4.11 HAZARDOUS MATERIALS

This section addresses current locations within the project area that have the potential for contamination from hazardous materials or the migration of contaminants from nearby hazardous waste sites. A study of the right-of-way (ROW) conditions was prepared by Diaz•Yourman & Associates (DYA) and an Environmental Site Assessment Report (ESA) was prepared in November 2007. This study is contained in **Appendix G**.

4.11.1 EXISTING SETTING

The ESA prepared for the site focused on potential hazardous substances that may be encountered by construction activities associated with the proposed project. As grading and excavation work for the proposed project would generally be limited to a depth of 5 ft or less, except at proposed grade separation structures, the ESA findings and conclusions generally pertain to the identification of potential near-surface contamination from on-site or adjacent sources. At the grade separation structure locations involving deeper construction excavations, potential deeper soil or groundwater contamination from nearby and more distant sources were considered. Grade separation features consist of bridge crossings at the Los Angeles River and Santa Susana Wash, and possible grade separation near Lassen Street.

The ESA identified facilities located within one-quarter mile of the proposed project site that might reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous material in accordance with the CEQA guidelines. Due to the large volume of site inventory and supporting data, a summary of the sites that have potentially recognizable environmental concerns (REC) directly related to the Project is provided below. For a complete list see **Appendix G**.

Arsenic from Weed Killer

Near-surface soils within the railroad ROW may contain arsenic from weed killers (herbicides) commonly used in the past by railroads for weed control. The existing Metro Orange Line from North Hollywood Station to the Canoga Park and Ride Station encountered total arsenic concentrations between 0.99 to 546 mg/kg along the previous railroad right-of-way. The total arsenic concentrations were above the presumed background total arsenic concentration of 11ppm for the area. Metro and the California Department of Toxic Substance Control (DTSC) agreed on a plan to use a site specific action level of 50ppm for the site. Soils with arsenic levels above 50 ppm were removed and disposed of off-site according to State disposal guidelines. Soils with arsenic between 11 and 50 ppm were considered as having elevated levels of arsenic and were required to be managed through soil amendment and additional agronomic tests to prevent migration of arsenic to water supplies as well as exposure to humans.

Railroad Ties

Railroad ties are commonly treated with various chemicals for preservation, including but not limited to creosote, pentachlorophenol and metallic arsenates. Upon removal during construction, railroad ties remaining within the former railroad bed in the ROW may either become a product suitable for reuse or a waste product. Upon removal, railroad ties designated for reuse should be managed as "Treated Wood Waste" (TWW) in accordance with Alternative Management Standards provided in

CCR Title 22 Section 67386. Railroad-tie materials designated for disposal should be considered potentially hazardous TWW and should be managed and disposed in accordance with Title 22 Section 67386.

In addition, railroad ties previously salvaged and stored for reuse at various locations within the Project ROW should be managed as "Treated Wood Waste" (TWW) in accordance with Alternative Management Standards provided in CCR Title 22 Section 67386.

Lead

Soils adjacent to paved areas within the Project ROW may contain aerially deposited lead (ADL) from vehicle exhaust. Lead and other heavy metals such as chromium may be present within yellow thermoplastic paint markings on the pavement.

Volatile Organic Compounds (VOC) in groundwater

Where groundwater is present at shallow depths (15 to 20 ft below the ground surface [bgs]) low concentrations of VOC (close to maximum contaminate levels [MCL]) may be present in the following two areas:

- Chlorinated solvents (e.g., Tetrachloroethylene [Perchloroethylene] [PCE], Trichloroethylene [TCE]) from the former Rocketdyne facilities near the southern end of the project ROW south of the Los Angeles River.
- Fuel VOC (e.g., benzene, toluene, ethylbenzene, and xylene [BTEX]; Methyl tert-butyl ether [MTBE]) from former leaking underground storage tank (LUST) cases within approximately 200 ft south of Sherman Way.
- As of 2003, off-site investigation and remediation for the existing remaining Rocketdyne facilities at 6933 Canoga Avenue (currently referred to as Pratt & Whitney) was considered completed by RWQCB, while on-site groundwater monitoring continues for the facility. As of the most recent monitoring report in 2006, PCE was reported at a concentration of 28 ppb in a monitoring well in the northeastern corner of the facility, located approximately 200 ft upgradient of the Project area on the northeastern corner of Vanowen Street and Canoga Avenue.

Underground Storage Tanks (UST) and Leaking Underground Storage Tanks (LUST)

Registered USTs could be an environmental concern when they are within, or immediately adjacent to, the Project ROW. LUST cases could potentially contaminate the groundwater. The following UST and LUSTs were found to be at locations of potential impacts within the project area:

- Skyline Concrete Sales (now National Ready Mix), 6969 Deering Avenue, is within the Project ROW north of Bassett Street and had a permit for a new fueling station in 1973; an application for UST removal in 1988 with no further record of removal; one diesel UST was abandoned in place with concrete fill in 1966; and one new 12,000-gallon UST was installed in 1988 and is currently active.
- Cal Mat Concrete, 7001 Deering Street, located within the project ROW at Hart Street, north of Bassett Street, low-level soil contamination from a former LUST remains beneath a

structure. A 10,000-gallon UST was removed in 1986. A 1,200-gallon UST was removed in 1987; as part of the UST removal, soil was removed and three groundwater monitoring wells were installed in the years 1987 to 1994, 2001, and 2005. Groundwater was between 12 to 17 ft bgs; groundwater flows along a southern gradient. Low concentrations of fuel hydrocarbons may remain in soil and groundwater.

- Valley Builders (formerly Wilsons Canoga Feed), 7101/7119 Deering Avenue, Los Angeles Fire Department (LAFD) file review found two 1,000-gallon fuel USTs, which were removed in 1986; soil sampling was required but there was no record of sampling in the file. USTs were located next to Deering Avenue, north of Gault Street (currently 7119 Deering Avenue).
- Former Hull Bros. Lumber Co., 21350 Sherman Way, is within the project ROW at the southwest corner of Canoga Avenue and Sherman Way. Groundwater wells are still located on-site per the September 20, 2007, site survey; minor VOC in groundwater in the Project ROW. This case remains open with California Regional Water Quality Control Board; case closure has been requested by the responsible party.

Evidence of hazardous substances, unlabeled drums, and petroleum hydrocarbons

Evidence of hazardous substances, unlabeled drums, and petroleum hydrocarbons were observed at several locations within or adjacent to the project ROW during the site reconnaissance:

- Masonry Club, stone and brick building materials, 7000 Canoga Avenue; this facility has two 55-gallon diesel fuel containers (per discussion with tenant) in a shed in the northeastern corner on a pallet on a concrete floor; the drums have no secondary containment or labeling and there are oil stains on the parcel. There are also used, railroad ties stored for landscaping reuse within the facility presumed treated with preservatives and thereby subject to Title 22 Alternative management Standards for TWW.
- Cruz Construction, 7101 Deering Avenue, construction contractor yard; this parcel has a small maintenance area in the northeastern corner with oil stains on the ground and asphalt concrete (AC) pavement in the northeastern corner. There are also used, railroad ties within this facility presumed treated with preservatives and thereby subject to Title 22 Alternative management Standards for TWW.
- An unidentified solid waste transfer operation (no address available, assumed to be +/- 7100 Canoga Avenue) on a narrow strip on the east side of Canoga Avenue approximately halfway between Vanowen Street and Sherman Way.
- The Costume Shop (formerly Hull Bros. Lumber Co.), 21350 Sherman Way, is located within the Project ROW on the southeast corner of Canoga Avenue and Sherman Way. LUST monitoring wells remain and the case remains open.
- The eastern side of the Project ROW facing Canoga Avenue, between Wyandote and Valerio Street, is occupied by Star Construction contractor yard (7320 Canoga Avenue). The Star Construction parcel was observed to have unlabeled 55-gallon drums stored, scattered oil stains, and fueling trailers.
- The area on the eastern side of the ROW just south of Valerio Street is apparently being used by a painting service, presumably Galvin Painting, 7357 Deering Avenue, located immediately adjacent to the east side of the Project ROW. At the time of the survey, DYA observed storage of five unlabeled 55-gallon drums and paint stains on the gravel surface within an approximately10-foot-diameter area.

- At the southern end of an unattended rental truck storage on the east side of Canoga Avenue immediately north of Valerio Street, two unlabeled drums that appeared to contain an oily liquid were observed.
- The segment of the ROW along the eastern side of Canoga Avenue where Deering Avenue veers east (no address, 7700 block of Canoga Avenue) is occupied by several contractor yards and vehicle maintenance yards that included several areas that were closed, locked, and unaccessible; observations from available vantage points indicate some of these areas have unlabeled drum storage and oily stains on the ground surface.
- "Ovidios," an operating auto repair garage, 7800 Canoga Avenue, is within the Project ROW north of Ingomar Street, which includes a concrete block garage with approximately six bays with at least five underground hydraulic lifts. There is also a waste oil and waste oil filter storage area on the south side of the building using five 55-gallon drums for storage; the waste oil materials are reportedly recycled by a service. The area has oil stains on the concrete surface. A clarifier was also shown south of the building on a 1998 Metropolitan Transportation Authority (MTA) report. According to a previous UST closure report, as much as 1,000 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (TPH) remained in soil beneath the auto service garage building.
- 7900 Canoga Avenue: this parcel has a truck repair canopy with concrete pavement; there is a waste oil and parts-cleaning 100-gallon waste storage container next to the office building; the operator stated that the waste materials are recycled by Demeno Cardoon with manifests. There is also another vehicle repair parcel adjacent to Valley Trucking that was unoccupied at the time of DYA's site visit. There are scattered oils stains on the ground surface at both of these vehicle maintenance operations.
- Between Prairie Street and Plummer Street, a large quantity of used railroad ties for sale to the public, were observed to be stored at the northern end of the vacant ROW. There were also unlabeled drums in the area. The railroad ties should be presumed treated with preservatives and thereby subject to Title 22 Alternative management Standards for TWW.
- Metro and Pratt & Whitney have a ten year agreement stipulating that, if ongoing groundwater monitoring on the Pratt & Whitney facility on the west side of Canoga Avenue shows contamination has spread towards Metro right-of-way, Metro must allow for future monitoring wells to be installed.

Asbestos

Asbestos-containing material (ACM) may be present in the building material demolition debris observed at the waste transfer facility between Vanowen Street and Sherman Way.

4.11.2 REGULATORY FRAMEWORK

Certain chemical and physical properties of a substance may cause it to be considered hazardous. As defined by the California Code of Regulations (CCR), Title 22, Section 66084, a "hazardous material" is a "substance or combination of substances which, because of its quantity, concentration, physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed."

According to the California Health and Safety Code, Section 25124, a "hazardous waste" is any hazardous material that is abandoned, discarded or in storage prior to recycling. For example, excavated soil containing hazardous materials would be considered hazardous waste if the concentration of contaminants exceeded specific CCR Title 22 criteria.

CEQA Statute (California Public Resources Code, Division 13 Environmental Protection), Section 21092.6 Location of Projects on Hazardous Waste Sites List, directs the lead agency to consult the lists compiled pursuant to Section 65962.5 of the Government Code to determine whether the project and any alternatives are included on any hazardous waste sites lists.

4.11.3 IMPACTS AND MITIGATION MEASURES

Significance Criteria

The criteria used to determine the significance of an impact are based on Appendix G of the CEQA Guidelines. The proposed project could result in a significant impact if it would be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.6 and, as a result, if it would create a significant hazard to the public or the environment.

Methodology

The methodology used to identify the potential impact consisted of locating potentially hazardous sites and comparing their locations with the route of the proposed project. A Phase I ESA was prepared by DYA in November 2007 in which hazardous assessment documents previously prepared for the ROW were reviewed and potential hazards on the project site were evaluated.

Impact 4.11.1. The proposed project is located on land that is known to contain hazardous materials and as a result could create a hazard to the public or environment if mitigation measures were not implemented.

Alternative 1. No Project

The No Project Alternative will have no impacts.

Alternative 2. TSM

Excavations for construction of proposed bus stops and canopies may encounter aerially deposited lead, arsenic and petroleum hydrocarbons in shallow soils. Because of the limited amount of grading the impact is anticipated to be less-than-significant.

Alternative 3. Canoga On-Street Dedicated Bus Lanes

Grading for Canoga Avenue widening and construction of proposed improvements may encounter hazardous materials during grading and excavation within the ROW. The construction work for the proposed Project would generally be contained in the upper 5 ft of soil except for the proposed widening of Canoga Avenue grade separation over the Los Angeles River. The ESA indicated that in or adjacent to the Project ROW there are instances of potentially leaking USTs, stained soil, and

unlabeled drums. In addition, it is likely that lead and arsenic may have been deposited within the soil along the Project ROW and may occur at hazardous levels. Deeper construction excavations for the bridge widening may encounter groundwater impacted by VOC. The potential for an encounter with hazardous materials is a significant impact.

Alternative 4. Canoga Busway

The proposed improvements and grading for Alternative 4 is similar to that of Alternative 3 with the exception of additional grading for replacement of existing Canoga Avenue grade separation structures at the Los Angeles River and Santa Susana Wash and any new construction (underpass or aerial structure) near Lassen Street south of the Chatsworth Metrolink Station. The potential for an encounter with hazardous material is a significant impact similar to Alternative 3.

Mitigation Measures:

Alternative 1 will not need any mitigation measures. For Alternative 2, mitigation measures **MM 4.11-1** through **MM 4.11-7** are recommended. Mitigation measures **MM4.11-2** through **MM4.11-13** are applicable for Alternatives 3 and 4.

<u>*MM 4.11-1*</u>: A Phase II investigation shall be performed at proposed bus stops along Canoga Avenue at Sherman Way, Nordoff, Roscoe, Parthenia (optional stop), and at the Chatsworth Metrolink station. Soil borings shall be performed at locations where earthwork is planned for construction of bus stops. Soil sampling shall include environmental screening for contamination by visual observations and field screening for volatile organic compounds with a photoionization detector (PID). The soils shall be tested for arsenic and lead. Based on field screening, soil samples shall be analyzed for the suspected chemicals by a laboratory certified by the State of California Department of Health Services.

<u>*MM 4.11-2:*</u> Railroad ties stored for reuse or removed during construction excavation are presumed treated with preservatives and thereby subject to Title 22 Alternative Management Standards for Treated Wood Waste (TWW).

<u>*MM 4.11-3*</u>: On the previous Metro Orange Line project from the North Hollywood Station to the Canoga Park-and-Ride Station, Metro and the California Department of Toxic Substance Control (DTSC) agreed on a plan for handling soils with elevated levels of arsenic. The DTSC calculated an action level for arsenic to be 50ppm. Soils with arsenic levels above 50 ppm were removed and disposed of off-site according to State disposal guidelines. Soils with arsenic between 11 and 50 ppm were considered as having elevated levels of arsenic and were required to be managed to prevent migration of arsenic to water supplies as well as exposure to humans. A similar agreement between Metro and DTSC establishing thresholds for removal and management of soils with elevated levels of arsenic is anticipated for this project based on the soil conditions in the Project area. To evaluate the presence and extent of arsenic in the near surface soils, a Phase II investigation shall be performed where earthwork is planned.

<u>*MM 4.11-4*</u>: Yellow thermoplastic paint markings on the pavement should be evaluated for lead and other heavy metals such as chromium before disposal.

<u>MM 4.11-5</u>: Excavated soils with lead above a total threshold limit concentration (TTLC) above 1,000 ppm and/or soluble threshold limit concentration (STLC) above 5 mg/l are considered hazardous. Metro plans to coordinate with DTSC to have a site specific background level for the project and a plan for handling soils with elevated levels of lead. To evaluate the presence and extent of lead in the near surface soils, a Phase II investigation shall be performed where earthwork is planned.

<u>MM 4.11-6</u> Soils with petroleum hydrocarbons or hazardous constituents exceeding cleanup levels provided by California Regional Water Quality Control Board (RWQCB) and/or Department of Toxic Substances Control (DTSC) shall be remediated or disposed of off-site according to State guidelines.

<u>*MM 4.11-7*</u>: Metro must make allowances for future groundwater monitoring wells to be installed by Pratt & Whitney at the Canoga Park-and-Ride Station if required.

<u>MM 4.11-8</u> To evaluate evidence of hazardous substances, unlabeled drums, and petroleum hydrocarbons observed during the Phase I investigation, a Phase II investigation shall be performed where earthwork is planned between 7000 and 7900 Canoga Avenue. Sufficient borings shall be preformed to estimate the lateral extent and levels of contamination. Soil sampling shall include environmental screening for contamination by visual observations and field screening for volatile organic compounds with a photo ionization detector (PID). Based on field screening, soil samples shall be analyzed for the suspected chemicals by a laboratory certified by the State of California Department of Health Services.

<u>MM 4.11-9</u>: To evaluate for the presence of deeper soil contamination and volatile organic compounds (VOC) in groundwater at grade separation excavations, soils borings and groundwater monitoring wells shall be installed. Soil sampling shall include environmental screening for contamination by visual observations and field screening for volatile organic compounds with a PID. Based on field screening, soil samples shall be analyzed for the suspected chemicals by a certified laboratory. Groundwater samples should be analyzed for VOC.

<u>*MM 4.11-10:*</u> Groundwater removed for construction purposes with VOC above State and Federal Maximum Contaminant Levels for drinking water shall be treated or disposed according to applicable state guidelines.

<u>MM 4.11-11</u>: Buildings that will be demolished shall have a comprehensive ACM inspection prior to demolition. Asbestos-containing materials (ACM) that may be identified as present in any building to be demolished, including the building material debris observed at the waste transfer facility between Vanowen Street and Sherman Way shall be tested and properly disposed.

<u>*MM 4.11-12:*</u> At 6969 Deering Avenue, 7001 Deering Avenue, and 7101/7119 Deering Avenue, a Phase II investigation shall be performed consisting of surveying the lots to assess for potentially unknown remaining underground storage tanks.

<u>*MM 4.11-13*</u>: At 21350 Sherman Way groundwater monitoring shall continue until the case is closed by RWQCB.

Level of Impact After Mitigation: Less-than-significant.

Impact 4.11.2. There are no potential to cumulative hazardous materials impacts, no mitigation is required.

Mitigation Measures:

None required.

Level of Impact After Mitigation: Less than significant.