 1151 5th Street West in Azusa

N & G Business Park located at 505 Foothill Boulevard in Glendora

Chevron #9-3657 located at 465 Foothill Boulevard in Glendora

Texaco (former) located at 304 Bonita Avenue in San Dimas

Coast Foundry & Manufacturing located at 2707 Garey Avenue in Pomona

Claremont College located at 303 1st Street East in Claremont.

During the Phase II ESA, soil samples were collected from the right-of-way near 2701 North Garey, Apex Painting and Coast Foundry and Manufacturing. Arsenic was detected in concentrations that exceed the PRG-1, but are within or just above the expected range. In one sample, the detected concentration of soluble lead exceeds the soluble threshold limit concentration (STLC).

During the Phase II ESA, soil samples were collected from the right-of-way near N&G Business Park, Chevron # 9-3657, and Claremont College. Arsenic was detected in concentrations that exceed the PRG-1, but, except at one location, are within the expected background range.

The following is a summary of constituents detected during the course of the Phase II ESA investigation. The detected pH values indicate that the soil is not corrosive. However, two borings did have pH values approaching the corrosive limit. Three samples had total petroleum hydrocarbons with carbon chains containing 22 to 36 carbon atoms (TPH [C₂₂₋₃₆]) at concentrations as high as 6,800 milligrams per kilogram (mg/kg). Except for one sample, all detected concentrations of semi-volatile organic compounds (SVOCs) were below their respective PRG-I. The SVOCs that were detected in concentrations above the PRG-I are polynuclear aromatic hydrocarbons (PAHs) and are some of the constituents of creosote, often used as a wood preservative. A total of three VOCs were detected in two samples in concentrations below their respective PRG-I. All pesticides detected were in concentrations below their respective PRG-I. All pesticides detected were in concentrations below their respective PRG-I. Twenty-eight samples were found to contain arsenic above the background concentration of 20 mg/kg. Soluble concentrations of arsenic above the STLC were detected in two samples. The detected concentrations of lead exceeded the PRG-I at the surface of one boring. The soluble concentrations of lead in this sample and three others exceed the STLC.

3-9.2 Environmental Impacts

3-9.2.1 Evaluation Methodology

The purpose of the Phase I ESA was to identify, to the extent feasible pursuant to the processes prescribed in ASTM E1527-00, recognized environmental conditions in connection with the properties that would be used for the LRT alternatives. These properties include the rail right-of-way and potential sites for parking. Recognized environmental conditions are defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Due to lack of available historical resources, historical records were not reviewed for the period prior to 1938. Visual inspections of the railroad right-of-way were conducted <u>during</u> visits between November 10 and 24, 2003, <u>June 6 through June 24, 2005</u>, and <u>July 20, 2005</u>, but potential parking sites were only inspected from the property boundaries. Obstructions such as fences, vegetation, and buildings limited the observations on many of these properties.

In the Phase I ESA, potential contaminant sources were identified. The purpose of the Phase II ESA was to assess whether contamination is present in the subsurface soil that may be encountered during construction in the railroad right-of-way.

3-9.2.2 Impact Criteria

a. NEPA Impact Criteria

There are no specific impact criteria specified under NEPA. The CEQA impact criteria are used to determine whether an impact would be adverse. For the purposes of analysis, elassification criteria were developed to assist in identifying the potential impacts of each contaminated or potentially contaminated facility that was identified in the FirstSearchTM environmental database report system or the site reconnaissance. E each facility was classified as high, moderate, or low with respect to its type of operation, proximity to the Site, the anticipated hydrogeologic gradient, field observations, and regulatory information.

These classifications were used to identify facilities requiring further assessment due to their having the potential to impact the proposed project.

b. CEQA Impact Criteria

Under CEQA, direct and indirect impacts must be clearly identified and described, giving due attention to both short-term (i.e., during project construction) and long-term effects. The 2003 CEQA Guidelines (Environmental Checklist, Appendix G), use the following questions to determine whether a significant impact would occur. Would the project:

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

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?

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, would it create a significant hazard to the public or the environment?

For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

3-9.2.3 Construction-Period Impacts

a. No Build Alternative

Elements of the No Build Alternative have the potential to create construction-period impacts. However, it is assumed that all projects would be implemented in accordance with all federal and state requirements and permits during the construction process. Accordingly, impacts would be less than adverse under NEPA and less than significant under CEQA.

b. Build Alternatives

Phase I

There are no elements of the Foothill Extension project that occur in Los Angeles or South Pasadena, or to the east of the Sierra Madre Villa Station in Pasadena. Accordingly, there are not anticipated to be any construction-period hazardous material impacts

Segment 1 - The Cities Affected and the Effects

The cities in Segment 1 are Pasadena, Arcadia, Monrovia, Duarte, Irwindale, <u>and Azusa</u>. The reconnaissance of the rail right-of-way in these cities revealed areas of staining, indicating the potential for hazardous materials. <u>During Preliminary Engineering</u>, specific testing shall be conducted and necessary and appropriate means for remediation of these areas shall be developed, as appropriate, with the results reported in the Final EIS/EIR. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in section 3-9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEQA.

Soils that can be classified as hazardous materials due to the detected concentrations of metals, polychlorinated biphenyls (PCBs), or polynuclear aromatic hydrocarbons (PAHs) are present in the railroad right of way. Petroleum hydrocarbon concentrations varied throughout the railroad right of way. Handling and disposal options for each location will would depend on the actual concentration present, the presence of other constituents of concern, and the construction activity to be undertaken.

One sample contained semi-volatile organic compounds (SVOCs) above their respective PRG for Industrial Soil. The SVOCs are polynuclear aromatic hydrocarbons (PAHs) and are some of the constituents of creosote, often used as a wood preservative. Soils in the area of E-22 (refer to Phase II ESA) can be expected to require additional assessment and special handling during construction.

Evidence of staining and abandoned drums were was observed within the railroad right-of-way.

A portion of the Monrovia Nursery property in Azusa is the proposed location of parking for the Citrus Station in Azusa. The site is rated as having a High potential for hazardous materials that would be encountered during the construction process. Although the results of the Phase II allowed the property to be reclassified as Moderate with respect to potential impacts on the right of way, conditions on the property could not be evaluated. During Preliminary Engineering, specific testing should be conducted and necessary and appropriate means for remediation of the proposed parking site would be developed (including any contaminants arising from nearby sites), with the results report in the Final EIS/EIR. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in 3-9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEQA.

The Nu-way Industries property at 145 W. Duarte Rd, Monrovia is the proposed location of parking for the Monrovia Station. This site is rated as having a High potential for hazardous materials that would be encountered during the construction process. There are also nearby sites listed as having a High potential that could produce subsurface contamination on project lands. During Preliminary Engineering, specific testing shall be conducted and necessary and appropriate means for remediation of the Nu-way site shall be developed (including any contaminants arising from nearby sites), as appropriate, with the results reported in the Final EIS/EIR. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in section 3-9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEQA.

No other properties within Segment 1 that are anticipated to be utilized by the LRT alternatives were identified as having a High or Moderate classification.

Segment 2 - The Cities Affected and the Effects

The cities in Segment 2 are Azusa, Glendora, San Dimas, La Verne, Pomona, Claremont, Montclair and Upland. The <u>initial</u> reconnaissance of the railroad right-of-way between November 10 and November 24, 2004, in these cities and further observations on June 6 through 27, 2005 and observations of adjacent parking and station locations on July 20, 2005 revealed areas of staining, indicating the potential for hazardous materials. During Preliminary Engineering ongoing engineering Final Design, specific testing shall will be conducted and necessary and appropriate means for remediation of these areas would will be developed as appropriate, with the results reported in the Final EIS/EIR incorporated into construction/contract documents. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in section 3-9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEQA.

There are two sites in Pomona that as having a High potential for hazardous materials. The Orbital Sciences Group located at 2771 North Garey Avenue in Pomona is adjacent to the proposed parking garage site for the Pomona Garey station. There are also nearby sites listed as having High potential that could produce subsurface contamination on project lands.

Soils that can be classified as hazardous materials due to the detected concentrations of metals, PCBs, or PAHs are present in the railroad right of way.

Petroleum hydrocarbon concentrations varied throughout the railroad right of way. Handling and disposal options for each location will depend on the actual concentration present, the presence of other constituents of concern, and the construction activity to be undertaken.

Evidence of staining and abandoned drums was observed within the railroad right-of-way.

Although the results of the Phase II ESA allowed the properties in Pomona to be reclassified as Low and Moderate with respect to potential impacts on the right of way, conditions on the property could not be evaluated. During Preliminary Engineering, specific testing would should be conducted and necessary and appropriate means for remediation of the proposed parking site would be developed (including any contaminants arising from nearby sites), with the results reported in the Final EIS/EIR. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in section 3–9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEOA.

The former IBM location at 2710 North Towne Avenue is the proposed parking location for the Pomona-Towne station. It is known that the latter site has been remediated, and is subject to on going monitoring. During Preliminary Engineering, specific testing would be conducted and necessary and appropriate means for any further required remediation of this site would be developed, with the results reported in the Final EIS/EIR. Potentially adverse impacts resulting from construction will be mitigated by appropriate investigation of suspected hazardous materials or petroleum contamination, and removal or other remediation as discussed in section 3-9.2.6. Thus, it is anticipated that impacts would be less than adverse under NEPA and less than significant under CEQA.

No other properties within Segment 2 that are anticipated to be utilized by the LRT alternatives were identified as having a High or Moderate classification.

Summary of Impacts for Full Build (Pasadena to Montclair) Alternative

Soils that can be classified as hazardous materials due to the detected concentrations of metals, polychlorinated biphenyls (PCBs), or polynuclear aromatic hydrocarbons (PAHs) are present in the railroad right of way. Petroleum hydrocarbon concentrations varied throughout the railroad right of way. Handling and disposal options for each location will depend on the actual concentration present, the presence of other constituents of concern, and the construction activity to be undertaken.

One sample contained semi volatile organic compounds (SVOCs) above their respective PRG for Industrial Soil. The SVOCs are polynuclear aromatic hydrocarbons (PAHs) and are some of the constituents of creosote, often used as a wood preservative. Soils in the area of E-22 (refer to Phase II ESA) can be expected to require additional assessment and special handling during construction.

• Evidence of staining and abandoned drums were observed within the railroad right-of-way

The following potential impacts were identified for Phase I and Phase II, Segments 1 and 2.

Former agricultural and orchard uses

Potential oil well located in the City of Duarte

One location (145 W. Duarte Road, Monrovia) with known or potential subsurface contamination, including areas of soil staining, as well as potential asbestos and building materials potentially containing lead paint.

Potential subsurface contamination extending onto project the Ssites from nearby contaminated locations in Monrovia and Pomona

Monrovia Nursery

2701 North Garey in Pomona

• Presence of hazardous materials, drums, trash, debris on project lands.

Since groundwater is not anticipated to be encountered during construction activities, testing of the groundwater may be warranted in order to characterize the impacts if dewatering is anticipated; however, if the preliminary engineering phase ongoing engineering indicates groundwater may be encountered, specific testing shall will be conducted and necessary and appropriate means for handling, treating, or disposing of the groundwater shall be developed and reported in the Final EIS/EIR.

Summary of Impacts for Build LRT to Azusa Alternative

The following are potential impacts identified for Phase II Gold Line Foothill Extension, Segment 1:

Soils that can be classified as hazardous materials due to the detected concentrations of metals, polychlorinated biphenyls (PCBs), or polynuclear aromatic hydrocarbons (PAHs) are present in the railroad right of way. Petroleum hydrocarbon concentrations varied throughout the railroad right of way. Handling and disposal options for each location will depend on the actual concentration present, the presence of other constituents of concern, and the construction activity to be undertaken.

One sample contained semi volatile organic compounds (SVOCs) above their respective PRG for Industrial Soil. The SVOCs are polynuclear aromatic hydrocarbons (PAHs) and are some of the constituents of creosote, often used as a wood preservative. Soils in the area of E-22 (refer to Phase II ESA) can be expected to require additional assessment and special handling during construction.

- Evidence of staining and abandoned drums was observed within the railroad right-of-way.
- Potential oil well located in the City of Duarte
- One location (145 W. Duarte Road, Monrovia) with known or potential subsurface contamination, including areas of soil staining, as well as potential asbestos and building materials containing lead paint.
- Potential subsurface contamination extending onto project sites from nearby contaminated locations in Monrovia
- Monrovia Nursery in Azusa
- Presence of hazardous materials, drums, trash, debris on project lands.

Groundwater is not anticipated to be encountered during construction activities. However, if the preliminary engineering phase indicates groundwater may be encountered, specific testing shall be conducted and necessary and appropriate means for handling, treating, or disposing of the groundwater shall be developed and reported in the Final EIS/EIR.

If groundwater is anticipated to be encountered during construction activities, testing of the groundwater may be warranted in order to characterize the impacts if dewatering is anticipated.

3-9.2.4 Long-Term Impacts

a. No Build Alternative

There are no elements of the No Build Alternative that are anticipated to have long-term hazardous materials impacts. Operation of facilities and services created under the alternative would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards. No long-term hazardous material impacts in Phase I, Phase II Foothill Extension Segment 1 or Segment 2 are anticipated.

b. Build Alternatives

Operation of the Phase II Foothill Extension would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards. No long-term hazardous material impacts in cities in Phase I, Phase II Foothill Extension Segment 1 or Phase II Foothill Extension Segment 2 are anticipated as a result of the proposed project. Freight operations would continue on an independent track. It is assumed that freight operations would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards.

3-9.2.5 Cumulative Impacts

The Southern California Association of Governments' (SCAG) 2004 Regional Transportation Plan (RTP) Final Program EIR is the most applicable certified planning document that provides a regional cumulative impact assessment for transportation improvements (including the proposed project) through the year 2030. SCAG's 2004 RTP analysis concludes that the regional transportation system in 2030 would pose potential for hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during transportation. Implementation of the proposed project would contribute to this adverse cumulative impact.

3-9.2.6 Impacts Addressed by Regulatory Compliance

a. Construction-Period Impacts

Impacts that would arise from construction of any of the alternatives were identified in Section 3-9.2.3, above. Elimination or reduction of these construction-period impacts would occur through two steps, as follows: (1) compliance with local, state or federal regulations or permits that have been developed by agencies to manage construction impacts, to meet legally established environmental impact criteria or thresholds, and/or to ensure that actions occurring under agency approvals or permits are in compliance with laws and policies and (2) implementation of the proposed alternatives with additional construction-period mitigation measures defined in Section 3-9.3.1. Following is a discussion of the construction-period impacts for each of the alternatives that would be addressed by the first step, regulatory compliance.

It is assumed that all projects in all alternatives would be implemented in accordance with all federal and state requirements and permits during the construction process as well as Best Management Practices.

Based on the information gathered to date, the following regulatory compliance requirements will be implemented:

- When final construction plans are prepared showing the lateral and vertical extent of the soil to be disturbed during construction, a soil mitigation plan will be prepared. The plan will establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify criteria for imported materials.
- Any soil that is removed from the Site that contains soluble concentrations of metals in excess of the STLC is considered a California-hazardous waste and will be handled and disposed of in accordance with California regulations.
- If groundwater is expected to be encountered during construction activities, testing of the groundwater will be performed in order to characterize the groundwater where dewatering is required.
- All hazardous materials, drums, trash, debris will be removed and disposed of in accordance with regulatory guidelines.
- A health and safety plan will be developed for persons with the potential for exposure to the constituents of concern identified in this report.

In general, observations should be made during any future site development for areas of possible When ground disturbing activities begin, contractors will be responsible for general observations of sites to identify potential contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, staining soil or odorous soils. Should such materials be encountered, further investigation and analysis will be conducted:

During Preliminary Engineering, site-specific investigations for properties to be used for the LRT alternatives would be completed to assess the presence or absence of hazardous materials, its severity, and the control measure that is appropriate under applicable federal and state regulations. For instance, all soil believed to be contaminated would be sampled and analysed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW 846 or California required SW 846 sampling protocols.

Depending upon the amount of affected material encountered, the concentrations of hazardous constituents, and the type of hazardous constituents encountered during construction activities, the following measures would typically apply:

- Removal and Disposal-identify, remove, and haul and dispose of materials in the appropriate, licensed Class I, II, or III disposal facility
- Recycling–treat and/or recycle materials at regulated recycling facilities
- Reuse of uncontaminated or treated materials on project lands.
- Operations involving the segregation, handling, transportation, and disposal of contaminated soil, hazardous substances, solid waste, USTs, oil and gas wells, and other environmentally related issues encountered during earthwork operations are addressed by federal and state regulation. Excavated soil would will be sampled for the purpose of classifying material and determining disposal

requirements. If excavated soil is suspected or known found to be contaminated, the contractor will conduct the following:

- Segregate and stockpile the material on visqueen
- Spray the stockpile with water or a South Coast Air Quality Management District (SCAQMD) approved vapor suppressant and cover the stockpile with visqueen to prevent exposure to soil
- Provide qualified and trained personnel and personal protective equipment to perform operations
 including, but not limited to excavation, segregation, stockpiling, loading, and hauling that require the
 disturbance of hazardous substances including, but not limited to excavation, segregation, stockpiling,
 loading, and hauling

In addition, information regarding Resource Conservation and Recovery Act (RCRA) compliance and other State hazardous waste disposal requirements that apply to this project in the final construction documents would be identified in the Final EIS/EIR.

Summary of Construction-Period Impacts for Full Build (Pasadena to Montclair) Alternative Addressed by Regulatory Compliance

The presence or absence of hazardous materials throughout the entire project site cannot be fully documented. There is always a chance for unanticipated encounter with hazardous materials once construction begins. However, Based based on the fact that transportation projects in the area have been successfully build completed in circumstances with similar hazardous material issues similar to those identified for the study corridor, it can be assumed that compliance with federal and state regulations regarding the identification, testing, disposal, handling and transport of hazardous materials would be expected to reduce construction-period impacts to less than adverse under NEPA and less than significant under CEQA for the Full Build Alternative

Summary of Construction-Period Impacts for Build LRT to Azusa Alternative Addressed by Regulatory Compliance

Based on the fact that transportation projects in the area have been successfully build in circumstances with similar hazardous material issues identified for the study corridor, it can be assumed that compliance with federal and state regulations regarding the identification, testing, disposal, handling and transport of hazardous materials would be expected to reduce construction period impacts to less than adverse under NEPA and less than significant under CEQA for the Full Build Alternative

The presence or absence of hazardous materials throughout the entire project site cannot be fully documented. There is always a chance for unanticipated encounter with hazardous materials once construction begins. However, based on the fact that transportation projects in the area have been successfully completed in circumstances with hazardous material issues similar to those identified for the study corridor, it can be assumed that compliance with federal and state regulations regarding the identification, testing, disposal, handling and transport of hazardous materials would reduce construction-period impacts to less than adverse under NEPA and less than significant under CEQA for the Build LRT to Azusa Alternative.

b. Long-Term Impacts

Long-term impacts associated with of the alternatives were identified in Section 3-9.2.4, above. Elimination or reduction of these long-term impacts would occur through two steps, as follows: (1) compliance with local, state or federal regulations or permits that have been developed by agencies to manage construction impacts, to meet legally established environmental impact criteria or thresholds, and/or to ensure that actions occurring under agency approvals or permits are in compliance with laws and policies and (2) implementation of the proposed alternatives with additional mitigation measures defined in Section 3.9-1.3.2. Following is a discussion of the long-term impacts for each of the alternatives that would be addressed by the first step, regulatory compliance.

Long-term impacts could arise from operation of facilities and services created under any of the alternatives. Operations and services would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards and no mitigation measures would be required. No long-term hazardous material impacts in cities in Phase II-Gold Line Foothill Extension Segment 1 or Phase II-Segment 2 are anticipated.

3-9.3 Mitigation

Construction and operation of all alternatives would be conducted in accordance with federal and state regulations that govern the identification, testing, disposal, handling and transport of hazardous materials. Compliance with these regulations and their attendant permits would reduce potential impacts to less to adverse under NEPA and less than significant under CEQA. Accordingly, no mitigation measures beyond those identified for the construction period are required for the <u>Build</u> alternatives.

3-9.4 Impact Results with Mitigation

The following sections report the result of complying Compliance with regulatory requirements and proposed construction period mitigation measures. The intent of this section is to summarize where identified impacts have been will eliminate or reduce impacts to less than adverse/less than significant levels or whether there may be remainder impacts.during the construction period and over the long term.

3-9.4.1 Construction Period

Based on the fact that transportation projects in the area have been successfully built in circumstances with similar-hazardous material issues similar to those identified for the study corridor, it can be assumed that construction-period impacts would be eliminated or reduced to less than adverse/less than significant levels by complying with the federal and state regulatory requirements and/or permits identified in Section 3-9-1.2.6a. -and no additional measures to mitigate impacts were identified in Section 3-9.3.1. As a result of these two conditions, construction-period impacts would be not adverse under NEPA and not significant under CEQA for all alternatives.

3-9.4.2 Long Term

The presence or absence of hazardous materials throughout the entire project site cannot be fully documented. There is always a chance for unanticipated encounter with hazardous materials once construction begins. However, based on the fact that transportation projects in the area have been successfully built in circumstances with hazardous material issues similar to those identified for the study

corridor, it can be assumed that long-term impacts would be eliminated or reduced to less than adverse/less than significant levels by complying with the federal and state regulatory requirements and/or permits identified in 3-9-1.2.6a, and no additional measures to mitigate impacts were identified in 3-9.3.1. As a result of these two conditions, construction-period impacts would be not adverse under NEPA and not significant under CEQA for all alternatives.

Based on the fact that transportation projects in the area have been successfully operated in circumstances with similar hazardous material issues as identified for the study corridor, it can be assumed that long-term impacts would be eliminated or reduced to less than adverse levels under NEPA and less than significant levels under CEQA by complying with the federal and state regulatory requirements and/or permits identified in Section 3–9.1.2.6a, and no additional measures to mitigate impacts were identified in Section 3–9.3.1. As a result of these two conditions, long-term impacts would be not adverse under NEPA and not significant under CEQA for all alternatives.