

4.15 HAZARDOUS MATERIALS

4.15.1 Introduction to Analysis

This section discusses potential impacts on public health and safety from hazardous materials use associated with construction and operation of the project alternatives. In addition, potential impacts to construction workers have been addressed. Hazardous materials, such as fuels, oils, paints, and solvents will be used during construction and operation of the DNA project. In addition, it is possible that hazardous materials and wastes from previous uses of the sites along the alignment could be encountered during trenching, excavation, or demolition activities. These materials could include soil contaminated by fuel spills or building materials containing asbestos.

The storage and use of hazardous materials are governed by federal, state, and local laws and regulations. These laws and regulations address the use and storage of hazardous materials in order to protect the environment from contamination; they also are intended to protect workers and the surrounding community from exposure to hazardous materials. There are also laws requiring contaminated sites to be cleaned up when past contamination is discovered. Some of the many federal, state, and local laws and regulations covering hazardous materials include:

- Superfund Amendments and Reauthorization Act. This federal law encompasses several programs, including: (1) filing an inventory of hazardous materials used with the local emergency response agency, (2) adoption of a notification and reporting program for the potential release of hazardous materials in excess of thresholds, and (3) maintenance of materials safety data sheets for every hazardous material kept onsite.
- Comprehensive Environmental Response, Compensation, and Recovery Act. This federal law, also known as “Superfund”, gives the Environmental Protection Agency (EPA) the authority to require investigation and cleanup of sites contaminated by federally regulated hazardous substances.
- Clean Air Act. This federal law requires preparation of a Risk Management Plan if hazardous materials are present in excess of certain regulatory thresholds. In addition, the Clean Air Act gives the EPA the ability to regulate hazardous air pollutants, such as asbestos. Federal regulations require specific processes be followed to remove asbestos-containing materials from buildings prior to their demolition.
- Clean Water Act. The federal Clean Water Act effectively prohibits discharges of stormwater from construction sites unless the discharge is in compliance with an NPDES permit. Section 401 requires that agencies implementing a project that affects waters of the United States consult with the applicable water quality authority to receive a certification that the project will not affect water quality goals and objectives. In the project area, the Central Valley Regional Water Quality Control Board (RWQCB) would review the project and determine the need for a formal application for the issuance of individual waste discharge requirements pursuant to Section 402 of the CWA. In California, construction projects over one acre are required to follow the statewide General Permit for construction activities. This includes the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that would specify construction management

activities to be implemented during construction (e.g., best management practices, dewatering runoff controls, and construction equipment decontamination). The SWPPP also would include procedures for containment and disposal of any hazardous materials encountered during construction (e.g., asbestos and lead).

- Porter-Cologne Water Quality Control Act. This is a California law that gives the State the authority to regulate discharges of waste to surface water and land and to implement programs to protect water quality, including groundwater. The State derives its authority to require and direct the cleanup of contaminated sites so that the sites do not impact groundwater or surface water.
- California Hazardous Waste Control Act. This law, along with the federal Resource Conservation and Recovery Act, establishes management practices for the safe handling, treatment, recycling, and disposal of hazardous wastes, including highly contaminated soil.
- Toxic Substance Control Act. This federal law gives EPA the authority to regulate the use, storage, and disposal of materials containing polychlorinated biphenyls (PCBs), California Health and Safety Code, Section 25500, et seq. This regulation requires the preparation of a Hazardous Materials Business Plan if hazardous materials are stored in excess of regulatory thresholds.
- California Health and Safety Code, Sections 25531 through 25543.4. This regulation, known as the California Accidental Release Program, requires that storage or handling of regulated substance in excess of thresholds be registered with local agencies, and requires preparation of a Risk Management Plan.
- Various City and County code requirements also address hazardous materials management, including adoption of statewide codes such as the Uniform Building Code.

Information on the existing conditions at sites along the Corridor known to have had hazardous materials releases or to have used hazardous materials was gathered in accordance with guidance provided by the American Society of Testing and Materials Standard Practice for Phase I Environmental Site Assessment Process E1527-00. A Phase I Environmental Site Assessment was conducted in the study area in 2002 and included field reconnaissance of the DNA Corridor, and review of data provided by Environmental Data Resources, Inc. from environmental databases maintained by state, federal, and local agencies.

4.15.2 Environmental Setting

The potential for encountering hazardous materials in the DNA study area is closely correlated with the degree of urbanization and the nature of land uses. Commercial and industrial land uses generally present the greatest risk for encountering hazardous materials. As discussed below, based on the 2002 Phase I site assessment, the potential for contamination is greatest in the DNA study area near the Railyards and along Richards Boulevard due to the commercial and industrial character of the area.

As the alignment leaves the Downtown area and crosses the American River the potential for encountering hazardous waste sites generally lessens while concerns about residual

pesticides from recent agricultural activities increases along the alignment from North Natomas to the Sacramento International Airport.

The presence and character of hazardous materials can be anticipated to be typical of most urban and urbanizing areas, including occasional occurrences of groundwater contamination from leaking underground storage tanks, asbestos and lead paint from older buildings and bridges, lead-contaminated soils along roadways, and residual pesticides from existing or historical agricultural activities.

The 2002 Phase I site assessment identified a total of 27 sites of known or potential hazardous substances contamination that could be encountered during construction of the DNA project. These sites are summarized in Table 4.15-1 and depicted on Figure 4.15-1. As part of ongoing remediation, mitigation of contaminated soil and groundwater at the Railyards would occur prior to construction of the DNA project.

4.15.3 Impact Evaluation

As discussed in the previous section, hazardous materials may be encountered during construction of the DNA project. These materials can be categorized as follows:

- Contaminated soil or groundwater that may be disturbed during construction, resulting in a release of hazardous materials to the air or water via dust or erosion.
- Buildings, bridges, or other structures that must be demolished during construction. If these structures contain hazardous materials such as lead-based paint or asbestos-containing building materials, it could be released to the environment during demolition.
- Aboveground utilities, such as pole-mounted transformers containing PCBs or storage tanks containing propane, may be disturbed during construction, resulting in a release of hazardous materials.

In addition, spills of hazardous materials during operation or maintenance may impact the environment in the study area.

Methodology

A Phase I site assessment was conducted in 2002 following guidance provided by ASTM Standard Practice for Phase I Environmental Site Assessment Process E1527-00. Based on the results of the site assessment, sites adjacent to the DNA project with known or potential hazardous materials contamination were identified in order to assess the potential for encountering hazardous substances during construction.

Impacts to the public associated with hazardous wastes generally fall into two categories: (1) a public hazard is created through exposure, release, transport, or disposal of hazardous materials during construction; and (2) hazardous substances are released during the operation of an alternative. Construction worker exposure to hazardous materials during construction activities is mitigated by the use of protective equipment and implementation of worker safety training.

**Table 4.15-1
Summary of Known or Potential Hazardous Substance Contamination
in the Vicinity of the DNA Project***

Site No.	Site Name	Site Location (Typically Approximate)	Hazardous Substances Known or Potentially Present	Site Notes
1	Sacramento County Parking Garage	East and west side of 7th Street, north of H Street	Fuel	Removal, extent of contamination, and status of clean-up information are not available.
2	Sacramento Building Design	Adjacent to alignment	Diesel	Lateral/vertical extent of contamination was not reported.
3	Railyards	Portion of site is included in the study area (north of 7th Street to North 7th Street)	Soil and groundwater contamination related to historical use of railyards	Deed restrictions resulting from soil and groundwater contamination.
4	Pipeline	Center of the intersection of North B Street and North 7th Street	Gas	No further information available.
5	Agricultural land use Plant nursery	North B Street to the north of the American River Northwest corner of the intersection of North B Street and 7th Street	Residual and/or persistent pesticides	Use between 1929 and 1961 may have resulted in residual persistent pesticides. Plant nursery operated from approximately 1961 to present. Localized areas of residual concentrations of persistent pesticides may remain.
6	Possible surface mining sites	West side of North 7th Street to the south of Richards Boulevard	Mining-related hazardous substances	Possible surface mining was apparent from approximately 1946 to 1961. Pits filled with liquid were located north of Richards Boulevard between North 5th and North 7th Streets from approximately 1946 to 1949.
7	State of California, Office of State Printing	344 North 7th Street	Printing-related hazardous substances	Reported release that has affected groundwater. Monitoring wells currently in place are located approximately 100 feet west of the proposed Corridor; however, additional wells may be constructed prior to commencement of construction activity associated with the DNA project.

**Table 4.15-1 (Cont'd)
Summary of Known or Potential Hazardous Substance Contamination
in the Vicinity of the DNA Project***

Site No.	Site Name	Site Location (Typically Approximate)	Hazardous Substances Known or Potentially Present	Site Notes
8	Bercut Richards Super Service Gas Station	343 North 7th Street	Petroleum products	Soil staining was observed in an aerial photograph at the location circa 1956 to 1977. No reported releases.
9	Big Valley Express	500 Richards Boulevard	Petroleum products and diesel fuel	Reported release of petroleum hydrocarbons and diesel fuel that has not been fully characterized. Current wells are located within 5 feet of Richards Boulevard.
10	Yellow Cab Company	900 Richards Boulevard	Gasoline	Reported release of gasoline in 1995, which resulted in groundwater contamination. The site reportedly has not been assessed. This facility is located two blocks east of the proposed Corridor and the anticipated direction of groundwater flow is in a southwesterly direction toward the Corridor.
11	Renovated/demolished buildings (as result of project)	Along the Truxel alignment	Asbestos-containing building materials and/or lead-based paint (potentially)	An asbestos survey and/or lead-based paint survey may be required prior to beginning construction activity.
12	Renovated/demolished buildings (as result of project)	Along the Truxel alignment	Asbestos-containing building materials and/or lead-based paint (potentially)	An asbestos survey and/or lead-based paint survey may be required prior to beginning construction activity.
13	Western Trailer Repair	350 Richards Boulevard	Hazardous Waste Generator	EDR Data Base search and observed during site reconnaissance
14	Ruan Leasing Company	350 Richards Boulevard	Hazardous Waste Generator	EDR Data Base search and observed during site reconnaissance

Table 4.15-1 (Cont'd)
Summary of Known or Potential Hazardous Substance Contamination
in the Vicinity of the DNA Project*

Site No.	Site Name	Site Location (Typically Approximate)	Hazardous Substances Known or Potentially Present	Site Notes
15	Discovery Plaza (includes Sage Cleaners)	South side of West El Camino at the intersection of Truxel Road	Dry cleaning-related hazardous substances	Reported release affected groundwater.
16	Swanson's Cleaners	West side of Truxel Road south of West El Camino Avenue (adjacent to the proposed alignment)	Dry cleaning-related hazardous substances (potentially)	No further information available.
17	Shell Service Station	1599 West El Camino Avenue	N/A	Soil piles and excavation pits that indicate the underground storage tanks were recently replaced at the time of the site reconnaissance. This facility was listed as an active gasoline station with underground storage tanks; however, there was no reported release.
18	Agricultural land use	Along South Natomas alignment	Residual and/or persistent pesticides	Aerial photography depicts agricultural land use from approximately 1957 to 1987.
19	Natomas Cleaners	3291 Truxel Road in the Albertson's Shopping Center	Dry cleaning-related hazardous substances (potentially)	In operation since 1988, formerly Capitol Cleaners; no further information available.
20	SMUD PCB Substation #22	West side of Truxel Road north of the Community Center; to the north of the proposed Pebblestone Way Station	PCB-containing transformer mineral oil	Reported release of PCBs that affected soil. No cleanup was documented in the regulatory agency database report.
21	Agricultural land use	Along the North Natomas alignment	Residual and/or persistent pesticides	Aerial photography depicts agricultural land use from approximately 1964 to 1987.
22	Natomas Airport	3801 Airport Road	Pesticide oil/petroleum product	Reported release of pesticide oil/petroleum product, which has affected groundwater in the vicinity. The anticipated groundwater flow is in an easterly direction toward the Corridor.

**Table 4.15-1 (Cont'd)
Summary of Known or Potential Hazardous Substance Contamination
in the Vicinity of the DNA Project***

Site No.	Site Name	Site Location (Typically Approximate)	Hazardous Substances Known or Potentially Present	Site Notes
23	Agricultural land use for row crops and grain crops	From North Natomas alignment to Sacramento International Airport	Residual and/or persistent pesticides	Aerial photography depicts agricultural land use from approximately 1957 to present. Agricultural land use continues on several parcels north of I-5 and west of SR 99. Sacramento County began pesticide use records in 1990s.
24	Gas pipeline	Powerline Road near Bayou Way	Not known; identified as potential site for contamination	Gas pipeline marker was observed; obtain additional information from the State Fire Marshall's Office prior to beginning construction.
25	Sacramento International Airport, wastewater ponds	Sacramento International Airport	Wastewater derived from Airport operations	Wastewater ponds were listed as an active facility that handles both municipal and industrial sewage, located at the southern section of the Airport since 1972. Ponds appeared to be unlined and filled with liquid at the time of the site reconnaissance. The proposed alignment bisects the ponds.
26	Gas station	Sacramento International Airport, near wastewater treatment ponds	Groundwater contamination (assumed); storage of hazardous waste	Observed 55-gallon drum labeled hazardous waste, and monitoring wells at location.
27	Airport rental car facilities, Chevron USA facility	Sacramento International Airport on McNair Circle and Earhart Drive	Groundwater contamination associated with rental car/Chevron facilities	No further information available.

Note:

* Sites were identified from the Phase I Environmental Site Assessment conducted in the study area in 2002. The study included field reconnaissance of the DNA Corridor and review of data provided by Environmental Data Resources, Inc. from environmental databases maintained by state, federal, and local agencies.

Significance Criteria

Implementation of the DNA project would have a significant impact on hazardous materials if it:

- Creates a public hazard through transport, use or disposal of hazardous materials during construction; or
- Results in the release of hazardous substances during the operation of an alternative.

DNA Project Impacts

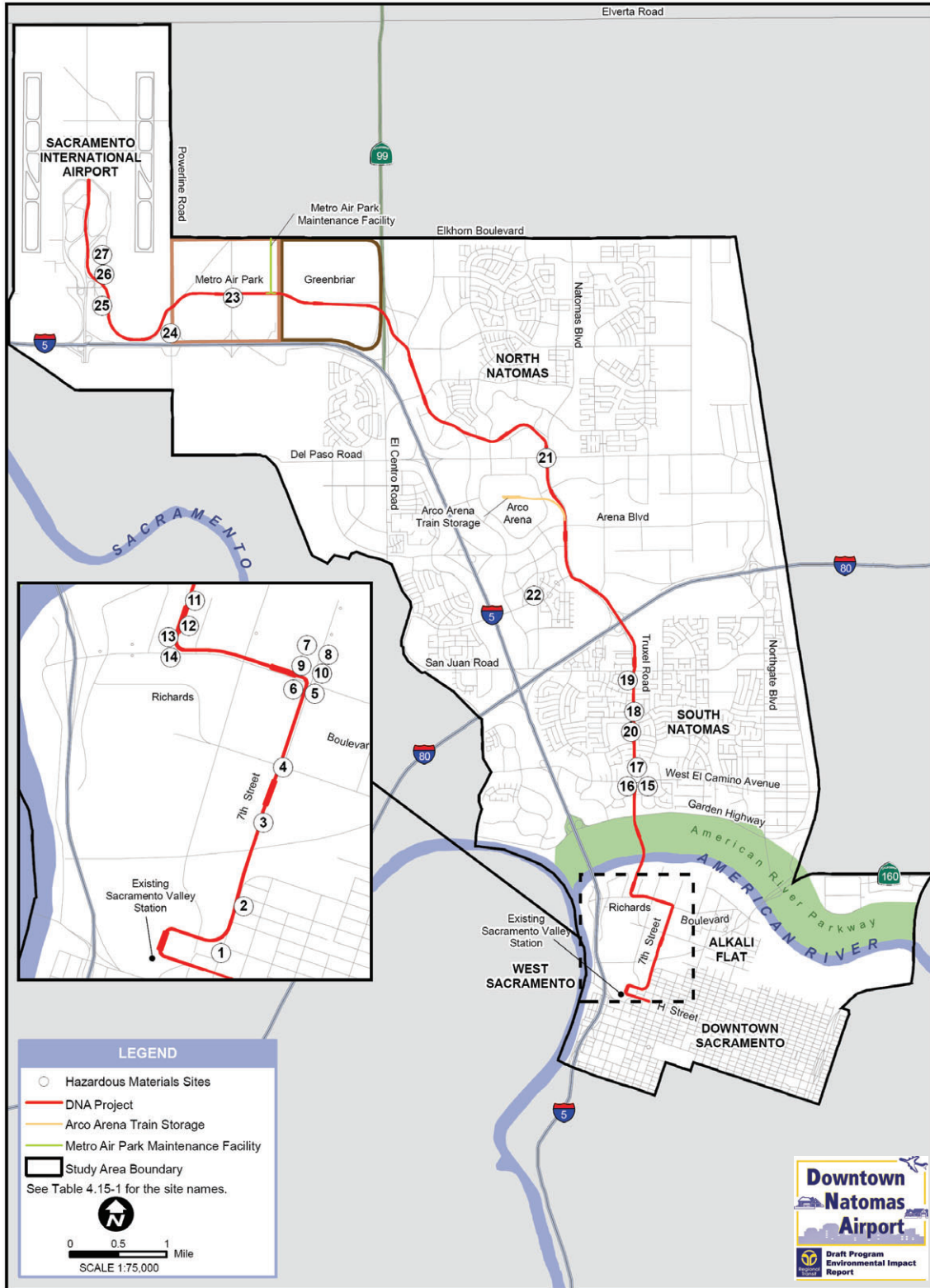
This section addresses impacts for the DNA project. The assessment performed in 2002 revealed 10 potential hazardous substances sites or conditions (e.g., residual and persistent pesticide use) that could be encountered during construction of the DNA project south of the American River resulting in a potentially significant impact (Impact HM-1). Construction in the vicinity of the Sacramento Valley Station may be affected by hazardous substances likely present at the Sacramento County Parking Garage and Sacramento Building Design (Sites 1 and 2 on Figure 4.15-1). Construction through the Railyards may be affected by hazardous substances at the site (Site 3); however, mitigation of contaminated soil and groundwater at the Railyards is ongoing and part of Union Pacific's commitment to increase development potential on this property. Construction along 7th Street and Richards Boulevard may be affected by any of seven sites involving leaked fuels, PCBs from transformers, and asbestos and lead paint from old buildings.

During operation of the DNA project, spills of hazardous materials may affect the environment. However, RT will institute procedures to avoid releases of hazardous materials into the environment under California Department of Toxic Substances Control, Central Valley Regional Water Quality Control Board (RWQCB), and Occupational Safety and Health Administration requirements.

Construction of the DNA project in South Natomas could involve the same general concerns as described above (Impact HM-1). However, the potential to encounter hazardous waste sites is less likely due to the residential character of this portion of the alignment. Potential risks from residual pesticides, underground storage tanks, and solvents from dry cleaning establishments were identified in the Phase I site assessment and will have to be further characterized during the Phase II studies for preliminary engineering. Groundwater contamination from the recently closed Natomas Airport also should be investigated.

Further north, the site assessment indicated the probable presence of residual pesticide-contaminated soils and groundwater that could be encountered during construction of the DNA project (Impact HM-1). Again, the extent of risk will be defined during the Phase II studies for preliminary engineering.

As the alignment approaches the Sacramento International Airport, residual pesticides from past agricultural practices could be encountered. Additionally, there is the potential for hazardous wastes associated with the wastewater ponds located to the immediate south of the Airport and contaminated groundwater associated with the storage of petroleum products on Airport property (Impact HM-1). As part of the DNA project, a maintenance facility is planned in this portion of the study area. This facility could potentially represent a



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Figure 4.15-1
Sites of Known and Potential Hazardous Substances Contamination that
Could be Encountered During Construction of the DNA Project

risk for release of toxic material into the environment during operations. The operation of this facility would be controlled by Department of Toxic Substances Control and Occupational Safety and Health Administration requirements.

Mitigation Measures

As required by the Department of Toxic Substances Control, RT will perform a Phase II site assessment to determine the presence and extent of contamination at properties to be purchased or condemned within the DNA project, at stations, and at the maintenance facility site. However, because of the potential to discover undocumented hazardous substance releases or cause spills during construction, RT also will prepare a Soil and Groundwater Management Plan prior to commencement of construction to handle site contingency planning (Mitigation MHM-1). Implementation of the mitigation measures would minimize Impact HM-1 to a less-than-significant level. The Soil and Groundwater Management Plan will include the following requirements:

- A registered geologist or engineer onsite or on-call to monitor construction activities, and with the authority to halt work or move work temporarily to another location if contamination is encountered during construction.
- A Health and Safety Specialist onsite or on-call to monitor suspect areas during construction (e.g., near hazardous substance release sites).
- An Environmental Compliance Manager onsite or on-call to supervise hazardous material use and storage during construction.
- A plan to contact the applicable landowner (if the land is not owned by RT) in the event hazardous substances are encountered.
- Meetings with applicable state and local agencies concerning undocumented contamination encountered.
- An asbestos and lead-based paint survey of all structures to be demolished that were initially constructed during an era when these materials were commonly used in construction.
- Coordination with Underground Service Alert prior to construction, especially in locations where pipeline markers are displayed or as-built plans indicate the possibility of a subsurface utility line(s). In addition, pipeline companies (e.g., PG&E) should be contacted to mark the location of pipelines so that they may be avoided.
- A well survey completed prior to commencement of construction activities to evaluate the status (e.g., active, decommissioned, decommission in progress) of the monitoring wells along the DNA Corridor. Wells within the proposed construction zone should be decommissioned prior to the start of construction activity.
- Coordination with Sacramento Municipal Utility District if transformers are to be moved or removed.

- Coordination with the RWQCB regarding the status of the wastewater pond closure near the Airport.
- Implementation of construction best management practices in accordance with a Stormwater Pollution Prevention Plan. Best management practices may include providing secondary containment areas for refueling construction equipment, berms or ponds to control runoff, and a monitoring program to test stormwater for contaminants prior to discharge from the construction site.
- Compliance with requirements for construction workers who may be exposed to hazardous materials, including preparation of health and safety and emergency response plans, air monitoring (if necessary), and provision of personal protective equipment.
- Once a Phase II site assessment is completed, a Remedial Action Work Plan will be developed in coordination with the California Department of Toxic Substances Control. This Work Plan will contain specifics on the remediation for the hazardous materials encountered during the construction of the project.