

4.11 HAZARDOUS MATERIALS

4.11.1 INTRODUCTION

This section updates information on hazardous materials within or along the Phase 1 alignment that was presented in the FEIR and SEIR-1. Issues related to hazardous materials are primarily applicable to the construction phase of Phase 1 and are discussed in **Section 4.19, Construction**, of this SEIR-2. However, the environmental and regulatory settings for hazardous materials associated with both the construction and operational phases are included in this section.

4.11.2 ENVIRONMENTAL SETTING

A qualitative assessment was performed in 2005 to evaluate the presence or potential presence of hazardous materials within the SVRTC, which included the Phase 1 area. The assessment primarily consisted of a review of regulatory agency databases of known or potentially contaminated sites. This qualitative assessment, as well as a quantitative assessment of physical samples from the Phase 1 area and chemical analysis of these samples, was presented in the FEIR and SEIR-1.

4.11.2.1 Qualitative Site Assessments

The discussion in subsection 4.11.2.1 of the FEIR and any updates provided in subsection 4.10.2.1 of the SEIR-1—which includes the identification of areas of known releases, potential sources of hazardous materials, and common contaminants from non-specific sources within ¼ mile of the Phase 1 area—remains applicable in this SEIR-2. Other noteworthy sites of known releases near the Phase 1 alignment or facilities added to this discussion include three sites along Las Plumas Avenue, as shown in **Table 4.11-1**.

4.11.2.2 Quantitative Site Assessments (Sampling and Analysis)

Quantitative site assessments completed since the SEIR-1 include soil characterization studies along the alignment from north of Montague Expressway to south of the Sierra Avenue/Lundy Avenue intersection and from Berryessa Road to Mabury Road. Groundwater characterization studies were completed for the retained cut sections from Montague Expressway to Trade Zone Boulevard and from Hostetter Road to Sierra Lundy Road, and for areas near Line B, Scott Creek, Berryessa Creek, Wrigley Creek, and Kato Road. The purposes of these investigations were to determine reuse or disposal requirements for soil and discharge requirements for groundwater during construction. The results of the studies are discussed in **Section 4.19, Construction**, of this SEIR-2.

Table 4.11-1: Additional Hazardous Materials Release Sites Near Phase 1

Name/Address of Contaminated Site	Reported Contamination	Status of Remediation Activities
1590 Las Plumas Avenue, San Jose	Total petroleum hydrocarbons and benzene, toluene, ethylbenzene, and xylenes (BTEX) in groundwater.	Ongoing quarterly groundwater monitoring.
1601 Las Plumas Avenue, San Jose	Oil and grease contamination in soil and groundwater, and contaminants associated with the rail spur site.	A site assessment and remediation action were conducted for the hazardous materials spill, and the Hazardous Materials Division of the San Jose Fire Department did not require further action. In 1994, the Regional Water Quality Control Board did not require further action for the rail spur site on this property.
1608 Las Plumas Avenue, San Jose	Total petroleum hydrocarbons and volatile organic compounds in groundwater; perchloroethylene in soil borings.	Ongoing quarterly groundwater monitoring.

Sources: Earth Tech, 2003; Iris Environmental, 2008.

4.11.3 REGULATORY SETTING

The regulatory setting presented in the FEIR and SEIR-1, which described the relevant federal and state laws and regulations related to hazardous materials, remains applicable in the SEIR-2. Please refer to subsection 4.11.2.2 of the FEIR and subsection 4.10.3 of the SEIR-1 for this discussion.

In 2008, subsequent to certification of the SEIR-1, the Regional Water Quality Control Board approved the *Contaminant Management Plan*. The *Contaminant Management Plan* includes information on sampling, reuse, transportation, disposal, stockpiling, and air monitoring during construction for Phase 1.¹ The plan also provides a site-specific risk assessment for soil and ballast reuse and specifies the constituent levels below which soil and ballast can be reused.

¹ The *Contaminant Management Plan* was prepared for the entire 16.1-mile BART Silicon Valley extension. Phase 1 is therefore included as part of the approved *Contaminant Management Plan*.

4.11.4 PROJECT IMPACTS AND MITIGATION MEASURES

The impacts identified in the FEIR and SEIR-1 related to maintenance activities during the operational phase, including dewatering activities where existing soil and groundwater contamination and/or contaminated surface water runoff may be present, remain applicable in the SEIR-2.

The design requirements and Best Management Practices (BMPs) included in the FEIR and SEIR-1 also remain applicable, such as development and implementation of a worker health and safety plan and, if required, Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response (HAZWOPER) training. The discharge of any water from dewatering activities would comply with National Pollutant Discharge Elimination System (NPDES) and/or municipal storm sewer system (MS4) permit requirements. Where necessary, pump stations would be equipped with properly designed, operated, maintained, and monitored treatment systems appropriate for the contaminants detected at specific locations. Soil and ballast reuse would be conducted in accordance with requirements outlined in the *Contaminant Management Plan*.

Other discussions of impacts, design requirements, and BMPs in the FEIR and SEIR-1 related to groundwater flow directions and pathways, stormwater runoff from BART facilities, and hazardous materials transport and disposal during the operational phase remain applicable in the SEIR-2.

Regarding the handling of hazardous materials near a school, there is one elementary school in Fremont, one elementary school in Milpitas, and two elementary schools in San Jose within ¼ mile of the Phase 1 area. BART is a passenger train and does not transport hazardous substances. The routine use of hazardous materials during BART operations would not result in effects on human health and the environment since the use, transport, and disposal of hazardous materials would be performed in compliance with federal, state, and local regulatory requirements, and all BART operations would be conducted in accordance with an approved and adopted worker health and safety plan. The handling of hazardous materials under Phase 1 would not result in significant impacts to schools, and no mitigation is required.

Refer to **Section 4.5, Community Services and Facilities**, of this SEIR-2 for a discussion of community services and facilities. Phase 1 would not significantly impact emergency response times or plans, as concluded in Section 4.5 of the FEIR.

Regarding the risk of exposure to wildland fires, there are no wildlands within the Phase 1 area. Phase 1 would not expose individuals or structures to an increased risk of loss, injury, or death from wildland fires due to the developed, urban nature of the Phase 1 area.

New or updated information has become available since certification of the SEIR-1 for 5 of the 23 design changes, including the access road from Fremont to San Jose, the modified starting point of BART Silicon Valley, the elimination of the Kato Road grade separation, the pump station alternate locations for the Dixon Landing Road BART Retained Cut Option, and the retained cut alternate locations from Curtis Avenue and Trade Zone Boulevard. The hazardous materials impacts resulting from these five design changes are discussed below.

4.11.4.1 Design Change 2. Access Road from Fremont to San Jose (STA 35+00 to STA 510+00)

The approved project included a maintenance access road to the east of the BART alignment and within the Union Pacific Railroad (UPRR) ROW from Hostetter Road to the intersection of Sierra Road and Lundy Avenue. During preliminary engineering, a proposed gravel road for maintenance and utility access purposes was added to Phase 1 along the alignment, east of the existing UPRR tracks and within the UPRR ROW.

Because the qualitative and quantitative assessments covered Phase 1, information regarding hazardous materials that are or could be present along the alignment (which includes the maintenance access road within the UPRR ROW), as described in the FEIR and updated in the SEIR-1, remains applicable. In addition, the discussion in the FEIR and SEIR-1 of maintenance activities that would occur during operation of BART Silicon Valley also remains applicable to Phase 1. No significant impacts are anticipated due to the addition of this access road.

4.11.4.2 Design Change 4. Starting Point of Trackwork (STA 35+00)

The approved project would begin slightly south of the approved BART Warm Springs Station in Fremont with a new, at grade, two-track BART rail line near the UPRR Warm Springs Yard (approximately 2,200 feet north of Mission Boulevard) and east of the existing ROW (STA 45+00). During preliminary engineering, the starting point of the Phase 1 trackwork was modified to approximately 900 feet north of the original starting point. This additional area is within the UPRR and VTA railroad corridor and was evaluated during the qualitative review of federal, state, and local databases conducted for the purpose of identifying the potential presence of hazardous materials within $\frac{1}{4}$ mile of the alignment. The UPRR and VTA railroad corridor was also characterized during the quantitative assessment of soil, ballast, and groundwater. The addition of 900 feet of trackwork within the corridor is not expected to cause additional impacts from those identified in the FEIR and SEIR-1.

4.11.4.3 Design Change 7. Eliminate Kato Road Grade Separation (STA 167+00)

Under the approved project, BART would cross on a new bridge structure over Kato Road, and VTA would reconstruct Kato Road as an underpass. VTA would also construct a new UPRR bridge over Kato Road. Under Phase 1, VTA would no longer construct the grade separation of Kato Road and the new UPRR bridge; rather, the City of Fremont has approved a separate Kato Road Grade Separation Project.² With the elimination of these grade separation activities as part of Phase 1, the potential for Phase 1 to encounter hazardous materials that could affect individuals or the environment (including in groundwater and surface waters) during construction and operation of the grade separation has been eliminated. Specifically, Phase 1 would no longer involve grade separation activities immediately adjacent to an identified hazardous materials release site that is now undergoing remediation (Cap Concrete Bedford Property, currently Scott Creek Business Park, 48870 Kato Road, Fremont). Impacts at this location would be reduced from those previously identified in the FEIR and SEIR-1. However, construction of a new bridge for BART to cross over Kato Road is still included as part of Phase 1 and the same mitigation measures identified in the FEIR and SEIR-1 would remain applicable for this design.

4.11.4.4 Design Change 8. Dixon Landing Road Alignment (STA 182+00 to STA 201+00)

In the SEIR-1, two options were analyzed for the configuration of the BART alignment as it crossed Dixon Landing Road: at grade and retained cut. The VTA Board of Directors selected the BART At Grade Option as part of the approved project. This SEIR-2 also considers both at grade and retained cut options, but includes four alternate locations for a pump station under the Dixon Landing Road BART Retained Cut Option. Alternate Location A is north of Dixon Landing Road on the west side of the railroad corridor. Alternate Location B is south of Dixon Landing Road on the east side of the railroad corridor. Alternate Locations C and D are within the railroad corridor south of Dixon Landing Road, on the east and west sides of the BART tracks, respectively.

As described in the FEIR and SEIR-1, accumulated water (including potentially contaminated water) would be pumped out on a regular basis. During the construction phase, the groundwater at this location would be tested for contaminants. If contaminants were shown to be present, an NPDES permit would be required for pumping activities during the operational phase, and the pump station would be equipped with a properly designed, operated, maintained, and monitored treatment system appropriate for the contaminants detected. No additional hazardous materials impacts are anticipated at the alternate pump station locations for the Dixon Landing Road BART Retained Cut Option.

² The City of Fremont filed a Notice of Exemption for the Kato Road Grade Separation Project with the Alameda County Clerk-Recorder on November 19, 2008 in accordance with CEQA.

4.11.4.5 Design Change 12. Curtis Avenue to Trade Zone Boulevard (STA 344+00 to STA 414+00)

BART would transition into a retained cut from south of Curtis Avenue, continue past the Milpitas/San Jose city lines, and return to an at grade configuration south of Trade Zone Boulevard. Under the approved project, the retained cut began at STA 337+00 and ended at STA 411+00. Under Phase 1, the starting point of the retained cut would now vary depending on which Milpitas Wye Relocation Option is selected. The existing locomotive wye in Milpitas would be modified to one of the three configuration options described in Design Change 13, Milpitas Wye, (see **subsection 3.2.3** of the SEIR-2). For the Milpitas Wye with Spur Connection Option and the Wye and Industrial Lead Option, the BART retained cut would begin at STA 344+00 and end at approximately STA 414+00. For the No Wye/Industrial Lead Only Option, the BART retained cut would begin at STA 356+00 and end at STA 414+00. The length and depth of the retained cut would enable the freight track to cross over the BART retained cut to access the locomotive wye on the east side of the ROW.

For the Milpitas Wye with Spur Connection Option and Wye and Industrial Lead Option, soils within the alignment of the BART retained cut have been impacted by residual petroleum hydrocarbons from the former Ford Automobile Assembly Plant site (STA 337+00 to STA 348+00) and by chlorinated solvents from the Jones Chemical and North American Transformer sites (STA 350+00 to STA 360+00). For the No Wye/Industrial Lead Only Option, the alignment of the BART retained cut would avoid the former Ford Automobile Assembly Plant site, but soils and groundwater within the alignment have been impacted by contamination at the Jones Chemical and North American Transformer sites.

The impacts, design requirements, and BMPs included in the FEIR and SEIR-1 related to maintenance procedures during the operational phase (including dewatering activities where existing soil and groundwater contamination and/or contaminated surface water runoff may be present) remains applicable in the SEIR-2. The discharge of any water from dewatering activities would comply with NPDES and/or municipal storm sewer system (MS4) permit requirements, if applicable. Development and implementation of a worker health and safety plan and, if required, HAZWOPER training also remain applicable. As mentioned under Design Change 8, Dixon Landing Road Alignment, pump stations in retained cuts would be equipped with properly designed, operated, maintained, and monitored treatment systems appropriate for the contaminants detected at specific locations. No additional hazardous materials impacts are anticipated due to the retained cut configurations from Curtis Avenue to Trade Zone Boulevard under this design change.

4.11.5 CONCLUSION

The proposed design changes would not create new hazardous materials impacts during operation of Phase 1. The design requirements, BMPs, and mitigation measures related to hazardous materials included in the FEIR and SEIR-1 remain applicable, and no additional mitigation is necessary.

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