

SECTION 4.8

Hazards and Hazardous Materials

This section addresses the potential exposure as a result of encountering existing contaminated soils and groundwater and using, storing and transporting hazardous materials, if encountered, during construction and operation of the proposed project.

The City received comments on the NOP related to hazards and hazardous substances, which are addressed in this section to the extent they pertain to potential project impacts (see Appendix B). NOP comment letters received relevant to this section include a letter from the Department of Toxic Substances Control (DTSC), requesting that the Tri-Party Memorandum of Understanding be discussed in the Subsequent Environmental Impact Report. The DTSC comments also provide an update on the status of the remediation and anticipate that the hazards and hazardous substances section consider remediation issues. These issues are addressed within this section.

The analysis in this section is based on project-specific construction and operational features, data provided in the City of Sacramento 2035 General Plan and City of Sacramento 2035 General Plan Master EIR, various phase I and phase II Environmental Site Assessments conducted in the area, remedial investigation/feasibility studies, remedial action plans, remedial implementation plans, closure reports, land use covenants (LUCs), certification documentation, and results of a search of government databases that identify known listed contaminated sites.

Issues Addressed in the 2007 RSP EIR

The 2007 Railyards Specific Plan (RSP) EIR discussed the following topics: construction and occupancy occurring on a property known to contain contaminated soil; the potential for remediation activities to expose people to adverse health effects associated with hazardous substances; interference with remediation efforts; exposure to asbestos, lead-based paint, or other hazardous substances; the increased use of hazardous substances; and the transport of hazardous substances. These issues are still applicable and discussed in this section.

Since the certification of the 2007 RSP EIR, most of the soil remediation within the RSP has been completed by Union Pacific Railroad (UPRR) and certified by DTSC. DTSC certification means that the remediation has been satisfactorily completed. However, certification does not mean that soils have been cleaned up to a level that allows for unrestricted use. Therefore, certification requires a LUC which places certain requirements and restrictions on development to protect human health and the environment.

Due to a change in ownership since 2007, the TriParty Memorandum of Understanding (MOU) is no longer an applicable structure for tracking and implementing LUCs. As a substitute for the MOU, a new Memorandum of Agreement (MOA) between DTSC and the owner, Downtown Railyard Venture, LLC (DRV), has been entered into, which provides for the management of all required reporting in accordance with DTSC approved LUC recorded against the certified areas of the property. The change in ownership and the MOA are discussed further under the Remediation Responsibilities.

4.8.1 Environmental Setting

The environmental setting is described on pages 6.5-1 through 6.5-15 of the 2007 RSP Draft EIR. The environmental setting has changed as a result of ongoing remediation, completion of certain efforts and development activities since certification of the 2007 RSP EIR. The following discussion updates and replaces the 2007 RSP EIR setting.

Soil and Groundwater Contamination

The 244-acre RSP Area served as the Central Pacific Railroad and later Southern Pacific Railroad principal locomotive and maintenance rebuilding facility, among other functions, since 1863. Many different industrial operations occurred at the RSP Area over its history. Primary operations at the site included assembly and building of locomotives and railroad cars and repairing or refurbishing of the cars and locomotives. Activities associated with these operations included steel fabrication, brick production, boiler-making, copper and tinsmithing, blacksmithing, machine work, carpentry, metal plating, upholstering, washing, welding and cutting, paint removal and application and sand blasting. At one time, the RSP Area also produced rails, steam engine and ferry parts and cable cars. Many of these activities are associated with lead and other heavy metal waste. Many different industrial processes were also associated with specific buildings on the site, and some processes were performed in numerous structures over time. Additional operations could have existed that were not recorded or did not occur in one location long enough to warrant mention by historians. These factors contribute to difficulties in obtaining accurate chemical use, storage, and disposal information. Many types of chemicals were used for railyards operations. Fuels, caustic solutions, paints, solvents, and metal alloys appear to constitute the majority of chemicals used at the site. Over the history of the site, numerous underground storage tanks (USTs) were installed (and later removed) to store chemicals associated with operations.¹ Additional information regarding site history can be found in Section 4.4, Cultural Resources.

Industrial activities are no longer performed on the site; however, these historic activities involved on-site disposals, spills, and other releases of hazardous chemical products and items containing hazardous substances that resulted in soil and groundwater contamination. The site is

¹ Richards Amendment/Railyards Redevelopment Plan Draft EIR, Section 5.5 Hazards and Hazardous Materials.

included on the state Hazardous Waste and Substances List (“Cortese List”) compiled pursuant to Government Code 65962.5 and referenced at Public Resources Code 21092.6.²

Soil within the RSP Area contained metals (primarily lead), petroleum hydrocarbons, volatile organic compounds, and asbestos. The metals, petroleum hydrocarbons, and volatile organic compounds ultimately led to degradation of shallow groundwater underlying the site. Additional information on the types and extent of contamination is summarized below.

In accordance with DTSC regulations, the remediation process for the study areas defined in the RSP Area consists of the following components:

- Remedial Investigation Report, which summarizes the nature and extent of contamination at the site followed by a Risk Assessment that determines the extent or risk exposure to human health and the environment, if any;
- Feasibility Study, which establishes remedial goals and objectives, evaluates the feasibility of various remedial technologies, and selects the most feasible remedial alternative;
- Final Remedial Action Plan,³ that describes in detail the selected remedial alternative and also requires the development of a LUC that identifies environmental requirements on future development to protect human health and the environment;
- Remedial Design Implementation Plan, which provides detailed technical plans and engineering designs for implementation of the Remedial Action Plan.
- Closure Report, which documents implementation of the Remedial Action Plan; and
- Certification, which provides written approval from DTSC that the Remedial Action Plan, including the recordation of the LUC, has been successfully implemented.
- Five-Year Review that evaluates the effectiveness of the remediation to protect human health and the environment and may include recommendations for improvement.

A key element of the soil and groundwater remedial investigation reports is to provide the data requirements for completion of a Baseline Risk Assessment and development of the Remedial Action Objectives for selected land use options. However, consistent with applicable regulations and standards, the remedial investigation reports do not provide recommendations for future land use but, rather, provide the data for development of remedial action objectives with the objective of conforming human-health and ecological-health cleanup objectives to the selected land use.

² Department of Toxic Substances Control, 2015. Hazardous Waste and Substances Site List. Available: <http://www.calepa.ca.gov/SiteCleanup/CorteseList/>. Accessed December 2, 2015.

³ Environmental review pursuant to CEQA must be undertaken by DTSC in conjunction with Remedial Action Plans approval.

The primary objective of a Baseline Risk Assessment is to characterize the potential for chemicals that may result in adverse health effects in potentially-exposed human populations and ecological species as the RSP Area site currently exists. That is, it evaluates the actual and potential risks in the absence of any remediation or mitigation measures. In addition, as mandated by DTSC guidance, the Risk Assessment also evaluates the potential risks to future residential populations at the project site. This provides an upper-bound estimate of potential health risks using the most health-protective scenario. Each Baseline Risk Assessment prepared for the RSP Area remediation included four steps: hazard identification or data evaluation of contaminants of concern; exposure assessment; toxicity assessment; and risk characterization.

The process outlined above has been completed for a majority of the RSP Area and has been subject to a separate CEQA review process conducted by DTSC as part of the Remedial Action Plans approval process, and by the City in its review of earlier development plans for the area. Appendix H.1 (Site Investigation and Remediation Bibliography) includes a bibliography of the technical reports that have been prepared to document the results of the site investigations and work plans for site remediation. Each of the site investigation and remediation reports listed in the bibliography in Appendix H.1 have been reviewed by DTSC and the Central Valley Regional Water Quality Control Board (Regional Water Board), to the extent needed, to ensure compliance with cumulative RSP Area approval and applicable laws and regulations pertaining to the remediation of hazardous substances contamination. The results of these studies are summarized in this section.

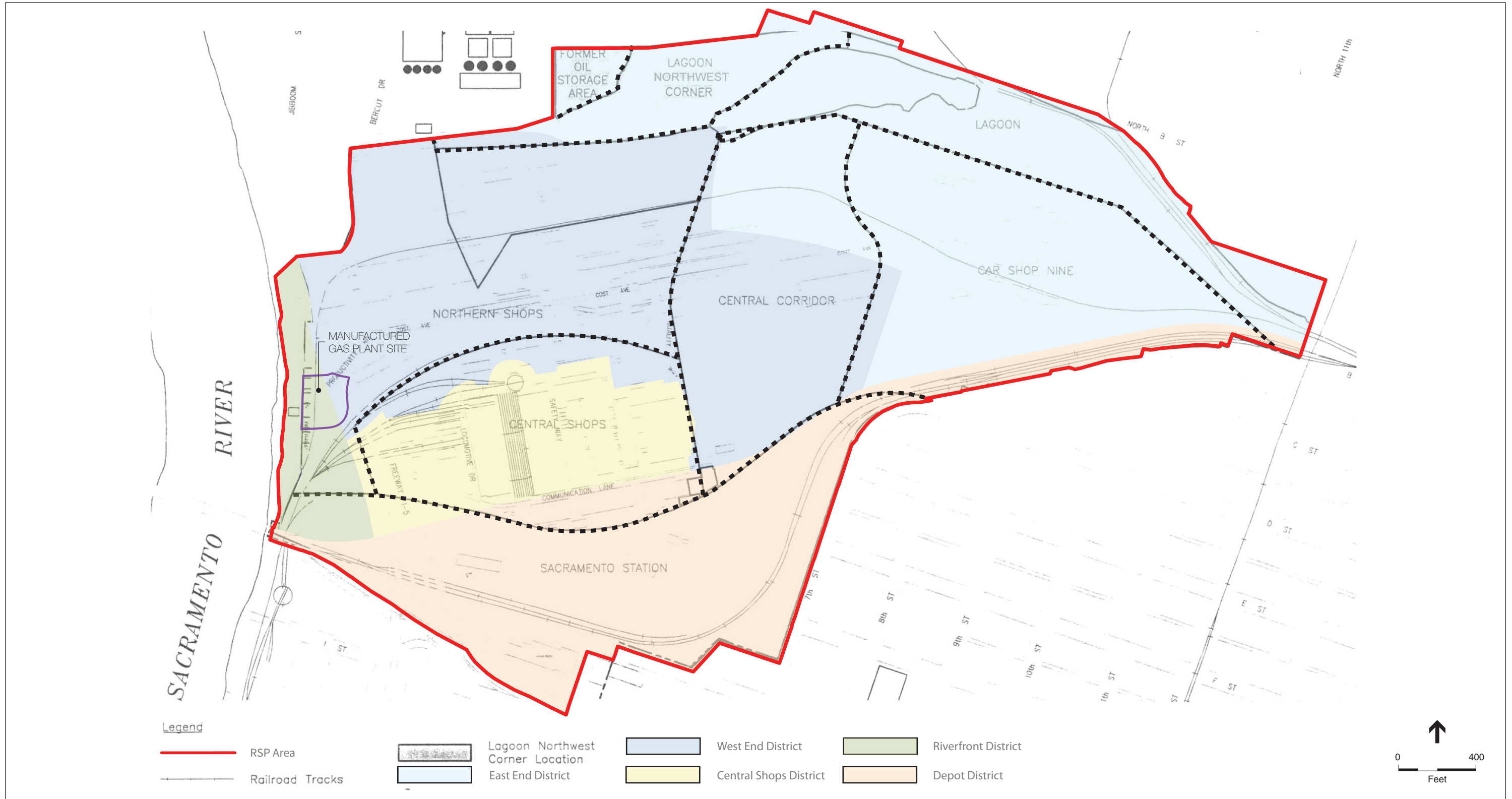
For purposes of the site investigations, DTSC approved separating the RSP Area into six different soil study areas: Lagoon Study Area, Car Shop Nine Study Area, Northern Shops Study Area, Central Shops Study Area, Central Corridor Study Area, and Sacramento Station Study Area (Sacramento Station). The boundaries of these study areas are illustrated in **Figure 4.8-1**. The groundwater investigation consists of the Lagoon Groundwater Study Area, Manufactured Gas Plant Study Area, and the South Plume Groundwater Study Area. The boundaries of these study areas are illustrated in **Figure 4.8-2**. The boundaries of each study area were determined based on soil or groundwater impact, history of use, project phasing, and encountered features. In addition to these study areas, four other areas (the Sand Piles site, Battery Shop Yard, Pond and Ditch/Former API Separator, and Drum Storage Area) were identified as hazardous waste units under the Resource Conservation and Recovery Act (RCRA).⁴

Constituents of Concern

The constituents of concern (COCs) present in RSP Area soil fall into five categories:

- Asbestos,
- Metals,

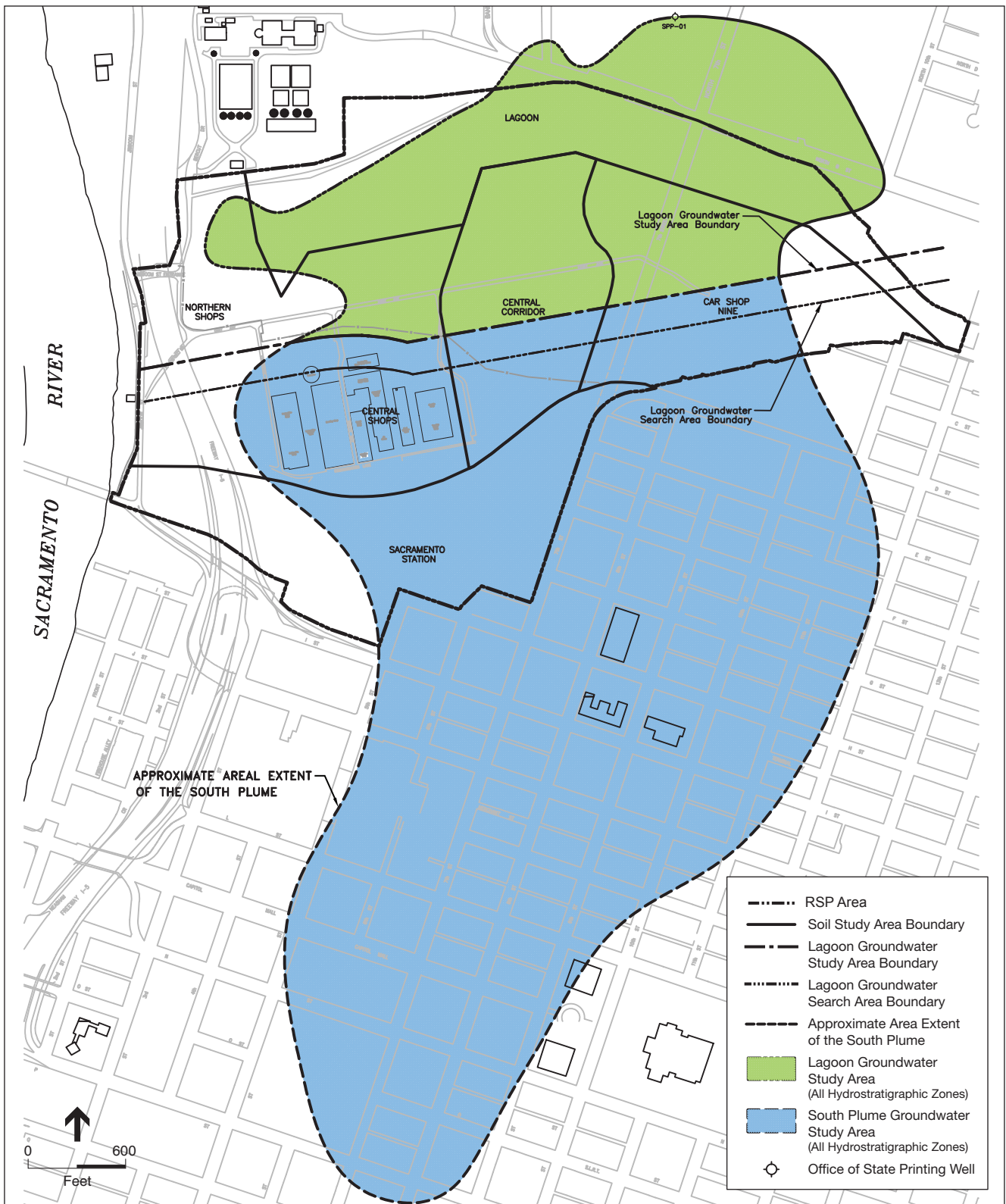
⁴ Sand Piles site, Battery Shop Yard, Pond and Ditch/Former API Separator, and Drum Storage Area RCRA units have been closed and included in the current certification process.



SOURCE: Report of Waste Discharge – Lagoon Study Area Northwest: Sacramento Rail Yard by Environmental Resources Management from Nov. 2004.

Sacramento Railroads Specific Plan Update . 150286

Figure 4.8-1
Railroads Soil Investigation and Cleanup Areas and Planning District Boundaries



SOURCE: ERM 2014

Sacramento Railyards Specific Plan Update . 150286

Figure 4.8-2
Groundwater Plumes

- Volatile Organic Compounds (VOCs),
- Total Petroleum Hydrocarbons (TPH), and
- Semivolatile Organic Compounds (SVOCs).

Although there is some overlap among these categories, typically each category possesses characteristics that influence where the chemicals are likely to be found given their mobility in the environment.

The following discussion describes the sources and distribution of these types of chemicals within the RSP Area. Remedial investigations have been completed for all of the RSP Area's soil study areas. These investigations have demonstrated that lead (and to a lesser degree other heavy metals) was fairly pervasive throughout the site, while chemicals within the other categories were present at various degrees of elevated levels only in localized areas.

Asbestos

Many of the historic buildings and structures within the RSP Area were constructed with materials and coating that contained asbestos to various degrees. Construction, demolition, and renovation activities had the potential to disturb asbestos and generate emissions of asbestos fibers. The only existing buildings associated with Railyards operations are the Central Shops. Hazardous waste abatement for these buildings, except the Erecting Shop and the Boiler Shop, has been completed and approved.

Asbestos is regulated as a hazardous air pollutant under the Clean Air Act and is also regulated as a potential worker safety hazard under the authority of the Occupational Safety and Health Administration (OSHA).

Metals

Many of the historic Railyards activities on the site, such as foundry work, blacksmithing, battery reconditioning, and parts fabrication, involved the extensive use of metals. Locomotive and railroad car maintenance applied lead-based paint and used sandblasting to remove weathered paint. Lead was also used in journal boxes and soldering.

Heavy metals, primarily lead, were found on much of the site in the surface soils. Within these soils, lead presence was generally restricted to approximately the top four feet. Other metals found on the site at various degrees of elevated concentrations were much more localized, but nearly always accompanied by lead. These metals included copper, zinc, nickel, antimony, and mercury. Heavy metals soil remediation for a majority of the RSP Area has been completed.

Volatile Organic Compounds

VOCs comprise the solvents, degreasers, paint thinners, and strippers formerly used in the RSP Area in various operations. Unlike metals, VOCs are highly mobile and volatile. They can be found in surface soils at significantly lower concentrations because they volatilize into the atmosphere. Although these compounds volatilize rapidly when spilled, they also move quickly

through soils into the groundwater. Since most of these compounds are at least somewhat soluble in water, groundwater contamination frequently occurs. Over time, many VOCs are biodegraded into other compounds by naturally occurring microorganisms in the soil and groundwater or other processes. Because of their mobility, VOCs readily migrate through the soil column and into groundwater. The movement of contaminated groundwater can contaminate clean soil.

Soil remediation for VOCs has been substantially completed. Remaining elevated levels of VOCs on the RSP Area are found primarily in soils located in the Manufactured Gas Plant Study Area, as well as the Central Shops/South Plume and Lagoon groundwater plumes.

Total Petroleum Hydrocarbons

THPs in soil and groundwater at the RSP Area consisted of petroleum products such as diesel, fuel oil, and lubricating oils and other chemical compounds that originate from crude oil. The presence of these compounds in soil and groundwater was due primarily to leaks or spills into the ground from storage tanks, pipelines, locomotive maintenance, and/or discharges with wastewater to the Pond and Ditch or Lagoon areas. Soils containing TPH contamination have been removed from most locations. Remaining levels of above remedial goals are found primarily within the Manufactured Gas Plant Study Area and in the groundwater near the western portion of the Central Shops.

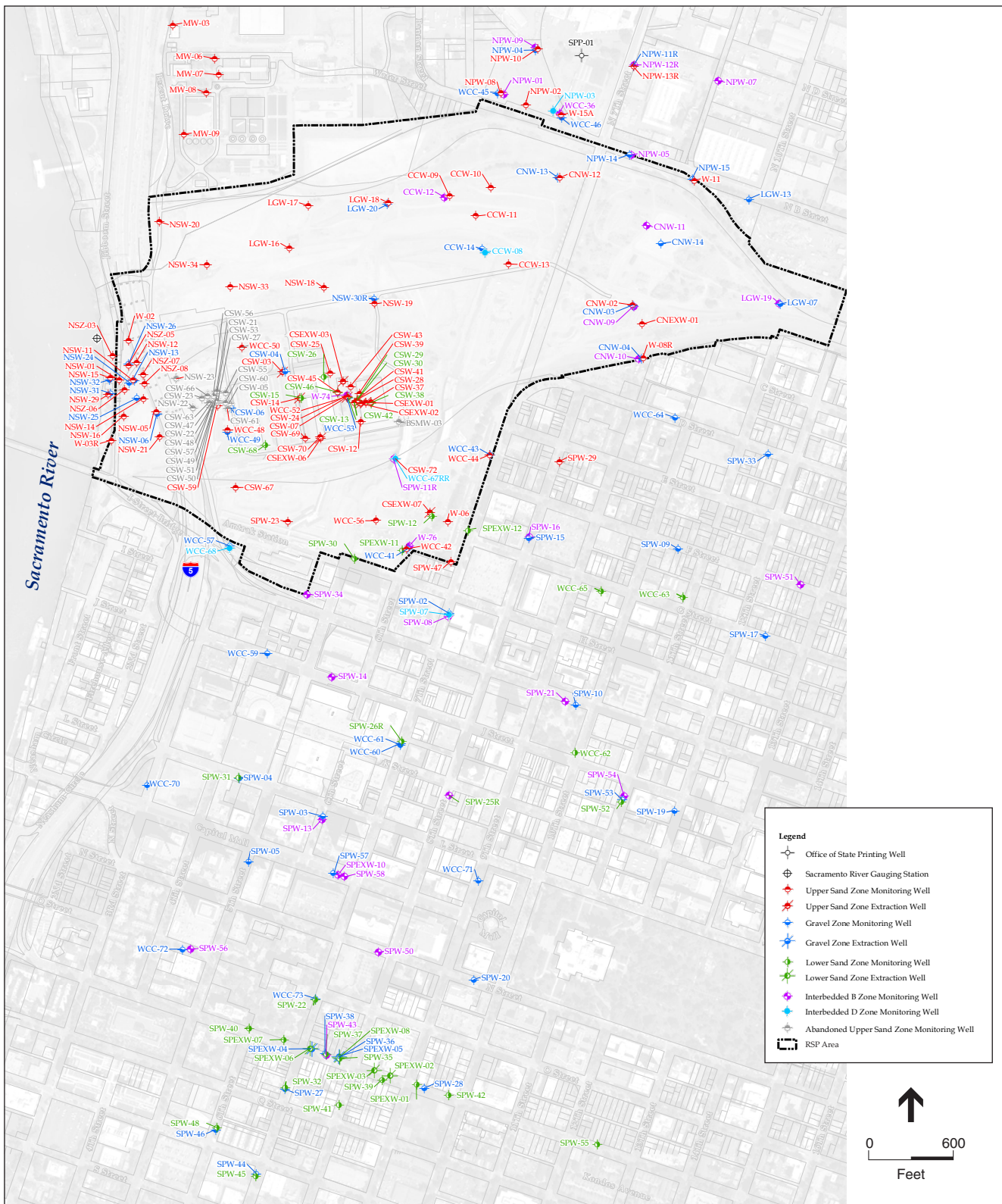
Semivolatile Organic Compounds

Most SVOCs are only slightly volatile under normal conditions and are strongly adsorbed to soils, meaning they tend to adhere to the surface of soil particles, rather than entering into its deeper structure. Thus, they are relatively immobile in the environment and stay close to the point where they were initially discharged. Some SVOCs, such as phenols and naphthalenes, are more volatile than others, are not as strongly adsorbed, and are somewhat soluble in water, and thus are more mobile in the environment.

Although SVOCs of both the more and less volatile types were found at the RSP Area to some extent, contamination by SVOCs generally was not widespread and occurred in only a few limited areas. The SVOCs most commonly detected at elevated levels at the site were polynuclear aromatic hydrocarbons (PAHs), which were ordinarily formed as incomplete products of combustion of organic materials such as coal or oil. Phenols have also been detected in the groundwater beneath the Central Shops.

Groundwater

Groundwater quality at the RSP Area site, and areas outside the site where contaminant plumes have been detected, is routinely monitored for contaminants of concern. The results are reported to DTSC and the Regional Water Board in accordance with a Regional Water Board-adopted "Monitoring and Reporting Program Order No. R5-2008-0821." **Figure 4.8-3** shows the locations of groundwater monitoring wells within the RSP Area. Monitoring wells are also located in downtown Sacramento and north of the site. Groundwater samples are collected from four



SOURCE: ERM-West, Inc., 2015. 2015 Annual Groundwater Monitoring and Remediation Systems Operation and Maintenance Report, Former SPTCo Sacramento Railyards, February 26, 2016.

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Figure 4.8-3
 Monitoring and Extraction Well Location Map

waterbearing zones beneath the site and in the downtown area: sand zone (upper and lower), gravel zone, the interbedded B zone, and interbedded D zone. VOCs, SVOCs, total petroleum hydrocarbons (TPH), and metals have all been detected at various levels in groundwater.⁵ Contaminated groundwater is being actively pumped and treated both onsite.

Remediation Responsibilities

The responsibilities for remediation of the RSP Area have changed several times as ownership of the site has changed. The past and current responsibilities are described below.

Enforceable Agreement

UPRR (formerly Southern Pacific Transportation Company) and DTSC entered into an Enforceable Agreement in 1988 regarding the investigation and remediation of hazardous substances at the Railyards. The purpose of the Enforceable Agreement is to ensure that releases or threatened releases of hazardous substances from the RSP Area are adequately investigated and that appropriate remedial actions are taken. The Enforceable Agreement specifies the documentation that must be produced and submitted to DTSC for review and approval for each study area as part of the remediation process described earlier.

Memorandum of Understanding

As part of the agreements leading to the approval of the December 2007 RSP EIR, an MOU between S. Thomas Enterprises of Sacramento, LLC (STES), DTSC, and the City of Sacramento was executed defining responsibilities of the three parties relevant to remediation and development obligations, including land use restrictions. The roles defined in the MOU were reflected in the mitigation measures identified in the 2007 RSP EIR. STES was the owner, master developer, and the Project Coordinator responsible for all Railyards remediation on behalf of UPRR. In 2010, IA Sacramento Holdings, LLC foreclosed on the property and assumed the position of a secured lender, and did not assume responsibilities for remediation, the role of Project Coordinator or master developer. In the following year, UPRR resumed responsibility as the Project Coordinator and the Responsible Party for all remediation under the 1988 Enforceable Agreement.

In 2015 IA Sacramento Holdings, LLC and DRV entered into a settlement agreement with UPRR that defines remediation responsibilities and roles. Under the agreement, UPRR retained its position as the Responsible Party under the 1988 Enforceable Agreement for historic contamination and for all Regulatory Orders, among other responsibilities. The sale of the Railyards to DRV in September 2015 made DRV owner and master developer.

Given the significant changes of responsibilities resulting from the recent change in ownership, the 2007 MOU is no longer applicable. A new MOA between DTSC and DRV was established to define roles and responsibilities (discussed below).

⁵ ERM-West, Inc., 2016. 2016 Semiannual Groundwater Monitoring and Remediation Systems Operation and Maintenance Report, Former SPTCo Sacramento Railyards, February 26, 2016.

2015 Land Use Covenant

As part of the certification process, and pursuant to Civil Code section 1471, DTSC determined that a LUC was necessary to protect present or future human health or safety or the environment as a result of hazardous materials, as defined in Health and Safety Code section 25260, DTSC also concluded that the Property (Assessor's Parcel Numbers 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058), as remediated and when used in compliance with the Environmental Restrictions of the 2015 LUC, would not present an unacceptable risk to present and future human health or safety or the environment.⁶ The 2015 LUC also provides a roadmap to development by assuring that the approved land uses conform with the certified areas. See Section 4.8.2 Regulatory Setting for additional discussion on the 2015 LUC.

Memorandum of Agreement

The 2015 LUC requires that DRV and DTSC enter into a MOA. The provisions of the MOA, which was executed in 2016, provide, among other provisions, (1) establishment of a process for owners to pay the DTSC's costs, and monitoring, inspecting and reporting in compliance with the Covenant on behalf of owners and occupants; (2) preparation of a soil and groundwater management plan approved by the DTSC; (3) provision of available information by the DTSC relating to vapor mitigation areas; and (4) obtaining of DTSC's determination of a proposed use of a parcel as being consistent with any restrictions provided in applicable LUCs. Ongoing remediation activities are not included within the MOA because UPRR, as the Responsible Party, is responsible for remediation under the 1988 Enforceable Agreement and Regulatory Orders as provided in the settlement agreement entered into by UPRR and DRV.

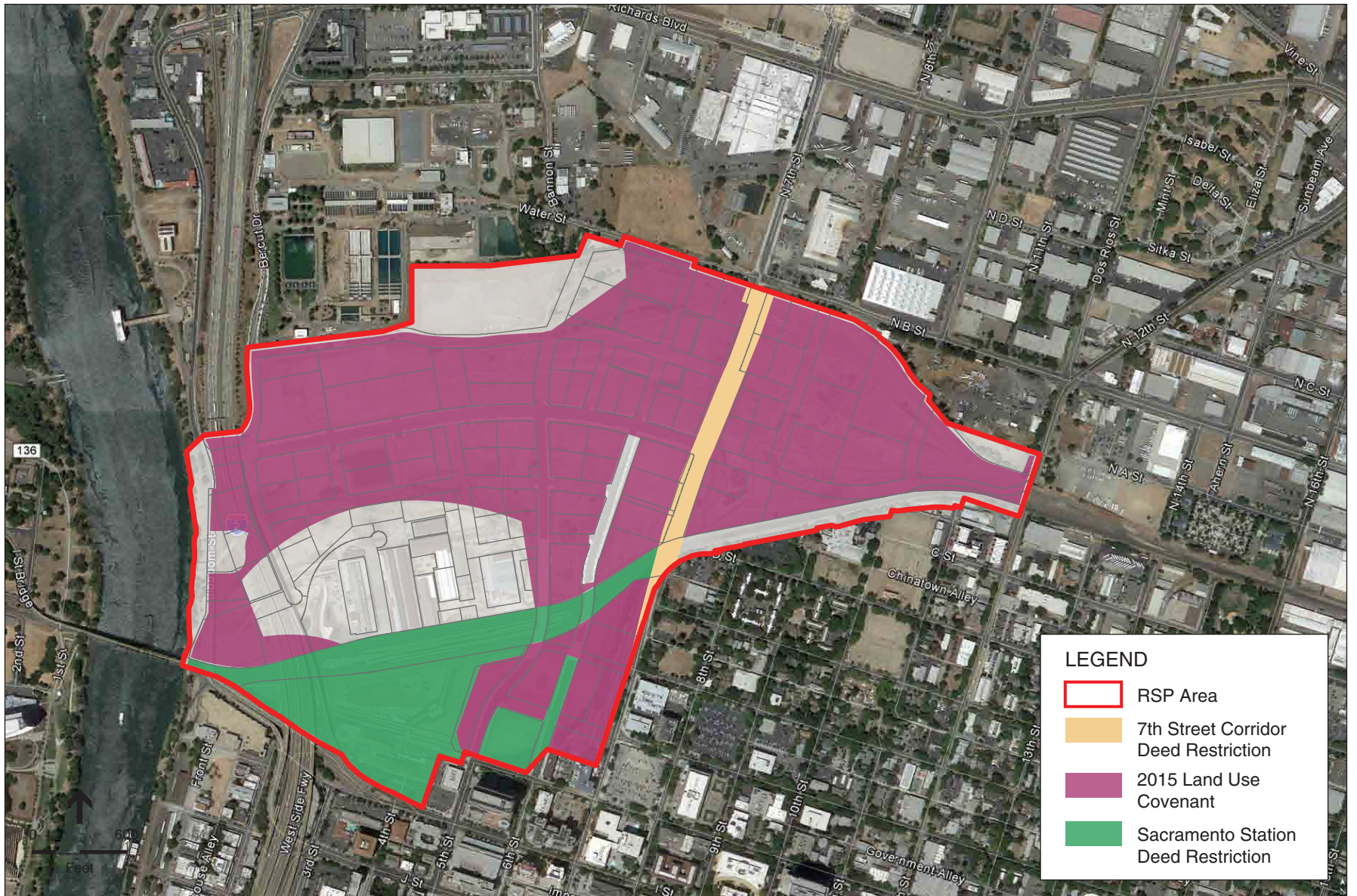
The 2015 LUC applies only to those parcels that have been remediated and certified (see **Figure 4.8-4**). These restrictions are discussed in more detail under Regulatory Setting.

Status of Remediation

Since the 2007 RSP EIR was completed, soils remediation and certification has been completed for the majority of the RSP Area. The status of each of the remediation areas is discussed below. In some cases, an area had both soil and groundwater contamination, and each is described (e.g., for the Manufactured Gas Plant).

The first Five-Year Review was completed in June 2015 for the Sacramento Station, Lagoon, Car Shop Nine, Central Corridor, and Northern Shops Soil Study Areas. The purpose of the First Five-Year Review is to evaluate the implementation and performance of the DTSC-approved remedies to determine whether the remedy as implemented is protective of human health and the environment for current and anticipated future uses. The first Five-Year Review also identifies issues found during the review process and makes recommendations to address them. DTSC

⁶ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.



SOURCE: ESA 2016

Sacramento Railyards Specific Plan Update . 150286

Figure 4.8-4
Deed Restriction and Land Use Covenants with the RSP Area

approved the Five-Year Review, concluding that some of the remedial goals for constituents of concern should be changed (e.g. lead) but that the implemented remedies are still protective of human health and the environment, as supported by engineering and institutional controls mandated by the recently-approved LUC.⁷

Car Shop Nine, Central Corridor, Lagoon, and Northern Shops

As discussed on pages 6.5-10 and 6.5-11 of the 2007 RSP Draft EIR, soils within the Lagoon Study Area and Central Corridor, Car Shop Nine, and Northern Shops contained heavy metals (primarily lead), TPH, VOC, SVOC, and asbestos. In portions of the RSP Area, one or more of these COCs were present at concentrations that posed a potential threat to human health and the environment and required remediation.

Remediation of site soils in the Lagoon, Central Corridor, Car Shop Nine, and Northern Shops study areas began in 2000 in accordance with the DTSC-approved Remedial Action Plans for the site and was certified completed in November 2015 for Car Shop Nine, Central Corridor, Lagoon, and Northern Shops Study Areas.⁸ Remediation activities included well abandonment, soil excavation and stockpiling, sampling, soil treatment, backfill activities and off-site disposal. With the exception of remediation activities for the Northwest Corner, located within the Lagoon Study Area, including Vista Park, no further soil remediation is planned for these study areas until access is available to small and limited inaccessible areas.⁹ Car Shop Nine, Central Corridor, Lagoon, and Northern Shops Study Areas are subject to soil certification by DTSC and the 2015 LUC. The 2015 LUC does not prohibit any use, including residential development, as long as the provisions of the LUC preventing exposure to soil and soil vapors are implemented.¹⁰ The 2015 LUC does not include the Central Shops for soil or groundwater, since remediation has not yet been certified.

Northwest Corner (Lagoon Study Area)

The Lagoon Study Area occupies approximately 51 acres within the northern and eastern portions of the RSP Area and has been subdivided into the Lagoon Proper and the Lagoon Northwest Corner. The primary contaminants of concern included benzopyrene, lead, antimony, nickel, extractable hydrocarbons and asbestos containing material (ACM). These contaminants had been determined by DTSC and Regional Water Board to not exceed the concentration levels which pose a threat to groundwater. In 2003 the Lagoon Study Area Remedial Action Plan was amended to include grading and capping approximately 10 acres (Lagoon Northwest Corner) beneath an

⁷ ERM-West, Inc., 2015. First Five-Year Review Report, Former SPTCo Sacramento Railyard, Sacramento California, June 1, 2015.

⁸ Department of Toxic Substances Control, 2015. Certification of Remedial Action, The Railyards, Sacramento California, November 20, 2015.

⁹ ERM-West, Inc., 2014. 2012-2013 Soil Remediation Summary Report, Car Shop Nine, Central Corridor, Lagoon, and Northern Shops Study Areas, Former Southern Pacific Transportation Company, Sacramento California, July 2014.

¹⁰ Department of Toxic Substances Control, 2015. Certification of Remedial Action, The Railyards, Sacramento California, November 20, 2015

engineered protective cover designed to meeting California Code of Regulations Title 27 requirements to the extent feasible.¹¹

As currently approved by DTSC, the Northwest Corner would ultimately contain up to 230,000 cubic yards of inert soil below an engineered cap and fill. Currently, the Northwest Corner contains approximately 225,000 cubic yards of inert soil.¹² A specific soil placement hierarchy was determined based on results of contaminant testing that determined whether concentrations of contaminants were suitable for placement under the engineered cap. The placement process ensured protection of human health, the environment, and groundwater beneath the Northwest Corner. The specific soil placement hierarchy was determined using four categories: (1) soil with contamination below remedial goals and asbestos-containing material present in soils; (2) soil contamination below remedial goals and below groundwater protection goals; (3) soils with concentrations of constituents above remedial goals and groundwater protection goals; and (4) soils with soluble concentrations of metals above the soluble metals criteria. One of the main goals of the soil hierarchy is to ensure the soils that could contact groundwater (i.e., the lowest foundation layer) only have constituents that are insoluble such as asbestos or metals above the remedial goals.

Sims Metal Site (Lagoon Study Area)

A portion of the Sims Metal site is located in the eastern most portion of the RSP Area. Although part of the Lagoon Study Area, the portion of the Sims Metal site located within the RSP Area is not covered under the 2015 LUC. As discussed below, the Sims Metal site is undergoing a separate remediation process with DTSC. Recycling operations have occurred at this location since the late 1940s. Associated Metals operated a recycling facility from approximately 1964 to 1974. From approximately 1974 to 1988 Levin metals operated a metals recycling facility. From 1988 to the present, Sims has operated a metals recycling facility at the site, where scrap metal, including automobiles and appliances are either sorted, cut, flattened, or compacted, and transported off-site either for further processing or for sale to steel mills. The site uses include offices, employee parking areas, scrap metal handling and stockpiling, and truck loading areas.¹³

Consent Order, Docket No. HSA-CO 05/06-021 divided the Sims Metal site into two divided study areas: Study Area #1 and Study Area #2. Study Area #1 located within the RSP Area consists of approximately 1-acre portion of APN 002-001-035-0001, currently owned by DRV and leased to Sims. Sims and Levin Enterprises, Inc. is the primary respondent for Study Area #1. Levin Enterprises, Inc. is the current landowner of approximately 1.3 acres of Study Area #2 (APN 002-031-001-0000) and is a former operator of the site. SAG/WIG LLC is the current

¹¹ Department of Toxic Substances Control, 2006. Explanation of Significant Differences Regarding Northwest Corner RAP Amendment, Union Pacific Railyard – Sacramento Site, September 13, 2006.

¹² Rashmawi, Elias Managing Senior Principal, Brownfield Development Subsector Leader, Stantec, personal communication, December 15, 2015.

¹³ Amec Geomatrix, Inc., 2012. Revised Feasibility Study Report, Sims Metal Site – Study Area #1, 130 North 12th Street, Sacramento California. Consent Order Docket No. HAS-CO 05/06-021, June 15, 2012.

landowner of approximately 6.5 acres of Study Area #2 (APN 002-031-002-0000) located outside of the RSP Area. Sims, Levin and SAG/WIG are the primary respondents with respect to Study Area #2.¹⁴

Potential contaminants of concern within Study Area #1 include metals (lead), polychlorinated biphenyls, Polynuclear Aromatic Hydrocarbons and Total Petroleum Hydrocarbons (diesel and motor oil range). Completed in 2012, the Revised Feasibility Study Report developed remedial action objectives and alternatives. The remedial action objectives included the prevention of exposure to future outdoor industrial and construction workers to contained soils and vapor exceeding cumulative cancer risk and restoring groundwater quality to meet applicable beneficial uses. Based on these remedial action objectives, remedial action alternatives were development for the site based the current uses. The Revised Feasibility Study Report concluded that the remedial action alternatives may be revisited should land uses change in the future.

Central Shops

Since the 2007 RSP EIR the Final Feasibility Study Report for the Central Shops Soil Study Area and the South Groundwater Plume was approved by DTSC. The main objective of the Final Feasibility Study Report was to gather sufficient information to support an informed risk management decision regarding the most appropriate remedy for a site.¹⁵

In January 2013 the remedial action plan was approved by DTSC.¹⁶ Additionally, in December 2014 the Remedial Design and Implementation Plan – Part G was prepared to address the Shallow Soil Target Area component described in the above mentioned Final Draft Remedial Action Plan. The Shallow Soil Target Area is defined by presence of nonvolatile COCs (metals, TPH, and nonvolatile SVOCs) remedial goals, which are predominantly within the upper 10 feet of soil. The Remedial Design and Implementation Plan includes objective for the Shallow Soil Target Area remedy component, a summary of the results of the pre-design investigation performed in August and September 2014, and implementation plans for the soil excavation.¹⁷

As of December 2015, all accessible contaminated soils had been removed and/or remediated and soil remediation activities associated within the Central Shops had been completed. Certification of Remedial Action is anticipated from DTSC in 2016. Due to access and potential impact to the buildings, soils under the Central Shops buildings and areas immediately adjacent to those

¹⁴ Amec Geomatrix, Inc., 2012. Revised Feasibility Study Report, Sims Metal Site – Study Area #1, 130 North 12th Street, Sacramento California. Consent Order Docket No. HAS-CO 05/06-021, June 15, 2012.

¹⁵ ERM-West, Inc., 2010. Final Feasibility Study Report, Central Shops Study Area – Soil and South Plume Study Area – Groundwater, Sacramento, California, July 2010.

¹⁶ ERM-West, Inc., 2013. Final Draft Remedial Action Plan, Central Shops Area – Soil and South Plume Study Area – Groundwater, Sacramento, California, January 2013.

¹⁷ ERM-West, Inc., 2014. Remedial Design and Implementation Plan - Part G, Shallow Soil Target Area, Central Shops Study Area, Former SPTCo Sacramento Railyard, Sacramento, California. December 23, 2014.

buildings have not been remediated. The Soil Management Plan will be used to manage soils within these inaccessible areas, should they be encountered in the future.¹⁸

Sacramento Station

As discussed on pages 6.5-12 and 6.5-13 of the 2007 RSP Draft EIR, a LUC was established as part of the closure process. The LUC restricts certain uses and identifies acceptable remedial goals in soils for future development scenarios. A Closure Certification Report for the Sacramento Stations Metals Area and a Closure Report for Sacramento Station Hydrocarbon Area Soils were submitted to DTSC in January 1991 and May 1994, respectively. DTSC certified the regulatory closure of the site on May 27, 1994, and the LUC was recorded. Impacted soils in accessible areas located under the former mainline tracks and in Areas A & B identified in the Sacramento Station Covenant were subsequently remediated and approved by DTSC. With the exception of an inaccessible area located under a concrete platform owned by the City of Sacramento outside the RSP Area, no further investigation or remediation is necessary in this portion of the RSP Area.

Since the publication of the 2007 RSP EIR, the mainline tracks that previously cut through the Sacramento Station site were relocated north. This allowed for the soils under former the mainline tracks that were not previously accessible to be remediated, as previously indicated. In September of 2015 a new LUC was issued replacing the Sacramento Station Covenant for areas owned by DRV within the Sacramento Station.¹⁹ Other areas within the Sacramento Station owned by Administrative Offices of the Courts and City of Sacramento remain under the Sacramento Station Covenant.²⁰

Since the publication of the 2007 RSP EIR, 3 tunnels, 2 bridges, 2 roadways, passenger facilities, mainline track corridor, two detention basins, and several wet and dry utilities have been constructed within or adjoining the Sacramento Station Study Area (these facilities also extended into the Central Shops, the Central Corridor, and the Northern Shops study areas). Additional roadways and one detention basin expansion are being constructed in this area in 2016. Construction of these features was and is being completed in accordance with terms of the Sacramento Station Covenant and the Railyards Project Soil and Groundwater Management Plan (SGMP). The SGMP is described in Section 4.8.2 Regulatory Setting.

¹⁸ Rashmawi, Elias, Managing Senior Principal, Brownfield Development Subsector Leader, Stantec, personal communication, December 15, 2015.

¹⁹ A portion of the Sacramento Station (the block between H and G Streets and 6th and 7th Streets) was purchased from the DRV by SMUD; however, this property remains covered by the 2015 LUC.

²⁰ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

Manufactured Gas Plant

The Manufactured Gas Plant Study Area was identified in 2003, after discovery of remnants of Manufactured Gas Plant gas holders on the western boundary of the Northern Shops area during soil remediation activities. Excavation of this area also encountered visible staining, strong odors, and a floating hydrocarbon product similar to fuel oil at the water table and soil interface.

Completed in 2015, the Remedial Investigation Report – Former Manufactured Gas Plant Study Area focuses on both soil and groundwater. The Remedial Investigation Report identified a broad spectrum of petroleum hydrocarbons, VOCs, and SVOCs.²¹

It is anticipated that the following documents will be completed within the next few years for the Manufactured Gas Plant Study Area: health risk assessment, 2017; remedial action plan, 2017; and a remedial design implementation plan, 2018. Implementation is expected to occur between 2018 and 2020.²²

West Jibboom Street Property

As discussed on page 6.5-13 of the 2007 RSP Draft EIR, a Phase 1 Environmental Site Assessment (ESA) was prepared for the westernmost portion of the proposed Riverfront District. This area, which is located between Jibboom Street and the east bank of the Sacramento River, would remain as open space under the Specific Plan.²³ The Jibboom Street Property (APN 002-0010-023), currently owned by the California Department of Parks and Recreation, included the Sacramento Gas Company from 1854 to the late 1800s, and later housed the Pioneer Mill, warehouses, and blacksmithing shop from the late 1800s through the mid-1900s. Presently on the site is the shell of a warehouse built in 1918; the site is otherwise vacant and is used as a bicycle path.

Remediation efforts have removed much of the shallow soil across the RSP Area. Extensive areas were excavated up to 5 feet below the ground surface with some areas excavated up to 34 feet below the ground surface.²⁴ The excavated areas did not include the levee area along the Sacramento River at the proposed location of the storm drain outfall structure. Some soil, sediment, and soil vapor samples were collected in the levee and shore area just south of the proposed outfall location and analyzed for various chemicals as part of the investigation and cleanup of the former Manufactured Gas Plant.²⁵ The sampled area along the levee extended from the former Manufactured Gas Plant adjacent to the old Southern Pacific pump station

²¹ ERM-West, Inc., 2015. Final Remedial Investigation Report - Manufactured Gas Plant Study Area, Former SPTCo Sacramento Railyard, Sacramento, California, April 2015.

²² Rashmawi, Elias, Stantec, 2015. Preliminary notes to SEIR preparer regarding remediation at the Sacramento Railyards [Memorandum], September 15, 2015.

²³ The remaining portion of the proposed Riverfront District (i.e., property between Jibboom Street and I-5) was investigated as part of the overall investigation and remediation process, specifically in the Northern Shops, Central Shops, and Sacramento Station study areas. See Figure 4.8-1.

²⁴ ERM-West, Inc., 2015, *First Five-Year Review Report, Former SPTCo Sacramento Railyard, Sacramento, California*, June 2015.

²⁵ ERM-West, Inc., 2015. Final Remedial Investigation Report - Manufactured Gas Plant Study Area, Former SPTCo Sacramento Railyard, Sacramento, California, April 2015.

northward to within about 200 feet of the proposed outfall location. Soil gas, river sediment, and soil samples were analyzed for TPH as gasoline, diesel, and motor oil; VOC; SVOC, and metals. The sample results were compared to screening levels to assess whether further action at a given location was needed. The screening levels were the lowest applicable regulatory-established screening levels (most restricted), which included California Human Health Screening Levels, Residential and Commercial Criteria, United States Environmental Protection Agency Region 3, 6, and 9 Screening Levels; site-specific goals for total extractable petroleum hydrocarbons, and Regional Water Board Environmental Screening Levels for each respective constituent.

Low levels of VOCs, SVOCs, TPH, and metals were detected in some of the soil and soil vapor samples. However, the concentrations of chemicals in the northernmost samples were either below the laboratory analytical reporting limits or below the screening levels. For the river sediment samples, only some metals were detected; however the concentrations were consistent with upstream background levels, suggesting that the former Manufactured Gas Plant did not release contaminants to the river sediments at detectable levels.

South Plume

Groundwater under the Sacramento Station, which is part of the South Plume remediation area, is subject to remedial measures under the Central Shops and South Plume Remedial Action Plan which was approved in January 2013, and is currently being implemented. The Remedial Action Plan identifies remediation goals (levels and timing) and preferred alternative for achieving established remediation goals.²⁶

Prior to the Central Shops and South Plume Remedial Action Plan, the Final Feasibility Study Report for the South Plume Study Area was approved in July 2010. The main objective of the Final Feasibility Study Report was to gather sufficient information to support an informed risk management decision regarding the most appropriate remedy for a site.²⁷

Groundwater and soil vapor investigation and remediation are underway in accordance with the approved plans.

Lagoon Plume

In 2014, the Final Health Risk Assessment for the Lagoon Groundwater Study Area was completed. The Final Health Risk Assessment indicated that potential risk could be associated with unremediated conditions under future on-site land use scenarios. Further evaluation of groundwater to mitigate these potential risks would be required. The Feasibility Study, anticipated to be completed in late 2016, would further evaluate this risk through development of

²⁶ ERM-West, Inc., 2013. *Final Draft Remedial Action Plan, Central Shops Study Area – Soil and South Plume Study Area – Groundwater, Sacramento, California*. January 2013.

²⁷ ERM-West, Inc., 2010. *Final Feasibility Study Report, Central Shops Study Area – Soil and South Plume Study Area – Groundwater, Sacramento, California*, July 2010.

health based remedial goals and the incorporation of a more contemporary data set.²⁸ In addition to the Feasibility Study, it is anticipated that the following documents will be completed within the next few years for the Lagoon Groundwater Study Area: Remedial Action Plan, 2017; and Remedial Design and Implementation Plan, 2018.²⁹

Manufactured Gas Plant Plume

A small plume of groundwater impact is associated with the Manufactured Gas Plant Study Area and is centered on the former gas holders. The COCs identified include total petroleum hydrocarbons, VOCs, and SVOCs, similar to the sources identified in soils. Metals were detected in groundwater at concentrations that are generally consistent with naturally occurring concentrations. As discussed above, the Remedial Investigation Report – Former Manufactured Gas Plant Study Area for both soil and groundwater was completed in 2015.³⁰ It is anticipated that the following documents will be completed within the next few years for the Manufactured Gas Plant Study Area: Health Risk Assessment, 2017; Remedial Action Plan, 2017; and a Remedial Design Implementation Plan, 2018. Implementation is expected to occur between 2018 and 2020.³¹

Project-Specific Components

The following paragraphs summarize the study areas within which the KP Medical Center, MLS Stadium, and the Stormwater Outfall are located, as well as the remediation status for these same areas.

KP Medical Center

The KP Medical Center is located within the Northern Shop Soils Study Area and the Lagoon Groundwater Study Area. Soil contaminants of concern for this area were metals (primarily lead), TPH, VOC, SVOC, and asbestos. As mentioned above, soil remediation for the Northern Shop Study Area was certified complete in November 2015, and is subject to the 2015 LUC.³²

As previously described, a Final Health Risk Assessment was completed in 2014 which indicated that potential risk could be associated with unremediated conditions under future on-site land use scenarios. Constituents of concern identified included metals, VOCs, SVOCs, arsenic, TPH, and 1,4-dioxane.³³ The feasibility study, anticipated to be completed in 2016, would further evaluate the risk through development of health-based remedial goals and incorporation of a more contemporary data set. A Remedial Design and Implementation Plan is anticipated in 2018.

²⁸ ERM-West, Inc., 2014. Final Health Risk Assessment Report Lagoon Groundwater Study Area, December 2014.

²⁹ Department of Toxic Substances Control, 2015. Up, Downtown Sacramento-Lagoon (34400008) Available: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=34400008. Accessed November 30, 2015.

³⁰ ERM-West, Inc., 2015. Final Remedial Investigation Report - Manufactured Gas Plant Study Area, Former SPTco Sacramento Railyard, Sacramento, California, April 2015.

³¹ Rashmawi, Elias, Stantec, 2015. Preliminary notes to SEIR preparer regarding remediation at the Sacramento Railyards [Memorandum], September 15, 2015.

³² Department of Toxic Substances Control, 2015. Certification of Remedial Action, The Railyards, Sacramento California, November 20, 2015.

³³ ERM-West, Inc., 2014. Final Health Risk Assessment Report Lagoon Groundwater Study Area, December 2014.

MLS Stadium

The MLS Stadium is located within the Lagoon Study Area and Car Shop Nine Study Area. Soil contaminants of concern for this area were metals (primarily lead), TPH, VOC, SVOC, and asbestos. As mentioned above, soil remediation for the Lagoon and Car Shop None Study Areas was certified complete November 2015 and is subject to the 2015 LUC. However, two small areas below the existing portion of Track 150, clipping the southeastern and southwestern corners of the Car Shop Nine Study Area were inaccessible for remediation. These minor areas will require further remediation in accordance with the Remedial Action Plan prior to excavation or initiation of any redevelopment activities.³⁴

The groundwater remediation process is underway for this area in accordance with relevant portions of the South Plume Remedial Action Plan (occupying the southern portion beneath the MLS Stadium area). The Final Health Risk Assessment for the Lagoon Groundwater Study Area identified metals, VOCs, SVOCs, arsenic, TPH, and 1,4-dioxane.³⁵ In the upcoming years additional site remediation documentation is anticipated for the Lagoon Plume, which occupies the northern portions beneath the MLS Stadium.

Stormwater Outfall

The Stormwater Outfall is located within the Northern Shops Study Area for soils; however it is outside of any identified groundwater contamination areas. Based on the existing investigative and remediation records, there are no known soil or groundwater significant remaining concerns associated with the location of the Stormwater Outfall. The existing DTSC clean parcel letters that approved soil remediation within the Stormwater Outfall site (for the Northern Shop Study Area), and the November 2015 soil certification and the 2015 LUC complete the remediation process for the Stormwater Outfall site.

Hazardous Materials Transportation through the RSP Area

Rail

The UPRR main line tracks run through the RSP Area. The tracks carry both passenger (Amtrak) and freight trains. The freight trains that pass through the RSP Area could carry hazardous materials. Any shipper that chooses to use rail to transport hazardous materials may do so, provided the shipper and rail car(s) transporting the materials meet all federal rail safety transportation requirements for hazardous materials. In the event of an emergency involving an accidental or threatened release of hazardous substances, this information would immediately be available to response personnel via a coordinated national, state, and local emergency response system (see Section 4.8.2 Regulatory Setting, below).

³⁴ Department of Toxic Substances Control, 2015. Certification of Remedial Action, The Railyards, Sacramento California, November 20, 2015.

³⁵ ERM-West, Inc., 2014. Final Health Risk Assessment Report Lagoon Groundwater Study Area, December 2014.

Roadways

Only one open street, 7th Street, currently runs through the RSP Area, connecting downtown Sacramento to the River District (or Richards Boulevard area) to the north. Three additional roads, 5th Street, 6th Street and Railyards Boulevard, have been constructed within the RSP Area. Extension of F and G streets are under construction and projected to be completed in 2016. Local truck traffic transporting products containing hazardous substances may legally use these roadways when they are open. I-5 is a major highway on which hazardous substances are routinely transported.

Existing Hazardous Materials Use

Current On-Site Conditions

Small quantities of household-type products (e.g., cleaning agents, pesticides, paints) are used at the station building and platforms for maintenance. Small quantities of various chemicals and fuel are also used at the California Railroad Museum shop for railcar rehabilitation and restoration.³⁶ Fueling, including storage, at the main line platforms occurs for parked locomotives.

Adjacent Uses

Surrounding land uses where hazardous substances could be present (e.g., transported, used, or stored) include a former PG&E transformer station in a narrow parkway between the Sacramento River and the RSP Area to the west of the site, and the offsite portion of the Sims Metals leased property east of the RSP Area. The area north and northeast of the RSP Area was historically a largely industrial and commercial area, although some residential uses, a school and social services were also present in this area when the 2007 RSP EIR was prepared. This area, which had been known as the Richards Area, is now called the River District. The River District is undergoing a transition to more residential and mixed use land uses, such as the Township Nine development at 7th Street and Richards Boulevard. However, a number of industrial, warehouse and heavy commercial uses are still located in the area. There are also municipal facilities in this area, including the City of Sacramento's water treatment plant and the State Printing Plant. Commercial facilities include gasoline service stations, freight and trucking facilities, and motels. The downtown business district, consisting primarily of residential and office development and some retail, is south of the RSP Area.

4.8.2 Regulatory Setting

Federal

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (USEPA), U.S. Department of Labor Occupational Safety and Health Administration (Fed/OSHA), and the U.S. Department of Transportation (DOT). Federal laws, regulations, and responsible agencies are summarized in **Table 4.8-1**.

³⁶ City of Sacramento, 2007. Railyards Specific Plan Draft Environmental Impact Report. August 2007.

State and local agencies often have either parallel or more stringent rules than federal agencies. In most cases, state law mirrors or overlaps federal law and enforcement of these laws is the responsibility of the state or of a local agency to which enforcement powers are delegated. For these reasons, the requirements of the law and its enforcement are discussed under either the state or local agency section.

State

The primary State agencies with responsibility for hazardous materials management include the California Environmental Protection Agency (Cal EPA), California Occupational Safety and Health Administration (Cal/OSHA), California Department of Health Services (CDHS), California Highway Patrol and the California Department of Transportation. State laws, regulations, and responsible agencies are summarized in **Table 4.8-2**.

**TABLE 4.8-1.
FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

Classification	Law or Responsible Federal Agency	Description
Hazardous Materials Management	Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA))	Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.
Hazardous Waste Handling	Resource Conservation and Recovery Act of 1976 (RCRA)	Under RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste from "cradle to grave."
	Hazardous and Solid Waste Act	Amended RCRA in 1984, affirming and extending the "cradle to grave" system of regulating hazardous wastes. The amendments specifically prohibit the use of certain techniques for the disposal of some hazardous wastes.
Hazardous Materials Transportation	U.S. Department of Transportation (DOT)	DOT has the regulatory responsibility for the safe transportation of hazardous materials. The DOT regulations govern all means of transportation except packages shipped by mail (49 CFR).
	U.S. Postal Service (USPS)	USPS regulations govern the transportation of hazardous materials shipped by mail.
Occupational Safety	Occupational Safety and Health Act of 1970	Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR).
Radioactive Materials ^a	Atomic Energy Act	Administered by the Nuclear Regulatory Commission, the act regulates the use and control of radioactive material. ^b
Biosafety Standards ^c	The National Institutes of Health, and the Centers for Disease Control and Prevention (CDC)	Operated under the U.S. Department of Health and Human Services, these agencies establish standards for working with biohazardous materials.
Structural and Building Components (Lead-based paint, polychlorinated biphenyls, and asbestos)	Toxic Substances Control Act	Regulates the use and management of polychlorinated biphenyls in electrical equipment, and sets forth detailed safeguards to be followed during the disposal of such items.
	USEPA	The USEPA monitors and regulates hazardous materials used in structural and building components and their effects on human health.

NOTES:

a U.S. Nuclear Regulatory Commission, Atomic Energy Act of 1954.

b Radioactive material is any material or combination of materials that spontaneously emit ionizing radiation.

c A hazardous biologic material is any potentially harmful biologic material (including infectious agents, oncogenic viruses, and recombinant DNA) or any material contaminated with a potentially harmful biologic material.

SOURCE: ESA.

**TABLE 4.8-2.
STATE LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

Classification	Law or Responsible State Agency	Description
Hazardous Materials Management	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)	In January 1996, Cal EPA adopted regulations, which implemented a Unified Program. The plan is implemented at the local level and the agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency.
	State Hazardous Waste and Substances List ("Cortese List")	The RSP Area is included on the "Cortese List" compiled pursuant to Government Code section 65962.5 and referenced in Public Resources Code 21092.6. The oversight of hazardous substances release sites often involves several different agencies that may have overlapping authority and jurisdiction. DTSC is the lead agency coordinating with the Regional Water Board and other agencies regarding issues pertaining to hazardous substances release sites.
Hazardous Waste Handling	Cal EPA	The Cal EPA is the parent agency of the DTSC which regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.
	California Hazardous Materials Release Response Plan and Inventory Law of 1985	The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials onsite prepare a business plan and submit it to local health and fire departments.
	DTSC	Under the California Hazardous Waste Control Act, California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq., DTSC (a division of the Cal EPA) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills. DTSC is also the administering agency for the California Hazardous Substance Account Act. California Health and Safety Code, Division 20, Chapter 6.8, Sections 25300 et seq., also known as the State Superfund law, providing for the investigation and remediation of hazardous substances pursuant to State law.
Hazardous Materials Transportation	Part 9 of the California Building Standards Code	Part 9 the California Fire Code regulates the operation, placement, and use of emergency generators.
	Title 26 of the California Code of Regulations	Regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR).
	California Highway Patrol and the California Department of Transportation (Caltrans)	These two state agencies are primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.
Occupational Safety	Cal/OSHA	Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the Code of Federal Regulations (CFR). Cal/OSHA standards are generally more stringent than federal regulations.
	Cal/OSHA regulations (8 CCR)	Concerning the use of hazardous materials in the workplace require employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.

Classification	Law or Responsible State Agency	Description
Occupational Safety (cont.)	California Office of Statewide Health Planning and Development	The Office of Statewide Health Planning and Development serves as the regulatory building agency for all hospitals and nursing homes in California. Its primary goal in this regard is to ensure that patients in these facilities are safe in the event of an earthquake or other disaster, and to ensure that the facilities remain functional after such an event in order to meet the needs of the community affected by the disaster.
Medical Waste	Medical Waste Management Act	Within the regulatory framework of the Medical Waste Management Act, the Medical Waste Management Program of the CDHS ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste offsite treatment facilities and transfer stations throughout the state. The CDHS also oversees all medical waste transporters.
Aviation	Caltrans	Caltrans' Division of Aeronautics issues permits for all heliports in the State of California. Heliports must meet the Federal Aviation Administration's Final Approach and Takeoff Area standards in order to obtain a Caltrans operating permit, in addition to complying with Title 21 CCR, Airports and Heliports, which is based upon the Federal Aviation Administration's Advisory Circular on Heliport Design.
Underground Infrastructure	California Government Code Section 4216-4216.9	Section 4216-4216.9 "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

Local

City of Sacramento 2035 General Plan

The following goals and policies from the 2035 General Plan are relevant to Hazards and Hazardous Substances.

Goal PHS 3.1 Reduce Exposure to Hazardous Materials and Waste. Protect and maintain the safety of residents, businesses, and visitors by reducing, and where possible, eliminating exposure to hazardous materials and waste.

Policies

PHS 3.1.1 Investigate Sites for Contamination. The City shall ensure buildings and sites are investigated for the presence of hazardous materials and/or waste contamination before development for which City discretionary approval is required. The City shall ensure appropriate measures are taken to protect the health and safety of all possible users and adjacent properties.

PHS 3.1.2 Hazardous Material Contamination Management Plan. The City shall require that property owners of known contaminated sites work with Sacramento County, the State, and/or Federal agencies to develop and implement a plan to investigate and manage sites that contain or have the potential to contain hazardous materials contamination that may present an adverse human health or environmental risk.

PHS 3.1.4 **Transportation Routes.** The City shall restrict transport of hazardous materials within Sacramento to designated routes.

PHS 3.1.8 **Risks from Hazardous Materials Facilities.** The City shall review proposed facilities that would produce or store hazardous materials, gas, natural gas, or other fuels to identify, and require feasible mitigation for, any significant risks. The review shall consider, at a minimum, the following: presence of seismic or geologic hazards; presence of hazardous materials; proximity to residential development and areas in which substantial concentrations of people would occur; and nature and level of risk and hazard associated with the proposed project.

Goal PHS 4.1 Response to Natural and Human-Made Disasters. Promote public safety through planning, preparedness, and emergency response to natural and human-made disaster

Policies

PHS 4.1.2 **Post-Disaster Response.** The City shall plan for the continued functioning of critical facilities following a major seismic or geologic disaster to help prevent major problems during post-disaster response such as evacuations, rescues, large numbers of injuries, and major clean up operations.

Goal PHS 5.1 Human Services and Healthy Community. Improve provision of human services and promote health and safety.

Policies

PHS 5.1.10 **Pest/Vector Management.** The City shall coordinate with appropriate agencies (e.g., Sacramento-Yolo Mosquito and Vector Management District) to support pest/vector management strategies (e.g., mosquito control), require drainage of untreated pools and other water features in homes and businesses that are vacant or in sale proceedings, and enhance public awareness of vector control.

As discussed in Impacts 4.8-1 through 4.8-7, the RSP has been investigated to identify areas with possible hazardous materials contamination to ensure the safety of people in the vicinity of these areas. In addition, the RSP would be managed in a way that would reduce the potential for adverse impacts on human or environmental health. Therefore, the RSPU would be consistent with the General Plan goals and policies.

Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. Sacramento County has adopted the Area Plan for Emergency Response to Hazardous Materials Incidences in Sacramento County, which is administered by the Environmental Management Department.³⁷ The Area Plan outlines the procedures that County regulatory and response agencies will use to coordinate management, monitoring, containment, and removal of hazardous materials in the event of an accidental release. The Area Plan also provides guidance for coordinating the responses of other agencies, including the DTSC, CHP California Department of Fish and Wildlife (CDFW), RWQCB, and local fire departments.

³⁷ Sacramento County Environmental Management Department, 2012. Area Plan for Emergency Response to Hazardous Materials Incidents in Sacramento County, September 2012.

Sacramento County Environmental Management Department, Hazardous Materials Division

The Hazardous Materials Division of the Sacramento County Environmental Management Department is the designated Certified United Program Agency (CUPA) for the City of Sacramento and Sacramento County and is responsible for implementing six statewide environmental programs for Sacramento County, including:

- Underground storage of hazardous substances (USTs);
- Hazardous Materials Business Plan requirements;
- Hazardous Waste Generator requirements;
- California Accidental Release Prevention program;
- Uniform Fire Code hazardous materials management plan; and
- Above Ground Storage Tanks (Spill Prevention Control and Countermeasures Plan).

Sacramento County Well Ordinance

Chapter 6.28 of the Sacramento County Code is intended to protect the health safety and general welfare of the people by ensuring that the groundwater of the County is not polluted or contaminated by improper well construction, modification, repair, or abandonment. The ordinance prohibits digging, boring, drilling, deepening, modifying, repairing or destroying a well without receiving a permit to do so from the Sacramento County Environmental Management Department.³⁸

Sacramento-Yolo Mosquito and Vector Control District

The Sacramento-Yolo Mosquito and Vector Control District (SYMVCD) provides mosquito and vector control for Sacramento and Yolo counties. To accomplish this, the District provides ongoing surveillance of mosquitoes and other vectors to determine the threat of disease transmission and lower annoyance levels. The District has enforcement authority under the California Health and Safety Code if needed to respond to conditions that could encourage growth of mosquitos and other vectors. The Sacramento-Yolo Mosquito and Vector Control District works with various City agencies to develop and implement abatement strategies including working with the DOU. The DOU oversees and applies vector control best management practices at detention basins, drainage channels, drainage pump stations and drop inlets in the CSS located throughout the City. As part of their role, DOU reviews private development projects for application of identified best management practices.

³⁸ Sacramento County Code. Chapter 6.28 Wells and Pumps.

Restriction Governing the RSP Area

Remediation of site soils have been completed for the Central Corridor, Car Shop Nine, Northern Shops, Lagoon (except for the Northwest Corner) study areas in accordance with the 1988 Enforceable Agreement and the DTSC-approved Remedial Action Plans. However not all soils were remediated to levels protective for unrestricted land use, so the Remedial Action Plans for these areas required a LUC. **Table 4.8-3** list the LUC within the RSP Area and Figure 4.8-4 identifies each areas covered by those restriction.

**TABLE 4.8-3.
LUCS IN THE RSP AREA**

Area Name	Adoption Date	Land Use Covenants
Sacramento Station	May 6, 1994	The Sacramento Station Covenant allows for industrial uses, commercial uses, and landscaped and paved areas without restriction. Restricted use include but are not limited to: residential, day care, educational, public or institutional uses, parks, playgrounds, water features, open space, yards, gardens, and landscaped areas. No excavation at and/or removal of soil from the site is allowed, except as specifically allowed, without the prior written approval of DTSC. Excavated soil must be tested for contamination and properly used, treated, and/or disposed of as required by law and DTSC. In September of 2015 a new LUC was issued replacing this Sacramento Station Covenant for areas owned by DRV within the Sacramento Station. Restrictions included in the 1994 covenant were revised in the 2015 LUC, the currently governing covenant. Other areas within the Sacramento Station owned by Administrative offices of the Courts and City of Sacramento remain under the Sacramento Station Covenant.
7th Street Corridor	July 11, 2001	The 7 th Street Covenant restricts the use of residence, hospitals, school or day care centers. Prohibited activities include raising food, drilling for water, oil or gas with DSTC approval, and the extraction of groundwater for purpose other than remediation or construction dewatering.
Lagoon, Central Corridor, Car Shop Nine and Northern Shops	September 30, 2015	For any use, which includes commercial, retail, industrial, hospital, school, daycare, mixed use, residential or park use, that include areas in which direct human exposure to soil is possible following construction the top layer of clean soil should be maintained. No activities that would disturb the soil are allowed within the site without a soil management plan approved in writing by DTSC. Any soils that are brought to the surface should be managed in compliance with all applicable provision of the state and federal laws and an approved soil management plan. Appendix H.2 includes this LUC.

2015 Land Use Covenant

As part of the certification process, and pursuant to Civil Code section 1471, DTSC determined that a LUC was necessary to protect present or future human health or safety or the environment as a result of hazardous materials (as defined in Health and Safety Code section 25260) remaining on the land after remediation. DTSC also concluded that the Property (Assessor's Parcel Numbers 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058), as remediated and when used in

compliance with the Environmental Restrictions of the 2015 LUC, would not present an unacceptable risk to present and future human health or safety or the environment.³⁹

The 2015 LUC sets forth environmental restrictions that apply to and encumber the site and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. The covenant runs with the land pursuant to Health and Safety Code section 25355.5 and Civil Code section 1471.

The 2015 LUC includes restrictions and requirements in Article 4, which is provided in Appendix H.2. Issues addressed in the 2015 LUC include:

4.01 Prohibited Use If improvements to be constructed for any use, which allowed uses include, but are not limited to commercial, retail, industrial, hospital, school, daycare, mixed use, residential or park use, include areas in which direct human exposure to Native Soil remains possible following the completion of such construction (e.g., yards, open space or landscaped areas), the Owner or Occupant shall install, keep and maintain a top layer of clean soil of a thickness and composition to prevent exposure to such Native Soil which is reasonably satisfactory to DTSC as being protective of human health, and the environment approved in writing by DTSC or determined by DTSC on an individual parcel basis. With the exception of routine maintenance, the Compliant Soil Layer should not be disturbed unless the Owner or Occupant of the site demonstrates to the reasonable satisfaction of DTSC that the disturbance of the Compliant Soil Layer is necessary to the present or modified use of the site and can be accomplished in a manner that would not materially increase exposure to the Native Soil as compared to the existing Compliant Soil Layer or is otherwise performed and completed in a manner the DTSC approves as being protective of human health and the environment. DTSC may waive the requirement of a Compliant Soil Layer on a particular site if it is demonstrated to the DTSC's satisfaction, that the Native Soil would not pose an unacceptable risk to human health and safety and the environment.

4.02 Soil Management. No activities that would disturb the soil are allowed within the site without a soil management plan approved in writing by DTSC. Any soils that are brought to the surface should be managed in compliance with all applicable provision of the state and federal laws and an approved soil management plan.

4.03 Prohibited Activities. Prohibited activities include the extraction of groundwater without an approved groundwater management plan, or the drilling for water, oil, or gas without prior written approval by DTSC.

³⁹ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

- 4.04 Non-Interference with Remediation Systems.** No disruption of any Remediation Systems are permitted without prior written approval by DTSC. DTSC should also consider the location and placement of new Remediation Systems to avoid interference with new development.
- 4.05 Vapor Intrusion Mitigation Management.** Any enclosed building or enclosed structure or utility corridors to be constructed within the Vapor Mitigation Areas must be designed and constructed to include Vapor Mitigation unless exempted from such requirement by DTSC. If Vapor Mitigation is required by DTSC, the Downtown Railyard Venture or subsequent Owner shall certify in writing to DTSC within 30 days following completion of such construction that the required Vapor Mitigation was incorporated into such construction in accordance with the requirements of DTSC.
- 4.06 Access for DTSC.** DTSC shall have a reasonable right of entry and access to the site for inspection, monitoring, and other activities as deemed necessary by DTSC in order to protect the public health or safety, or the environment.
- 4.07 Access for Implementing Operation and Maintenance.** The entity or person responsible for implementing operation and maintenance activities should be able to access the site for the purpose of implementing operation and maintenance activities until DTSC determines that no further operation and maintenance activity is required.
- 4.08 Inspection and Reporting Requirements.** One purpose of the MOA is to address all monitoring, inspection and reporting requirements required by the 2015 Land Use Covenant (Article 4). Therefore, it is understood that the reporting requirements will be met, as long as the MOA is complied with. If reporting requirements are not met through the MOA, then each Owner shall conduct an annual inspection of its portion of the Property verifying compliance with the Covenant, and shall submit an annual written inspection report to the DTSC for its approval by March 15th of each year.
- 4.09 Signage Requirement.** For those areas of the property that remain undeveloped and at which disturbance of Native Soil remains possible, the owner(s) of such unimproved portions of the Property shall post and maintain signage which is reasonably adequate to provide notice of no trespassing, and the prohibition of disturbing soils.

Failure of the Owner or Occupant to comply with the Covenant would be grounds for the DTSC to require modification or removal of any Improvements constructed or placed upon any portion of the Property in violation of the Covenant. Violation of the Covenant, including such as failure to submit a record or report to the Department, would be grounds for DTSC to pursue administrative, civil, or criminal actions, as provided by law.

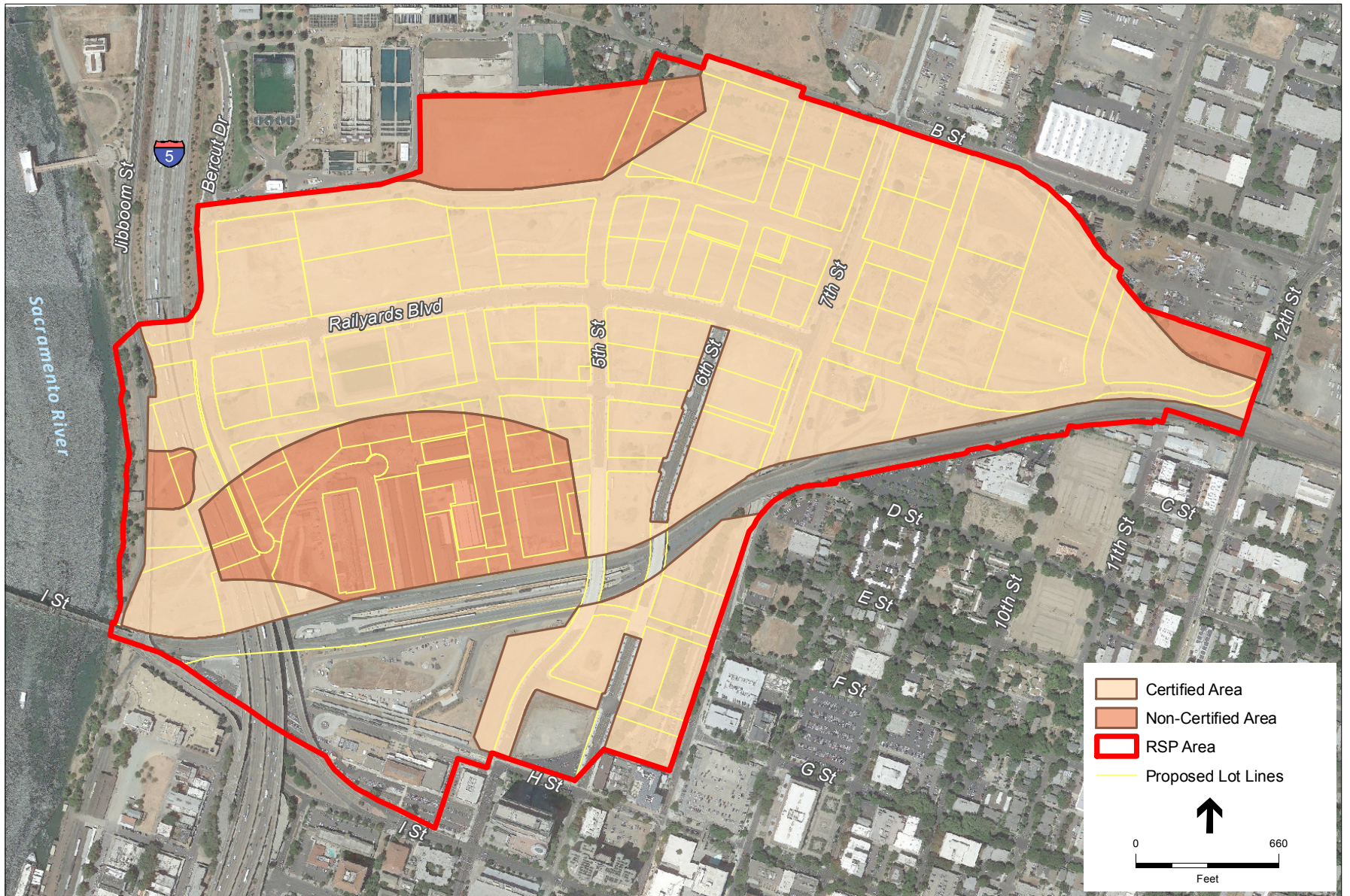
Railyards Project Soil and Groundwater Management Plan

The Railyards Projects Soil and Groundwater Management Plan or SGMP (see Appendix H.2) was approved by DTSC in 2015. The SGMP was prepared for use with each development project to be constructed within the RSP Area that requires special handling of soil and/or groundwater to ensure compliance with regulatory requirements and other obligations set forth in the SGMP. The SGMP's purpose is to describe required management, handling, and procedures associated with encountering soil and groundwater, and general waste streams with the potential to require special handling. It is based on existing regulatory order(s), including the 1988 Enforceable Agreement, along with relevant established approvals, practices and procedures as set forth and implemented in several project-specific soil and groundwater management plans that have been approved by DTSC and implemented in the RSP Area.

Specifically, the SGMP is applicable to all development projects within the RSP Area and relates to: (1) soils moved, handled, disturbed and/or excavated by or on behalf of a project proponent in anticipation of or during the course of project development; (2) groundwater encountered by or on behalf of a project proponent during the course of project development that requires pumping for excavation activities; and (3) the imposition of and the required satisfaction of other obligations set forth in the SGMP.

Specific provisions of the SGMP apply to: (1) the portion of the RSP Area within the 2015 LUC (referred to as the Certified Area in the SGMP); and (2) the remainder of the RSP Area (referred to as the Non-Certified Area in the SGMP). **Figure 4.8-5** shows the Certified and Non-Certified Areas covered by the SGMP. Unless otherwise indicated, soils within the Certified Area have been certified by DTSC as having met their respective remedial goal requirements. Remedial goals for the RSP Area were selected by DTSC for each Study Area (see Figure 4.8-1). The remedial goals (listed in Exhibit E of the Plan) were established by DTSC to be the more protective value of either construction workers or groundwater exposure taking into account inhalation of volatile constituents of concern released from groundwater into ambient air, trench air, and indoor air. Additionally, a set of remedial goals for groundwater were also selected to restore the groundwater to beneficial use.

The SGMP describes project development management activities for soil and groundwater in Certified Area consistent with DTSC directives for on-site management and testing before appropriate disposition is determined. In addition, the SGMP describes testing, management, treatment and disposition activities what would be implemented in the event that soils or groundwater is determined to be above applicable remediation goal levels. As previously stated, soils in the Certified Area have been certified by DTSC to have met relevant remediation goals; nevertheless, the procedures in the SGMP apply to any soils or groundwater encountered, regardless of the certification status.



SOURCE: Kimley-Horn, 2015; AECOM, 2016; ESA, 2016

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Figure 4.8-5
Certified and Non-Certified Areas

Development in Non-Certified Areas (such as the Central Shops Study Area and the excluded triangle east of Vista Park (in the northwest corner of the Lagoon Study Area) can only commence after the project proponent (defined in the SGMP as the entity that would be primarily responsible for construction of a development project) obtains written approval from DRV, the property owner (defined in the SGMP as a public or private entity that owns all or portions of the RSP Area where projects are to be developed) and DTSC of an addendum to the SGMP (Project Addendum, described in detail below). In addition to its own internal approval process, DRV's approval could include gaining approval from UPRR due to UPRR's ongoing remediation obligations in such areas which may include adherence to additional required processes. Project proponents must assume that all soils, including soils at depths deeper than previously remediated or characterized by UPRR encountered are suspect soils (soils excavated from certified areas with apparent indications that remedial goals could be exceeded as evident from site experience and observations of the Environmental Oversight Project Manager (person designated to oversee activities related to implementation of the SGMP) or other qualified personnel). Soils would be subject to the characterization protocol described in Section 5 of the SGMP.

The property owner and project proponent for a development project are responsible for implementing the SGMP. At the inception of any given development project, the project proponent would submit to DRV and the various property owners whose property would be accessed or impacted, a Project Addendum for approval that provides sufficient project details and describes project specific implementation tasks. The Project Addendum must include the following (to the extent applicable) and any other information required by the SGMP or otherwise requested by approving parties:

1. Brief project description;
2. Project area(s), owner(s), and proponent(s);
3. Project main stakeholders, including public funding agencies, if any;
4. Environmental oversight project manager, construction manager and general contractor;
5. Impacted or restricted areas or properties;
6. Construction plans, including earth work handling and land use plans;
7. Encroachments, transportation and access routes, laydown areas, project management and support areas, off-site soil and material/waste removal and disposal, soil and material import protocols, and any similar such construction plans to be implemented;
8. Groundwater control and dewatering plans, if any;
9. Plans for wells and above ground or subsurface remediation system relocation and replacement, if any;

10. Plans for removal of existing hardscape, especially but not limited to areas where remediation has not occurred, if any;
11. Hazardous waste on-site and off-site handling and disposal plans;
12. Storm water pollution prevention plan;
13. Health and safety plan(s);
14. Transportation and debris handling and removal plan(s); and
15. Archaeology oversight and review plan.

The property owner and its project proponents for a given development project would be responsible for implementing the SGMP in accordance with the LUC (applicable to the Certified Aras), all applicable approvals and relevant laws and regulations.

4.8.3 Analysis, Impacts, and Mitigation

Significance Criteria

The criteria listed below is similar those used in the 2007 RSP EIR. One additional criterion has been added related to the exposure of contaminated groundwater during construction or dewatering activities. This SEIR assumes implementation of the proposed projects would have a significant impact related to hazardous substances if it would:

- Substantially increase the risk of exposure of people to contaminated soils during site development;
- Substantially increase the risk of exposure of future occupants to contaminated soils;
- Interfere with ongoing soil and groundwater remediation efforts for the Railyards cleanup by precluding access to groundwater remediation and monitoring systems at the site during construction or occupancy, or conflict with the cleanup orders;
- Expose occupants to a substantial, unmitigated risk of exposure to contaminated soil or groundwater due to phased development of the specific plan and/or ongoing remediation efforts;
- Expose construction workers, occupants, and/or site visitors to unmitigated hazards associated with the presence of hazardous substances (e.g., asbestos, lead, PCBs, etc.) in buildings that would be renovated and/or restored;
- Substantially increase the risk of exposure of site occupants to inadvertent or accidental releases of hazardous substances to the environment from non-residential uses during project occupancy; or
- Substantially increase the risk of exposure of site occupants to inadvertent or accidental releases of hazardous substances transported on adjacent roadways and rail lines within the RSP Area;

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during construction or dewatering activities.

Methodology and Assumptions

Remediation documentation, the Enforceable Agreement, MOA, 2015 LUC, Sacramento Station Covenant, 7th Street Covenant and interviews were reviewed to identify known contaminated soil and/or groundwater sites and the history of the RSP Area. This information was used to determine if the proposed projects construction activities could encounter known subsurface contamination. The analysis also considers the range and nature of foreseeable hazardous materials use, storage, and disposal resulting from the development within the RSP Area and identifies the primary ways that these hazardous materials could expose individuals or the environment to health and safety risks. Businesses that could locate in the RSP Area are unknown at this time, but the general types of businesses and the range and types of uses (e.g., retail stores, offices, hotel) that are expected to be located in the RSP Area would be limited by zoning to those that use minimal amounts of hazardous materials. Compliance with applicable federal, State, and local health and safety laws and regulations by residents and businesses in the RSP Area is assumed in this analysis, and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. The methods employed in this analysis are similar to those used in the 2007 RSP EIR.

Issues Not Discussed in Impacts

Impact 6.5-3 on pages 6.5-30 and 6.5-31 of the 2007 RSP EIR found that the soil remediation activities would occur concurrently with the development of the 2007 RSP and; therefore, could expose project occupants or visitors to adverse health effects associated hazardous substances. The 2007 RSP EIR found this impact to be potentially significant and recommend Mitigation Measure 6.5-3 be implemented to ensure project occupants or visitors are protected from unacceptable exposure to residual levels of hazardous substances during remediation activities. Since the certification of the 2007 RSP EIR, soil remediation and/or certification has been completed for the majority of the RSP Area including the Lagoon, Central Corridor, Car Shop Nine, Central Shops, and the Northern Shops Study Areas. Remediation activities of the remaining contaminated areas would include implementation of measures to protect construction workers that would also ensure the health and safety of the general public. In addition, it is unlikely that the RSPU would be constructed in advance of the remaining soil remediation efforts. As such, no impact would occur and this issue is not further addressed.

Impact 6.5-5 on pages 6.5-32 and 6.5-33 of the 2007 RSP EIR determined that throughout the life of the project, proposed land uses may be changed and new construction may occur, exposing construction workers and site occupants to unacceptable levels of contaminated soil and/or groundwater in the 2007 RSP Area. The 2007 RSP EIR found this impact to be potentially significant and recommended Mitigation Measure 6.5-5, which required consistency with the Tri-Party MOU. Since the certification of the 2007 RSP EIR soil remediation and certification has been completed for the majority of the RSP Area. Remediation of site soils were conducted in

accordance with the 1988 Enforceable Agreement and the DTSC-approved Remedial Action Plans. Furthermore, LUCs have been recorded which restrict land uses for much of the RSP Area. Land uses associated with project phasing would not therefore present an unacceptable risk to present and future human health or safety or the environment and the cleanup standards affecting soil and groundwater have been established in the remediation documentation. Therefore, no impact would occur.

The 2007 RSP did not address vector control, because it did not anticipate the use of interim retention basins or other facilities that could provide breeding habitat for mosquitos. The 2016 RSPU could require expansion of existing retention basins and/or construction of new temporary basins prior to completion of the Stormwater Outfall (see Section 4.13, Utilities, for more discussion). Such basins, if not properly managed, could provide breeding habitat for mosquitos, which are vectors for several diseases. As discussed in the Regulatory Setting, the SYMVCD in concert with the City DOU requires BMPs to minimize the potential for creation of breeding habitat, which would preclude the conditions necessary for breeding habitat in the RSPU basins, if constructed. Therefore, this issue is not addressed further in this Draft SEIR.

Impacts and Mitigation Measures

Impact 4.8-1: Construction of the proposed projects could result in the exposure of people to health risk associated with contaminated soils and debris.

Impact 6.5-1 on page 6.5-25 of the 2007 RSP EIR found that the 2007 RSP would occur on property that is known to contain contaminated soil which could present a hazard to construction workers if not properly managed. Soil containments of concern include metals, hydrocarbons, VOCs, and SVOCs. The 2007 RSP EIR found this impact to be potentially significant and recommend Mitigation Measure 6.5-1 be implemented for all construction activities to ensure that construction workers are protected from unacceptable exposure to residual levels of hazardous substances during site development.

Impact 6.5-9 pages 6.5-38 and 6.5-39 of the 2007 RSP EIR analyzed the potential for development of the West Jibboom Street Property to expose construction workers to hazardous substances that could be present in soil or groundwater. The 2007 RSP EIR found this impact to be potentially significant and recommended Mitigation Measure 6.5-9, which required a Phase 2 ESA and subsurface geophysical investigation prior to development.

As discussed in Section 4.5.1 Environmental Setting, soils in the RSP Area contained metals, hydrocarbons, VOCs, and SVOCs. Exposure to substances that adsorb to the soil, such as heavy metals and semi-volatile organic compounds, could occur through inhalation or ingestion of affected soils. Exposure to more mobile chemicals, such as VOCs could result from inhalation of gases or skin contact. Exposure to hydrocarbons could result by any of the above-mentioned exposure routes. Unmitigated releases of hazardous substances in excess of risk-based standards could result in adverse short-term or long-term human health or environmental effects. Construction activities that move soil, such as pile driving, grading, trenching and excavation,

could expose construction workers or the public to chemicals and associated health risks if the soils were not remediated to health-protective levels. In addition to contaminated soil, based on the history of industrial activity with the RSP Area, there is the potential to encounter significant debris, industrial deposits, and foundation remnants in fill soils including scrap metal associated with the railroad industry, concrete fragments and foundation pieces, rock fragments such as granite of various sizes, and wood debris. Brick and ACM could also be encountered in debris. ACM-free debris does not pose an unacceptable risk to construction workers. Bricks on their own are not a cause of concern, unless coupled with other factors with known impacts. For example, in some areas in the past, brick and ACM have been associated with foundry waste that generated contaminated soil, which has required remediation.⁴⁰

Railyards Specific Plan Update

Since the certification of the 2007 RSP EIR, soil remediation and certification has been completed for the majority of the RSP Area including the Lagoon, Central Corridor, Car Shop Nine, and the Northern Shops Study Areas. Remediation of site soils for these areas was conducted in accordance with the 1988 Enforceable Agreement and the DTSC-approved Remedial Action Plans. However, soils were not remediated to levels protective for unrestricted land use; therefore, the Remedial Action Plans for these areas required a LUC that places restrictions on certain parcels.⁴¹ As described in the Environmental Setting, DTSC concluded that these properties, as remediated and when used in compliance with the Environmental Restrictions of the 2015 LUC, including soil management, would not present an unacceptable risk to present and future human health or safety or the environment during construction. Specifically, the Environmental Restrictions require that any soils brought to the surface be managed in compliance with all applicable provision of the State and federal laws, and an approved SGMP. In May of 1994, DTSC certified the regulatory closure of the Sacramento Station Study Area.⁴² The portion of the Sacramento Station owned by the DRV is covered under the Environmental Restrictions of the 2015 LUC and an approved SGMP. The Lagoon, Central Corridor, Car Shop Nine, and the Northern Shops Study Areas and the portion of the Sacramento Station owned by DRV are referred to as Certified Areas in the SGMP.

Some areas in the RSP Area owned by DRV are not covered by the 2015 LUC, because they still undergoing remediation and/or have not been certified by DTSC. Such areas are also required to comply with the relevant provisions and requirements of an approved SGMP (these areas are referred to as Non-Certified Areas in the SGMP). There are also other portions of the RSP Area that are not owned by DRV. These portions of the RSP Area are referred to as Other Areas. The following summarizes the impact associated with risk of exposure to contaminated soil and debris

⁴⁰ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

⁴¹ Department of Toxic Substances Control, 2015. Certification of Remedial Action, The Railyards, Sacramento California, November 20, 2015.

⁴² The mainline track that previously cut through the Sacramento Station were relocated north, allowing for the soils under the mainline tracks that were not previously accessible to be remediated.

in Certified and Non-Certified Areas (see Figures 4.8-4 and 4.8-5), and other areas not owned by DRV.

The RSPU also contains policies requiring that development –related excavation be carried out in a manner that meets DTSC requirements (Policy HAZ-1.1) and to fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1).

Certified Areas Owned by DRV

Certified Areas in the RSP Area include the Lagoon, Central Corridor, Car Shop Nine, Northern Shops Study Areas, and the portion of the Sacramento Station Study Area owned by the DRV. Development in each of these areas would be accomplished in compliance with the Environmental Restrictions of the 2015 LUC; therefore, potential exposure to contaminated soil would not present an unacceptable risk to present and future human health or safety or the environment. Specifically, the Environmental Restrictions require that any soils that are brought to the surface be managed in compliance with all applicable provision of the State and federal laws, and an approved SGMP.

The SGMP identifies a wide range of activities to address various development construction tasks that could encountered including, but not limited to, soil excavation and stockpiles, soil transportation, health and safety, asbestos handling and mitigation, groundwater handling, debris handling, well abandonment or adjustment, and general site requirements. Prior to initiation of site development activities, as part of the Approved Project Addendum (described in the Regulatory Setting), the contractor is required to submit to DRV and the various property owners whose property would be accessed or impacted, a plan that addresses the applicable activities described above. The plan would be developed incorporating project-specific handling procedures, to ensure human health is not compromised through the handling or spread of contaminated soil throughout the RSP Area. The SGMP also includes general rules that should be included this plan. Some of the general rules include controlling fugitive dust emissions in accordance with applicable regulations; as needed, the use of protective covering prior to stockpiling and handling soils; obtaining written approval by the property owner and DRV for the storage or transportation of material, soil, waste, water, debris, equipment of any kind onto properties owned by others; and, isolating and disposing brick material and asbestos waste at a regulated facility in accordance with applicable regulations.⁴³ These measures would ensure that the public is not exposed to contaminated soils and soil is handled in a way to limit distribution or contact.

The SGMP also describes management activities and requirements for soil remediation of areas that could require further remediation. Such areas could include small areas within Car Shop Nine

⁴³ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

Study Area that the Certification of Remedial Action and the 2015 LUC note are not currently accessible and could require further remediation prior to excavation.⁴⁴

Because construction of the Lagoon, Central Corridor, Car Shop Nine, and the Northern Shops Study Areas and the portion of the Sacramento Station Study Area owned by the DRV would be conducted in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP, the potential exposure to contaminated soil would not present an unacceptable health risk to people during construction activities and this impact would be **less than significant**.

Non-Certified Areas Owned by DRV

Central Shops Study Area

As of December 2015, all accessible contaminated soils had been removed/remediated and cleanup activities associated within the Central Shops Study Area had been complete. Certification of Remedial Action for soils within the Central Shops Study Area is anticipated from DTSC in late 2016. Some soils under the Central Shops buildings and areas immediately adjacent to those buildings have not yet been remediated due to inaccessibility. Although the Central Shops Study Area is not currently covered by the 2015 LUC, development in this area would be required to comply with the requirements of an approved SGMP (described above). As a result, soil disturbance activities in the Central Shops Study Area would not expose people to unacceptable health risks associated with contaminated soils during construction and this impact would be **less than significant**.

Sims Metal Site

Although part of the Lagoon Study Area the portion of the Sims Metal site located within the RSP Area is not covered under the 2015 LUC and is undergoing a separate remediation process with DTSC. Because remediation has not been completed in this area and a LUC has not been recorded, soil disturbance activities could expose people to unacceptable health risks associated with contaminated soils. Further, any development of this site would be subject to the requirements of an approved SGMP which includes measures to reduce risk of exposure and protect health and safety and; therefore, this would be a **less-than-significant** impact.

Manufactured Gas Plant Study Area and Northwest Corner

Soil remediation in the Manufactured Gas Plant Study Area and the Northwest Corner would be conducted in accordance with the 1988 Enforceable Agreement and the DTSC-approved Remedial Action Plans. If soils are not remediated to levels protective for unrestricted land uses the Remedial Action Plans may require a LUC for these areas. However, any development in the Manufactured Gas Plant Study Area and the Northwest Corner would be subject to the requirements of an approved SGMP which includes measures to reduce risk of exposure and protect health and safety and; therefore, this would be a **less-than-significant** impact.

⁴⁴ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

Other Areas

Sacramento Station Study Area

Parts of the Sacramento Station Study Area within the RSP Area are owned by the Administrative Offices of the Courts and City of Sacramento and would be developed in accordance with the restrictions in the Sacramento Station Covenant.⁴⁵ The 1994 Sacramento Station Covenant includes environmental restrictions to ensure people are not exposed to unacceptable health risks associated with contaminated soils during construction. The Sacramento Station Covenant prohibits excavation at and/or removal of soil from the site, except as specifically allowed, without the prior written approval of DTSC. Excavated soil must also be tested for contamination and properly used, treated, and/or disposed of as required by law and DTSC.⁴⁶ As a result, because soil disturbance activities in this portion of the Sacramento Station Study Area would be conducted in conformance with the Sacramento Station Covenant potential of exposure to unacceptable health risks associated with contaminated soils during construction would be **less than significant**.

7th Street Corridor

In 2000, remediation activities for the 7th Street Corridor in the RSP Area were deemed complete by DTSC. Construction within the 7th Street Corridor must comply with the 7th Street Covenant, which include Environmental Restrictions for human health and safety. The Environmental Restrictions of the 7th Street Corridor Covenant require that prior to any soil disturbance activities a Soil Management Plan and a Health and Safety Plan be approved by DTSC.⁴⁷ These plans would ensure appropriate procedures for worker health and safety and the safe and lawful handling of potential contaminated soils. Because construction within the 7th Street Corridor would be conducted in compliance with the Environmental Restrictions of the 7th Street Corridor Covenant, the potential exposure to contaminated soil would not present an unacceptable health risk to people during construction activities and this impact would be **less than significant**.

West Jibboom Street Property

As discussed in Section 4.5.1 Environmental Setting, only small portions of the West Jibboom Street Property (APN 002-0010-023) had been sampled for soil contamination as part of the investigation and cleanup of a former manufactured gas plant. The portion of the property along the Sacramento River currently owned by the California Department of Parks and Recreation, proposed location of the stormwater outfall structure was not sampled (see discussion below under Stormwater Outfall). However, results of sampling along the levee from the former

⁴⁵ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

⁴⁶ Department of Toxic Substances Control, 1994. Covenant and Agreement to Restrict use of Property, Sacramento Station site at the southern Pacific Transportation Company, Sacramento Locomotive Works, Sacramento, California, May 6, 1994.

⁴⁷ Department of Toxic Substances Control, 2001. Covenant to Restrict Use of Property, Environmental Restrictions, 7th Street Corridor, Former Southern Pacific Transportation Company, Sacramento Locomotive Works, Sacramento County, California. June 14, 2001.

Manufactured Gas Plant adjacent to the old Southern Pacific pump station identified screening levels at the lowest applicable regulatory-established screening levels for each constituent. Furthermore, review of existing and known records did not indicate the presence of adverse soil conditions.⁴⁸

Although contaminated soils are not anticipated to be encountered at the West Jibboom Street Property, because any development on this property would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact. The 2007 RSP EIR Mitigation Measure 6.5-9, which required a Phase II ESA for the Jibboom Street Property would no longer be required because since 2007, a comprehensive multi-phase soil and groundwater remedial investigations of the Manufactured Gas Plant Area have been completed under the direction of DTSC and the Regional Water Board. The results of these reports established groundwater and soil impact boundaries that do not extend to this property.⁴⁹ 2007 RSP EIR Mitigation Measure 6.5-9 has been replaced by Mitigation Measure 4.8-1. Mitigation Measure 4.8-1 would ensure that the appropriate measures are taken if unidentified contaminated soil is encountered during construction.

Railyards Specific Plan Update Land Use Variant

Similar to the RSPU, development of the RSPU Land Use Variant could expose people to unacceptable health risks associated with contaminated soils in those areas that are not subject to the 2015 LUC, Sacramento Station Covenant, the 7th Street Covenant, or an approved SGMP. Therefore, the discussion above would be the same for the RSPU Land Use Variant and the potential impact would be **potentially significant** for the West Jibboom Street Property.

KP Medical Center

The KP Medical Center site is primarily located within the Northern Shops Study Area, which is covered by the 2015 LUC. As discussed above, construction in this area must be accomplished in compliance with the Environmental Restrictions of the 2015 LUC, including compliance with the SGMP, which would minimize the potential exposure to contaminated soil. The RSPU also contains policies requiring that development –related excavation be carried out in a manner that meets DTSC requirements (Policy HAZ-1.1) and to fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1). Therefore, construction of the KP Medical Center would not present an unacceptable health risk to people during construction activities. This impact would be **less than significant**.

⁴⁸ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

⁴⁹ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

MLS Stadium

The MLS Stadium site is located within the Lagoon Study Area and Car Shop Nine Study Area, which is covered by the 2015 LUC. As discussed above, construction in these study areas must be accomplished in compliance with the Environmental Restrictions of the 2015 LUC, including compliance with the SGMP, which would minimize the potential exposure to contaminated soil. The RSPU also contains policies requiring that development –related excavation be carried out in a manner that meets DTSC requirements (Policy HAZ-1.1) and to fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1). Therefore, construction of the MLS Stadium would not present an unacceptable health risk to people during construction activities. This impact would be **less than significant**.

Stormwater Outfall

The Stormwater Outfall site is located within the Northern Shops Study Area and within the West Jibboom Street Property. The portion of the Stormwater Outfall located in the Northern Shops Area would be constructed in compliance with the Environmental Restrictions of the 2015 LUC (including compliance with the SGMP). As discussed above under the West Jibboom Street Property heading, the proposed outfall would be constructed on property currently owned by the California Department of Parks and Recreation and was not sampled as part of the investigation and cleanup of a former manufactured gas plant. However, results of sampling along the levee from the former Manufactured Gas Plant adjacent to the old Southern Pacific pump station identified screening levels at the lowest applicable regulatory-established screening levels for each constituent. Furthermore, review of existing and known records did not indicate the presence of adverse soil conditions.⁵⁰ Although contaminated soils are not anticipated to be encountered during construction of the Stormwater Outfall, because development of this site is not currently covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant impact**.

Summary

Development of the RSP Area located in the Certified and Non-Certified Areas, including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall (as shown in Figures 4.8-4 and 4.8-5) would occur in areas where soil remediation has been certified complete and/or where the Environmental Restrictions of a LUC and the SGMP are required to be implemented. Therefore, the risk of exposing people to contaminated soil and debris during construction would be **less than significant**. In the West Jibboom Street property and the portion of the Stormwater Outfall to be constructed on property currently owned by the California Department of Parks and Recreation, although contaminated soils are not anticipated to be encountered, because development of these areas is not currently covered by the requirements of a LUC or an approved SGMP, the potential exposure to unidentified contaminated soil and debris

⁵⁰ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

would be a **potentially significant impact**. This impact is similar to Impacts 6.5-1 and 6.5-9 of the 2007 RSP EIR, but the severity is substantially reduced because extensive remediation has occurred since 2007, reducing the potential risk of exposure.

Mitigation Measure

Mitigation Measure 4.8-1 described below replaces Mitigation Measures 6.5-1 and 6.5-9, pages 6.5-25, 6.5-26 and 6.5-39 of the 2007 RSP EIR. No mitigation is required for those portions of the RSP Area located in the Certified and Non-Certified Areas including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall.

Mitigation Measure 4.8-1 (RSPU, West Jibboom only, SO)

If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations, and recommendations for appropriate handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until remediation is complete and a “no further action” letter is obtained from the appropriate regulatory agency.

Impact Significance After Mitigation: Mitigation Measure 4.8-1 would minimize risk of exposure to previously unidentified soil contamination by requiring that work stop and the appropriate analysis occur to identify the type and extent of the contamination. Depending on the results, appropriate remediation would be completed prior to resuming construction activities in the affected area. The handling, storage, transportation and disposal of any contaminated soil would be accomplished with applicable federal, State and local laws. Therefore, with the implementation of Mitigation Measure 4.8-1, this impact would be reduced to a **less-than-significant** level.

Impact 4.8-2: Renovation of Central Shop buildings could expose people to asbestos-containing materials, lead-based paint and/or other hazardous materials.

Impact 6.5-6 discussed on pages 6.5-33 and 6.5-34 of the 2007 RSP EIR addressed the potential exposure to asbestos, lead-based paint, or other hazardous substances as a result of the renovation or restoration Central Shops buildings. The 2007 RSP EIR found the potential release of such materials into the environmental could be a significant impact if not properly identified, removed, contained, or transported for disposal at approved sites. Mitigation Measure 6.5-6, requiring that remaining hazardous substances and/or waste be removed in compliance with applicable State

and local laws and regulations was recommended to reduce this impact to a less-than-significant level.

As discussed in the 2007 RSP EIR asbestos, a naturally-occurring fibrous material was used as a fireproofing and insulating agent in building construction before such uses were terminated due to liability concerns in the late 1970s. Because it was widely used prior to the discovery of its health effects, asbestos can be found in a variety of building materials and components such as insulation, walls and ceilings, floor tiles, and pipe insulation. Friable (easily crumbled) materials are particularly hazardous because inhalation of airborne fibers is the primary mode of asbestos entry into the body. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Non-friable asbestos and encapsulated friable asbestos do not pose substantial health risks.

Asbestos exposure is a human respiratory hazard. Asbestos-related health problems include lung cancer and asbestosis. Any activity that involves cutting, grinding, or drilling during building renovation or demolition or relocation of underground utilities could release friable asbestos fibers unless proper precautions are taken. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, making friable materials the greatest potential health risk.

Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million (ppm)).⁵¹ However, some paints manufactured after 1978 for industrial or marine uses legally contain more than 0.06 percent lead.⁵² Excessive exposure to lead (even low levels of lead) can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems because it is easily absorbed into developing systems and organs.

Old light tubes, thermostats, and other electrical equipment typically contain heavy metals such as mercury. Elemental mercury can also be found in many electrical switches. Due to accidental spills and historic disposal practices before the adoption of more stringent disposal regulations, it is possible elemental mercury may be present in non-structural features of the Central Shops buildings. Mercury liquid evaporates slowly if exposed to air, and, at certain levels of exposure, mercury vapors are toxic and can cause kidney and liver damage.

Polychlorinated biphenyl (PCB) is an organic chemical, usually in the form of an oil that was historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs are highly persistent in the environment, and exposure to PCBs has been

⁵¹ California Department of Education, 2015. Lead in Paint, October 12, 2015. Available: <http://www.cde.ca.gov/ls/fa/hs/leadpaint.asp>, accessed January 12, 2016.

⁵² PBS&J/EIP, 2007. Railyards Specific Plan Draft Environmental Impact Report. August 2007.

demonstrated to cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system.⁵³

Railyards Specific Plan Update

Since the certification of the 2007 RSP EIR abatement (i.e., removal or encapsulation of hazardous materials) has been completed on five of the Central Shops buildings. Abatement still needs to be complete on two remaining Central Shops buildings.⁵⁴

CCR Title 8 Section 5208 requires that a State-certified risk assessor conduct a risk assessment and/or paint inspection of all structures constructed prior to 1978 for the presence of asbestos or lead-based paint prior to demolition. If such hazards are determined to exist on site, the risk assessor would then prepare a site-specific hazard control plan detailing asbestos and/or paint removal methods and specific instructions for providing protective clothing and gear for abatement personnel. If necessary, a State-certified lead-based paint and an asbestos removal contractor (independent of the risk assessor) would be retained to conduct the appropriate abatement measures as required by the plan. Wastes from abatement and demolition activities would be disposed of at a landfill(s) licensed to accept such waste. Once all abatement measures have been implemented, the risk assessor would conduct a clearance examination and provide written documentation to the City that testing and abatement have been completed in accordance with all federal, state, and local laws and regulations.

If any unforeseen conditions are discovered during construction, the contractor would coordinate with the appropriate agencies for the safe handling, sampling, and disposal of encountered materials. Construction workers are required to comply with Cal/OSHA worker health and safety standards that ensure safe workplaces and work practices. The RSPU also contains policies to fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1).

Compliance with all applicable laws and regulations at the federal, State, and local levels would prevent the exposure of individuals and the environment to the hazards (by ensuring that all abatement regulations are carried out prior to demolition). Therefore, exposure to asbestos containing materials, lead-based paint and/or other hazardous materials would be **less than significant**.

The 2007 RSP EIR recommended Mitigation Measure 6.5-6 be implemented for the renovation and/or restoration of the Central Shops buildings. Mitigation Measure 6.5-6 required written documentation be provided to the City that asbestos-containing materials and lead-based paint had been abated and any remaining hazardous substances and/or waste had been removed in

⁵³ U.S. Environmental Protection Agency, 2013. Basic Information Polychlorinated Biphenyl (PCB), April 8, 2013. Available: <http://www3.epa.gov/epawaste/hazard/tsd/pcbs/about.htm>, accessed January 12, 2016.

⁵⁴ Rashmawi, Elias, Managing Senior Principal, Brownfield Development Subsector Leader, Stantec, personal communication, December 15, 2015.

compliance with applicable State and local laws and regulations. However, the RPSU is required to apply with all State and local laws and regulations; therefore Mitigation Measure 6.5-6 is not carried forward for this impact.

Railyards Specific Plan Update Land Use Variant

The RSPU Land Use Variant potential to expose people to asbestos, lead-based paint, and/or other hazardous substances as a result of the renovation or restoration Central Shops buildings is the same as discussed above for the RSPU. Compliance with all applicable laws and regulations at the federal, State, and local levels would prevent the exposure of individuals and the environment to the hazards (by ensuring that all abatement regulations are carried out prior to demolition). Therefore, exposure to asbestos containing materials, lead-based paint and/or other hazardous materials would be **less than significant**.

KP Medical Center

The KP Medical Center would not affect renovation and/or restoration of the Central Shops buildings. As such, the KP Medical Center would result in **no impact** related to the exposure of people to asbestos containing materials, lead-based paint and/or other hazardous materials.

MLS Stadium

The MLS Stadium would not result in the renovation and/or restoration of the Central Shops buildings. As such, the MLS Stadium would result in **no impact** related to the exposure of people to asbestos containing materials, lead-based paint and/or other hazardous materials.

Stormwater Outfall

The Stormwater Outfall would not renovate and/or restore of the Central Shops buildings. As such, the Stormwater Outfall would result in **no impact** related to the exposure of people to asbestos containing materials, lead-based paint and/or other hazardous materials.

Summary

The RSPU and RSPU Land Use Variant renovation and/or restoration of the Central Shops buildings could release asbestos, lead-based paint, or other hazardous substances, to the environment if not properly identified, removed, contained, and transported. Compliance with all applicable laws and regulations at the federal, State, and local levels would prevent the exposure of individuals and the environment to the hazards. Therefore, risk of exposing people to asbestos containing materials, lead-based paint or other hazardous materials would be **less than significant**. The KP Medical Center, MLS Stadium and Stormwater Outfall would not result in the renovation and/or restoration of the Central Shops buildings; therefore **no impact** would occur.

Mitigation Measure

None required.

Impact 4.8-3: Development of the proposed projects could expose people to existing contaminated groundwater during dewatering activities.

Railyards Specific Plan Update

The potential for the development of the RSPU to expose people to existing groundwater contamination during dewatering activities was not previously discussed in the 2007 RSP EIR. The 2007 RSP EIR discussed adverse effects of groundwater related groundwater flow and groundwater recharge in Section 6.6 Hydrology and Water Quality.

Groundwater underlying the RSP Area has been reported at depths ranging from approximately 2 to 18 feet above mean sea level with ground surface elevations ranging from 6 to 47 feet above mean sea level.⁵⁵ As described in the Environmental Setting, contaminated groundwater under the RSP includes the South Plume, Lagoon Plume and Manufactured Gas Plant Plume. These plumes are routinely monitored for contaminants of concern, which include VOCs, SVOCs, TPH and metals.

Because buildings would be constructed with waterproof foundations and would not include basement levels there would be no anticipated permanent dewatering and associated risk of exposure to contaminated groundwater. Therefore, this impact focuses on potential exposure associated with temporary dewatering during construction of proposed project facilities.

Temporary dewatering in areas of shallow groundwater is often necessary for excavation to construct shallow foundation systems, utility corridors, or installation of deep pilings. Construction dewatering activities could extract groundwater that contains elevated level of contaminants of concern. If dewatered groundwater is inadvertently released into the environment; such release could expose the environment, construction workers, and/or the public to contaminants. The dewatering of contaminated groundwater could therefore present risks to public health and safety, and the environment, if the contaminated dewatered groundwater is not handled properly.

Groundwater extracted during construction would be discharged into the City's CCS before being discharged to the Sacramento River. See Section 4.13 Utilities and Services for a discussion of sewer and drainage infrastructure and infrastructure capacity. Dewatered groundwater discharges to the City's CCS would be regulated and monitored by the City's Utilities Department pursuant to Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439. Groundwater discharges to the City's CCS are defined as construction dewatering discharges, foundation or basement dewatering discharges, treated or untreated contaminated groundwater cleanup, discharges, and uncontaminated groundwater discharges.

⁵⁵ ERM-West, Inc., 2015. First Five-Year Review Report, Former SPTCo Sacramento Railyard, Sacramento California, June 1, 2015.

The City requires that any short-term discharge be permitted, or an approved MOU for long-term discharges be established, between the discharger and the City. Short-term limited discharges of seven days duration or less must be approved through the City Department of Utilities by acceptance letter. Long-term discharges of greater duration than seven days must be approved through the City Department of Utilities and the Director of the Department of Utilities through a MOU process. The MOU must specify the type of groundwater discharge, flow rates, discharge system design, a City-approved contaminant assessment of the proposed groundwater discharge indicating tested levels of constituents, and a City-approved effluent monitoring plan to ensure contaminant levels remain in compliance with State standards or Sacramento Regional County Sanitation District (RegionalSan) and Regional Water Board-approved levels. All groundwater discharges to the sewer must be granted a RegionalSan discharge permit. As a standard precautionary action, the Regional Water Board would be notified prior to beginning any site preparation or grading and the applicant would adhere to all requests and recommendations from the Regional Water Board.

In addition, prior to discharge, a National Pollutant Discharge Elimination System (NPDES) permit would be required that would specify standards for testing, monitoring, and reporting, receiving water limitations, and discharge prohibitions. The RSPU also contains policies requiring that development – related excavation and dewatering be carried out in a manner that meets DTSC requirements (Policy HAZ-1.1).

Certified Areas Owned by DRV

Certified Areas in the RSP Area include the Lagoon, Central Corridor, Car Shop Nine, Northern Shops Study Areas, and a portion of the Sacramento Station Study Area owned by the DRV. Any groundwater extraction in the Certified Areas would be conducted in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP. The Environmental Restrictions set forth in the 2015 LUC requires approval from DTSC prior to any groundwater extraction. The SGMP requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits. Compliance with the 2015 LUC, SGMP, federal, State and local regulations minimizes potential degradation of receiving waters and the risk of exposure to contaminated groundwater during construction dewatering activities. Therefore, this is considered a **less-than-significant** impact.

Non-Certified Areas Owned by DRV

Central Shops Study Area

As described above, if dewatering activities were required for the Central Shops Study Area the discharge of groundwater during dewatering would be regulated by federal, State and local regulations. However, the Central Shops Study Area lies above the contaminated South Plume and dewatering activities could expose construction workers and/or the public to contaminated groundwater if not properly managed or monitored. Even though the Central Shops Study Area is

not currently covered by the 2015 LUC, any dewatering would comply with the protective measures included in an approved SGMP which requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits. Compliance with an approved SGMP, federal, State and local regulations would minimize potential degradation of receiving waters and the risk of exposure to contaminated groundwater during construction dewatering activities. Therefore, this is considered a **less-than-significant** impact.

Sims Metal Site

As previously discussed, although part of the Lagoon Study Area, the portion of the Sims Metal site located within the RSP Area is not covered under the 2015 LUC and is undergoing a separate remediation process with DTSC. Because remediation has not been completed in this area and a LUC has not been recorded, any dewatering during construction could encounter contaminated groundwater as a result of past activities on the site. However, any dewatering would comply with the protective measures included in an approved SGMP which requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits. Compliance with an approved SGMP, federal, State and local regulations would minimize potential degradation of receiving waters and the risk of exposure to contaminated groundwater during construction dewatering activities. Therefore, this is considered a **less-than-significant** impact.

Manufactured Gas Plant Study Area and Northwest Corner

Both the Manufactured Gas Plant Study Area and the Northwest Corner are above contaminated groundwater plumes and dewatering activities could expose construction workers and/or the public to contaminated groundwater if not properly managed or monitored. However, any dewatering would comply with the protective measures included in an approved SGMP which requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits. Compliance with an approved SGMP, federal, State and local regulations would minimize potential degradation of receiving waters and the risk of exposure to contaminated groundwater during construction dewatering activities. Therefore, this is considered a **less-than-significant impact**.

Other Areas

Sacramento Station Study Area

As previously discussed, the portion of the Sacramento Station owned by the DRV is covered under the 2015 LUC Environmental Restrictions and the SGMP. Other areas within the Sacramento Station Study Area owned by the Administrative Offices of the Courts and City of Sacramento and would be developed in accordance with the restrictions in the Sacramento Station Covenant which requires approval from DTSC prior to any groundwater extraction.⁵⁶

Compliance with the Sacramento Station Covenant and federal, State and local regulations would minimize potential degradation of receiving waters and risk of exposure to contaminated groundwater during construction dewatering activities. Therefore, this is considered a **less-than-significant** impact.

7th Street Corridor

Construction within the 7th Street Corridor must comply with the 7th Street Covenant, which include Environmental Restrictions for human health and safety with the 7th Street Corridor. The Environmental Restrictions of the 7th Street Corridor Covenant allows for construction dewatering within the limits of parcel. Under the RSPU, 7th Street could be widened; however, such activities would not likely require dewatering. If construction dewatering activities were required, compliance with federal, State and local regulations and the 7th Street Corridor Covenant would minimize the potential degradation of receiving waters and would minimize the potential for exposure to contaminated groundwater during dewatering activities. Therefore, this is considered a **less-than-significant** impact.

West Jibboom Street Property

As previously described, the portion of this property along the Sacramento River currently owned by the California Department of Parks and Recreation, proposed location of the stormwater outfall structure, was not sampled (see discussion under Stormwater Outfall). Comprehensive multi-phase groundwater remedial investigations of the former Manufactured Gas Plant area have been completed under the direction of DTSC and the Regional Water Board. The results of these reports established groundwater impact boundaries that do not extend to this property.

Furthermore, the property is located upgradient of the Manufactured Gas Plant Study Area.⁵⁷ It was also determined that the Lagoon Groundwater Plume Study Area and the Central Shops/South Plume Study Area did not extend to under the property.⁵⁸ Never the less, past activities at this site could have contaminated underlying groundwater which could expose construction workers and/or the public if not properly managed or monitored. Although

⁵⁶ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

⁵⁷ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

⁵⁸ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

contaminated groundwater would not be expected to be encountered, and dewatering activities would be regulated by federal, State and local regulations, because this property is not currently included in the Certified or Non-Certified Area and dewatering activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact.

Railyards Specific Plan Update Land Use Variant

Similar to the RSPU, development of the RSPU Land Use Variant could expose people to existing contaminated groundwater during dewatering activities. The discussion above would be the same for the RSPU Land Use Variant and the potential impacts effects of the RSPU Land Use Variant would be equal to those of identified for the RSPU. The potential for exposure to contaminated groundwater associated with dewatering activities at the West Jibboom Street Property is considered a potentially **significant impact**.

KP Medical Center

The KP Medical Center could require some limited construction period dewatering during excavation for deeper pile caps, grade beams, or underground vaults. As such, the discussion above any dewatering on this site would be subject to federal, State and local regulations for the discharge of groundwater during dewatering. The KP Medical Center site would also be constructed in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP. The SGMP requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits.⁵⁹ The RSPU also contains policies requiring that dewatering is carried out in manners that meet DTSC requirements (Policy HAZ-1.1). Therefore, the potential for exposure to contaminate groundwater during dewatering activities associated with construction of the KP Medical Center would be **less than significant**.

MLS Stadium

Construction of the proposed MLS Stadium could require temporary dewatering. As described in Chapter 2, Project Description, analysis of the groundwater for contaminants would be performed prior to initiating any dewatering activities. Monitoring wells would be used, either new or existing, around the site to obtain data prior to and during dewatering. It is anticipated that groundwater may have to be treated on-site prior to discharge. A temporary groundwater treatment facility would be installed within the footprint of the proposed MLS Stadium to meet discharge flow rate and quality requirements.

As the MLS Stadium site is located within an area covered by the 2015 LUC, development must be accomplished in compliance with the Environmental Restrictions of the 2015 LUC, including

⁵⁹ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

compliance with the SGMP. The SGMP requires that a groundwater control plan be prepared by the general contractor and submitted for approval prior to any groundwater extraction, treatment or discharge activities. The groundwater control plan must estimate volumes, rate, location, and type of groundwater control, as well as securing all needed discharge permits, including City, RegionalSan, and State permits.⁶⁰ The RSPU also contains policies requiring that dewatering is carried out in manners that meet DTSC requirements (Policy HAZ-1.1).

While it is likely that contaminated groundwater associated with the Lagoon Plume and South Plume would be extracted during dewatering activities, because the MLS Stadium would include monitoring and on-site treatment, as needed, prior to discharge, and because discharge of groundwater during dewatering is regulated by federal, State and local regulations to minimize potential degradation of receiving waters and risk of exposure to contaminated groundwater during dewatering activities, this is considered a **less-than-significant** impact.

Stormwater Outfall

The Stormwater Outfall site is located within the Northern Shops Study Area and within the West Jibboom Street Property. The portion of the Stormwater Outfall located in the Northern Shops Area would be constructed in compliance with the Environmental Restrictions of the 2015 LUC (including compliance with the SGMP). As discussed above under the West Jibboom Street Property heading, the proposed outfall would be constructed on property currently owned by the California Department of Parks and Recreation. Comprehensive multi-phase groundwater remedial investigations of the former Manufactured Gas Plant area, Lagoon Groundwater Plume Study Area and the Central Shops/South Plume Study Area established groundwater impact boundaries that do not extend to this property. Furthermore, the property is located upgradient of the Manufactured Gas Plant Study Area.⁶¹ Never the less, past activities at this site could have contaminated underlying groundwater which could expose construction workers and/or the public if not properly managed or monitored. Although contaminated groundwater would not be expected to be encountered, and dewatering activities would be regulated by federal, State and local regulations, because this property is not currently included in the Certified or Non-Certified Area and dewatering activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact.

Summary

In addition to compliance with federal, State and local requirements would minimize the potential impacts associated with the degradation of receiving waters during construction dewatering activities development of the RSP Area located in the Certified and Non-Certified Areas, including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall (as shown in Figures 4.8-4 and 4.8-5), would occur in areas where the Environmental Restrictions

⁶⁰ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

⁶¹ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

of a LUC and the SGMP are required to be implemented. Therefore, the risk of exposing people to contaminated groundwater during construction dewatering would be **less than significant**. In the West Jibboom Street property and the portion of the Stormwater Outfall to be constructed on property currently owned by the California Department of Parks and Recreation, although contaminated groundwater would not be expected to be encountered, and dewatering activities would be regulated by federal, State and local regulations, because these properties are not currently included in the Certified or Non-Certified Area and dewatering activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact. Operational dewatering is not anticipated to occur as buildings would be constructed with waterproof foundations and would not include basement levels.

Mitigation Measure

Mitigation Measure 4.8-3 described below is a new mitigation measure not previously addressed in the 2007 RSP EIR. No mitigation is required for those portions of the RSP Area located in the Certified and Non-Certified Areas, including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall.

Mitigation Measure 4.8-3 (RSPU, West Jibboom only, SO)

Implement Mitigation Measure 4.8-1.

Impact Significance After Mitigation: Mitigation Measure 4.8-3 would minimize risk of exposure to previously unidentified groundwater contamination by requiring that work stop and the appropriate analysis occur to identify the type and extent of the contamination. Depending on the results, appropriate remediation would be completed prior to resuming construction activities in the affected area. The handling, storage, transportation and disposal of any contaminated groundwater would be accomplished with applicable federal, State and local laws. The measure will reduce the impact to **less than significant**.

Impact 4.8-4: Construction of the proposed projects' infrastructure and buildings could interfere with remediation efforts.

Impact 6.5-4 on pages 6.5-31 and 6.5-32 of the 2007 RSP EIR found that earthwork activities could encounter site remediation systems and unless planned and coordinated with site remediation activities, there would be an increased risk of damaging or interfering with remediation site controls such as soil containment areas, or groundwater remediation facilities. The 2007 RSP EIR found this impact to be potentially significant and recommend Mitigation Measures 6.5-3 and 6.5-4 be implemented to ensure construction of site features do not interfere with remediation efforts.

Development of portions of the RSP would occur simultaneously with implementation of the site remediation activities that are being implemented through DTSC-approved cleanup plans. Development activities such as site preparation, grading, installation of underground utility lines, and foundation excavation, to name a few, are examples of the types of earthwork that could encounter site remediation systems.

Railyards Specific Plan Update

Since the certification of the 2007 RSP EIR soil remediation was certified complete in for the Lagoon, Central Corridor, Car Shop Nine, Sacramento Station and the Northern Shops Study Areas. Soil remediation is only needed for a limited portion of the RSP Area. As described in the Environmental Setting, groundwater in the RSP Area is underlined by the South Plume, Lagoon Plume and Manufactured Gas Plant Plume. The groundwater quality of these plumes is routinely monitored at varying stages in the remediation process.

Certified Areas Owned by DRV

Certified Areas in the RSP Area include the Lagoon, Central Corridor, Car Shop Nine, Northern Shops Study Areas, and a portion of the Sacramento Station Study Area owned by the DRV. Soil remediation was certified complete in November 2015 for the Lagoon, Central Corridor, Car Shop Nine, and the Northern Shops Study Areas with only a small area within Car Shop Nine Study Area still requiring remediation due to inaccessibility. However, due to ongoing remediation of groundwater there is the potential to interfere with groundwater remediation facilities, which could result in an increased risk of exposure to adverse health or ecological effects. The Environmental Restrictions set forth in the 2015 LUC prohibit the disruption of any remediation systems without prior written approval from DTSC.⁶² Furthermore, the SGMP recognizes that replacement, adjustment, and relocation of monitoring and extraction wells, vapor probes, and associated remediation systems are expected to occur. Such work is permitted to occur under the SGMP only with written approval by the project proponent, DRV and property owner, coordination with UPRR, written approval by DTSC, and appropriate permitting in accordance with all applicable regulations.⁶³

In addition, the SGMP require that DTSC, DRV, property owners, and project proponents are notified of any conflicts between intended construction activities and existing wells as soon as possible. Any damage to wells or remediation systems is the responsibility of the general contractor to repair, in accordance with applicable regulations.⁶⁴

Implementation of the measure outlined in the SGMP and the Environmental Restrictions of the 2015 LUC would reduce this impact to a **less-than-significant** level by ensuring project

⁶² Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

⁶³ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

⁶⁴ Stantec, 2015. Railyards Projects Soil and Groundwater Management Plan, December 2015.

developers and their contractors are aware of the timing, locations, and types of remediation activities so that construction activities do not inadvertently or adversely affect cleanup activities, and that remediation contractors are aware of planned construction activities. Such efforts would ensure that contaminated substances would not be inadvertently encountered (e.g., infrastructure improvements involving trenching through the project site) and that soils or contaminated substances are not inappropriately moved or used within the site.

Non-Certified Areas Owned by DRV

Sims Metal Site, Manufactured Gas Plant Study Area and Northwest Corner

In the remaining Non-Certified Area (Sims Metal Site, Manufactured Gas Plant Study Area, and Northwest Corner) soil and groundwater remediation are at varying stages in the remediation process. Unless planned and coordinated with site remediation activities, there could be an increased risk of damaging or interfering with remediation site controls facilities such as soil containment areas, or groundwater remediation facilities such as extraction and monitoring wells, pumps, or pipelines. Such incidents could interfere with remediation efforts, resulting in delays. They could also compromise the effectiveness of measures intended to control inadvertent releases of contaminants to the environment, which could result in an increased risk of exposure and associated adverse human health or ecological effects. However, even though a LUC has not been recorded, development in these study areas would be required to comply with the requirements of an approved SGMP. Therefore the impact associated with the increased risk of damaging or interfering with remediation site controls facilities would be **less than significant**.

Other Areas

Sacramento Station Study Area

The portion of the Sacramento Station owned by the DRV is covered under the 2015 LUC Environmental Restrictions and the SGMP. Other areas within the Sacramento Station Study Area owned by the Administrative Offices of the Courts and City of Sacramento and would be developed in accordance with the restrictions in the Sacramento Station Covenant.⁶⁵ The Sacramento Station Covenant requires approval from DTSC prior to any groundwater extraction and prohibits hindering remediation efforts deemed necessary by the DTSC to remove or remediate groundwater contamination. Therefore the impact associated with the increased risk of damaging or interfering with remediation site controls facilities in the portion of the Sacramento Station Study Area not covered by the 2015 LUC would be **less than significant**.

West Jibboom Street Property

As previously described, comprehensive multi-phase soil and groundwater remedial investigations established that soil and groundwater impact boundaries do not extend to this

⁶⁵ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

property.⁶⁶ Although contaminated soil and/or groundwater is not anticipated to be encountered, past activities could encounter previously unidentified contamination that could require remediation. Any remediation activities at this property, unless planned and coordinated with other remediation activities in the RSP Area could damage or interfere with on-going remediation facilities including extraction and monitoring wells, pumps, or pipelines. In addition to delays, any interference could also compromise the effectiveness of measures intended to control inadvertent releases of contaminants to the environment, which could result in an increased risk of exposure and associated adverse human health or ecological effects. Because this property is not currently included in the Certified or Non-Certified Area and any remediation activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact.

Railyards Specific Plan Update Land Use Variant

Similar to the RSPU, construction of the RSPU Land Use Variant infrastructure and buildings could interfere with remediation efforts. Therefore, the discussion above would be the same for the RSPU Land Use Variant and the potential impacts equal to those identified for the RSPU. The potential for interference with groundwater remediation activities during development of the West Jibboom Street Property is considered a **potentially significant impact**.

KP Medical Center

The KP Medical Center site is located primarily within the Northern Shops Study Area, which is covered by the 2015 LUC. As discussed above, the Environmental Restrictions of the 2015 LUC and the SGMP prohibit the disruption of any remediation systems without prior written approval from DTSC.⁶⁷ Therefore, implementation of the measure outlined in the Environmental Restrictions of the 2015 LUC and the SGMP would ensure the impacts associated with the construction of the KP Medical Center infrastructure and buildings would not interfere with remediation efforts. This impact would be **less than significant**.

MLS Stadium

The MLS Stadium site is located within the Lagoon Study Area and Car Shop Nine Study Area, which is covered by the 2015 LUC. As discussed above, the Environmental Restrictions of the 2015 LUC and the SGMP prohibit the disruption of any remediation systems without prior written approval from DTSC.⁶⁸ Therefore, implementation of the measure outlined in the Environmental Restrictions of the 2015 LUC and the SGMP would ensure the impacts associated

⁶⁶ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

⁶⁷ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

⁶⁸ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

with the construction of the MLS Stadium infrastructure and buildings would not interfere with remediation efforts. This impact would be **less than significant**.

Stormwater Outfall

The Stormwater Outfall site is located within the Northern Shops Study Area and within the West Jibboom Street Property. The portion of the Stormwater Outfall located in the Northern Shops Area would be constructed in compliance with the Environmental Restrictions of the 2015 LUC (including compliance with the SGMP). Although contaminated soil and/or groundwater is not anticipated to be encountered, past activities could encounter previously unidentified contamination that could require remediation. Any remediation activities at this property, unless planned and coordinated with other remediation activities in the RSP Area could damage or interfere with on-going remediation facilities and result in an increased risk of exposure and associated adverse human health or ecological effects. Because this property is not currently included in the Certified or Non-Certified Area and any remediation activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact.

Summary

Development of the RSP Area located in the Certified and Non-Certified Areas including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall (as shown in Figures 4.8-4 and 4.8-5), would occur in areas where the Environmental Restrictions of a LUC and the SGMP are required to be implemented. Therefore, the risk of damaging or interfering with remediation site or facilities during construction would be **less than significant**. Additionally, the RSPU contains policies to establish an ongoing process for coordination during the remediation activities that coincide with development (Policy HAZ-5.1).

Although contaminated soil and/or groundwater is not anticipated to be encountered, past activities could encounter previously unidentified contamination that could require remediation. Any remediation activities at the West Jibboom Street property, including a portion of the Stormwater Outfall, unless planned and coordinated with other remediation activities in the RSP Area, could damage or interfere with on-going remediation facilities and result in an increased risk of exposure and associated adverse human health or ecological effects. Because this property is not currently included in the Certified or Non-Certified Area and any remediation activities would not be covered by the requirements of a LUC or an approved SGMP, this is considered a **potentially significant** impact.

Mitigation Measure

Mitigation Measure 4.8-4 replaces Mitigation Measure 6.5-4, pages 6.5-31 and 6.5-32 of the 2007 RSP EIR. No mitigation is required for those portions of the RSP Area located in the Certified

and Non-Certified Areas, including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall.

Mitigation Measure 4.8-4 (RSPU, West Jibboom only, SO)

Implement Mitigation Measure 4.8-1.

Impact Significance After Mitigation: Mitigation Measure 4.8-4 would minimize risk of exposure to previously unidentified soil and/or groundwater contamination by requiring that work stop and the appropriate analysis occur to identify the type and extent of the contamination. Depending on the results, appropriate remediation would be completed prior to resuming construction activities in the affected area. The handling, storage, transportation and disposal of any contaminated soil or groundwater would be accomplished with applicable federal, State and local laws. Coordination with appropriate regulatory agencies would ensure that the public is not exposed to contaminated soil or groundwater as a result of the disruption of remediation activities. Therefore, with implementation of Mitigation Measure 4.8-4 this impact would be reduced to a **less-than-significant** level.

Impact 4.8-5: Occupancy of the proposed projects could increase the use of hazardous substances during occupancy.

Impact 6.5-7 discussed on pages 6.5-34 through 6.5-36 of the 2007 RSP EIR found that the potential for the 2007 RSP to increase the use of hazards substance occupancy would result in a less significant impact. It was determined that compliance with hazardous materials regulations would reduce the risk to human health and the environment from the routine use of hazardous substances.

This impact analysis addresses the routine use, transport, storage, and disposal of hazardous substances that would occur with occupancy of the RSP Area. For an analysis of potential exposure of project occupants to the transportation of hazardous materials within and adjacent to the RSP that are not related to the RSP, please see Impact 4.8-6.

As discussed in the 2007 RSP EIR, hazardous substances would be used in varying amounts during occupancy of the RSP Area. The types and quantities of hazardous substances that would be present during occupancy of the residential, office, and commercial land uses in the are expected to include, for example, household-type and maintenance products (e.g., cleaning products, paints, solvents, pesticides/herbicides).

Hazardous substances would be handled and stored routinely by households and most businesses within the RSP Area. Typical household hazardous substances would include oils (e.g., motor oil and hydraulic oil), fuels (gasoline and diesel), paints (both latex and oil-based), solvents (e.g., degreasers, paint thinners, and aerosol propellants), acids and bases (e.g., automobile battery

fluids, swimming pool chemicals, and many cleaners), disinfectants, metals (e.g., mercury in thermometers, batteries, and photography chemicals), and pesticides and herbicides. Businesses would use materials similar to households and some (e.g., gas stations, dry cleaners, and photoprocessors) would use hazardous substances in larger quantities specifically related to their business activities. For example, supermarkets and gas stations stock hazardous substances for sale to consumers; service stations handle fuel, motor oil, antifreeze, and other fluids; and supermarkets handle automotive fluids, cleaners, pesticides, and batteries. In addition, dry cleaners handle perchloroethylene and photoprocessors handle fixer and developer chemicals.

Although individual households and many businesses use relatively small volumes of hazardous substances, the total volume of the hazardous substances managed by all of the households and businesses in the RSP Area would increase the opportunities for accidents and improper use, transportation, storage, and disposal. However, because many hazardous substances are consumed through their use (e.g., fuel, paint, aerosols), the quantity of hazardous substances handled is generally believed to be substantially greater than the volume of hazardous waste generated. In any case, the Sacramento County Environmental Management Department has a household hazardous waste collection program that safely collects, transports, and disposes of residual hazardous wastes.

Commercial products are labeled to inform users of potential risks and to instruct users in appropriate handling procedures. Although households are relatively less regulated than businesses, the risks posed by hazardous substances use at project-related residences would be similar to those in similar residential areas already developed in the City of Sacramento. The home use of common household hazardous substances is typically considered to pose an acceptable level of risk.

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As indicated above, the types and amounts of hazardous substances would vary according to the nature of the activity. Specific businesses or commercial activities have not been identified for most of the RSPU. Therefore, the actual hazardous substances and amounts that would be on site or within a specific location in the RSP Area cannot be determined at this time. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that would present a hazard.

Exposure of site occupants to hazardous substances could occur in the following manner: improper handling or use of hazardous substances or hazardous wastes during operation of uses under the RSPU, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. Future occupants could be exposed to hazards associated with accidental releases of hazardous substances, which would result in adverse health effects.

Hazardous materials regulations, which are codified in Titles 8, 22 and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code were

established at the State level to ensure compliance with Federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., OSHA in the workplace or DTSC for hazardous waste) and/or local jurisdictions (e.g., the Sacramento Fire Department).

By ensuring that businesses in or adjacent to the RSP Area (which are within the City and, therefore, subject to City regulations) comply with the Unified Program, the City would reduce impacts associated with the potential for accidental release of hazardous substances associated with occupancy of uses under the RSPU. This would be accomplished by ensuring that regulated activities (e.g., businesses) under the RSPU are managed in accordance with applicable regulations such as Hazardous Materials Release Response Plans and Inventories, and the California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements. Compliance with Title 26 of the CCR, which would be monitored by the City, would reduce impacts associated with potential for accidental release during occupancy of the RSPU. Compliance with this regulation would ensure that businesses where hazardous substances are used or stored adhere to regulations designed to prevent leakage and spills of material in transit and provide detailed information to clean-up crews in the event of an accident.

Workplace regulations addressing the use, storage, and disposal of hazardous substances in Title 8 of the CCR would apply to businesses and public facilities in and adjacent to the RSP Area. Compliance with these regulations would be monitored, in part, by the Sacramento Fire Department when it performs hazardous materials inspections. Other mechanisms in place to enforce the Title 8 regulations include compliance audits and reporting to local and State agencies. Implementation of the workplace regulations would further reduce the potential for hazardous materials releases.

The RSPU includes infill development of new commercial uses and some public services that would use and transport hazardous substances through the RSP Area on existing and proposed interior roadways. The number of hazardous substances incidents along existing and proposed roadways could increase depending on the type of commercial and industrial uses, and the number of persons exposed would increase due to the proposed plans. Proposed uses requiring the use of hazardous substances could generate hazardous waste, and could increase the transportation of such materials through the RSP Area, thereby increasing the risk of exposure to new residents to transportation-related hazardous substances incidents. CFR 49 and Title 26 regulate the transportation of hazardous substances by trucks and other vehicles. These requirements would apply to any transporters delivering or removing hazardous substances or wastes from the RSP Area.

Compliance with applicable federal and State laws and regulations that are administered and enforced by the CUPA and Sacramento Fire Department standards (the local agency that implements applicable hazardous substances-related sections of the Uniform Fire Code and Uniform Building Code), and federal and State transportation regulations would reduce impacts

associated with the routine use, storage, and transportation of hazardous substances in the RSP Area to a **less-than-significant** level.

Railyards Specific Plan Update Land Use Variant

The RSPU Land Use Variant potential for the increase the use of hazards substance during occupancy would be the same as those discussed above. As such, the discussion above would be applicable to the RSPU Land Use Variant and the effects of the RSPU Land Use Variant would be equal to those of the RSPU; therefore, resulting a **less-than-significant impact**.

KP Medical Center

In addition to the typical hazardous materials used by businesses, the KP Medical Center has the potential to use and store hazardous chemicals, radioactive materials, and biohazardous materials related specifically to its medical functions. Medical and administrative activities at the KP Medical Center site would use hazardous chemicals common in medical care, office and support settings. These chemicals would include familiar materials, such as toners, paints, lubricants, kitchen and restroom cleaners, and other maintenance materials as well as chemicals used during patient care, laboratory testing and medical diagnostics. These common products would be used for the same purposes as in any office or residence. A medical facility cannot reasonably predict in advance every possible chemical or combination of chemicals it might use.

The KP Medical Center could involve the use of a wide range of chemical compounds and products for facilities maintenance and patient care. Among these are hazardous materials including fuels, liquid oxygen, waste oil, battery waste, various liquid chemicals and radioactive materials. The use, storage and disposal of these hazardous materials could result in health and safety risks for those handling the materials within the hospital as well as the community. Should any of these materials be improperly used, stored or transported, toxins could be released into the air or water; fire or explosions could occur; and exposure could cause acute or chronic health effects to workers and visitors. Because of the potential risks, acute care facilities, like the KP Medical Center, are required to comply with several regulatory controls that control the transportation, storage, use, and disposal of chemical and other materials considered a risk to public health.

Areas within the hospital that contain hazardous chemicals, gases or bio-hazards must be equipped with proper ventilation and secondary spill containment. Most of the flammable materials stored indoors would be kept in fire safety cabinets when not in use. Until the time that they are used, hazardous materials would be stored in their original containers. As required, the hazardous materials would be stored, in each building, in locations according to compatibility and in storage enclosures (i.e., flammable material storage cabinets and biological safety cabinets) or in areas or rooms specially designed, protected, and contained for such storage, in accordance with state and local regulations for hazardous materials management (see Regulatory Setting, above).

Handling and use of hazardous materials and the disposal of the resulting hazardous wastes would be conducted under federal, State, and local laws and regulations for hazardous materials management. Hazardous materials would be used by personnel that have been trained in the handling and use of the material and that have received proper hazard-communication training. Hazardous materials planning and reporting requirements under the California Hazardous Materials Business Planning, California Proposition 65 notification, and Emergency Planning and Community-Right-to-Know Act would be initiated and completed, as required, for acute care facilities. Compliance with these laws and regulations would reduce the risk of hazard and hazards to workers, the public, and the environment to such that they would not pose a threat to project occupants or the public.

During operation the KP Medical Center would use a diesel-powered emergency back-up generator. This emergency back-up generator would be located within the CUP. Use of this diesel-powered emergency back-up generator would not be continuous. It would only operate during emergencies or when being tested (typically, monthly). The generator would be subject to the requirements of the California Fire Code, which includes placement limitations and fuel capacity limits.

The KP Medical Center has the potential to expose hospital occupants and the community to hazardous materials via storage, normal uses, and disposal. However, laws, regulations, and standards federally administered through OSHA, DOT, RCRA, EPA, Cal EPA, and the California Fire Code would ensure that the KP Medical Center would implement current safeguards and standards to reduce the risk of chemical and hazardous material exposure at the KP Medical Center and in the surrounding environment. Impacts are, therefore, **less than significant**.

MLS Stadium

The types and quantities of hazardous substances that would be present during operation of the MLS Stadium are expected to be similar to those discussed above for businesses in the RSP Area, which could include oils, fuels, paints, solvents, acids and bases, disinfectants, metals, and pesticides and herbicides. It is assumed that the use of hazardous substances would be intermittent and use would increase with event activity. During operation the MLS Stadium could use a diesel-powered emergency back-up generator. Use of this diesel-powered emergency back-up generator would not be continuous. It would only operate during emergencies or when being tested (typically, monthly). The generator would be subject to the requirements of the California Fire Code, which includes placement limitations and fuel capacity limits.

The MLS Stadium would be required to comply with the same federal, State and local regulations as discussed above under the Railyards Specific Plan Update heading, therefore, the impacts associated with the routine use, storage, and transportation of hazardous substances would be **less than significant**.

Stormwater Outfall

During operation the Stormwater Outfall would use a diesel-powered emergency back-up generator. This emergency back-up generator would be located within the proposed pump station located under I-5 viaduct immediately south of Railyards Boulevard. Use of this diesel-powered emergency back-up generator would not be continuous. It would only operate during emergencies or when being tested. The generator would be subject to the requirements of the California Fire Code, which includes placement limitations and fuel capacity limits. The Stormwater Outfall would be required to comply with the same federal, State and local regulations as discussed above for the RSPU, including the California Fire Code; therefore, impacts associated with the routine use, storage, and transportation of hazardous substances would be **less than significant**.

Summary

Compliance with applicable federal and State laws and regulations would reduce impacts associated with the routine use, storage, and transportation of hazardous substances in the RSP Area to a **less-than-significant** level for the RSPU, RSPU Land Use Variant, KP Medical Center, MLS Stadium, and the Stormwater Outfall.

Mitigation Measure

None required.

Impact 4.8-6: Development of the proposed projects would bring new occupants or visitors in proximity to hazardous substances transportation routes, such as I-5 and the UPRR rail lines.

Impact 6.5-8 discussed on pages 6.5-36 through 6.5-38 of the 2007 RSP EIR determined that the 2007 RSP would result in a less-than-significant impact as it relates to the proximity of new residents to existing non-project-related hazardous substances transportation routes, such as I-5 and the UPRR rail lines.

Hazardous substances that are not related to RSPU construction or occupancy can be legally transported through the RSP Area via rail or in trucks and other vehicles (on 7th Street, for example), or on adjacent roadways such as Richards Boulevard and I-5. The exact types and amounts of non-project-related hazardous substances that could be transported via rail within the RSP Area or adjacent to the RSP Area on roadways would vary from day-to-day, as would occur on roadways and rail elsewhere throughout the Sacramento metropolitan region. As noted in the Regulatory Setting, above, many federal and industry programs are already in place, and more are being developed, to help improve transport of hazardous substances.

As discussed in the 2007 RSP EIR, a primary safety and security concern related to the rail transportation of hazardous materials is the catastrophic release or explosion in proximity to densely populated areas, including urban areas and events or venues with large numbers of people

in attendance. Also of major concern is the release or explosion of a rail car in proximity to iconic buildings, landmarks, or environmentally significant areas. Such a catastrophic event could be the result of an accident, or a deliberate act of terrorism. The consequences of an intentional release of hazardous material by a criminal or terrorist action are likely to be more severe than the consequences of an unintentional release because an intentional action is designed to inflict the most damage possible.⁶⁹ The causes of intentional and unintentional releases of hazardous material are very different; however, in either case the potential consequences of such releases could be substantial.

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As noted in the Environmental Setting, freight trains do not stop in the RSP Area (or any other locations in the downtown Sacramento area) for any planned purpose. But if there is a delay in the system, there is the potential that a freight train carrying hazardous substances would be stopped in the RSP Area for a short amount of time. Such occurrences would be completely random and unscheduled, however, and the number of cars carrying hazardous materials and their contents would be similarly unpredictable. The risk of an accident involving a rail car carrying hazardous substances traveling through the RSP Area would be similarly unpredictable.

In the unlikely event of a worst-case scenario release of a hazardous substance in the RSP Area, the City of Sacramento has an extensive emergency response network in place to provide first response, which is described in the Regulatory Setting. Furthermore, a new fire station is proposed to be built as part of the RSPU, which would enable a quicker response time by personnel trained to deal with hazardous materials.

New residential uses are proposed to be developed in close proximity to the relocated main line, which would continue to be used to transport freight through the RSP Area. During the day, a large number of office workers would also be present in the RSP Area. While development of the RSPU would increase the number of people within the RSP Area who could be exposed to a risk of hazardous substances exposure from an unintentional release, the RSPU in and of itself would not alter the types of rail shipments through the RSP Area. Further, it is likely that many of the future occupants (residences and businesses) will simply be those that move from an existing location in the Sacramento metropolitan area (or other highly urbanized area), such as the KP Medical Centers. Where there is already a risk from a catastrophic release of an acutely hazardous substance. Moreover, an accidental or intentional release of an acutely hazardous substance would not be limited to the RSP Area, but could have severe consequences downtown and even greater distances. An unintentional or intentional release of hazardous substances within the RSP Area could occur, regardless of whether the RSPU is developed or not.

⁶⁹ *Federal Register*, Proposed Rules- Hazardous Materials: Enhancing Rail Transportation Safety and Security for Hazardous Materials Shipments, December 21, 2006 [Volume 71, Number 245, page 76836].

For the reasons outlined above, the RSPU would not substantially increase the risk of exposure to inadvertent or accidental releases of hazardous substances transported on adjacent roadways and rail lines within the RSP Area, as compared to existing conditions. Additional, as discussed in the Regulatory Setting, transportation of hazardous materials is regulated by the DOT and Caltrans. Therefore, the impact is considered **less than significant**.

Railyards Specific Plan Update Land Use Variant

The RSPU Land Use Variant potential to bring new occupants or visitors in proximity to hazardous substances transportation routes, such as I-5 and the UPRR rail lines would be the same as those discussed above. As such, the discussion above would be applicable to the RSPU Land Use Variant and the effects of the RSPU Land Use Variant would be equal to those of the RSPU, resulting in a **less-than-significant** impact.

KP Medical Center

Hazardous substance could be transported adjacent to the KP Medical Center on roadways or the UPRR rail lines. The KP Medical Center would be located approximately 200 feet from I-5. The KP Medical Center potential to bring patients, staff or visitors in proximity to hazardous substances transportation routes, such as I-5 would be the same as those discussed above. The KP Medical Center would be located approximately 1,300 feet from the UPRR rail lines. At this distance, patients, staff or visitors potential exposure to hazardous substances transported along the UPRR rail lines would be less those discussed above for the RSPU. As noted in the Regulatory Setting, many federal and industry programs are already in place to regulate the transportation of hazardous substances. As such, the KP Medical Center would result in a **less-than-significant** impact.

MLS Stadium

The proposed MLS Stadium would be located approximately 0.60 mile or (approximately 3,200 feet) from I-5 and approximately 200 feet from UPRR rail lines. The proposed MLS Stadium would not substantially increase the risk of exposure to inadvertent or accidental releases of hazardous substances transported on adjacent roadways or rail lines, as compared to existing conditions. Additional, as discussed in the Regulatory Setting, transportation of hazardous materials is regulated by the DOT and Caltrans. Therefore, the impact is considered **less than significant**.

Stormwater Outfall

The Stormwater Outfall would not result in occupancy during operation. As a result the Stormwater Outfall would not bring new occupants or visitors in proximity to hazardous substances transportation routes, such as I-5 and the UPRR rail lines. As such, the Stormwater Outfall would have **no impact**.

Summary

The RSPU, RSPU Land Use Variant, KP Medical Center, and MLS Stadium would not substantially increase the risk of exposure to inadvertent or accidental releases of hazardous substances transported on adjacent roadways and rail lines within the RSP Area, as compared to existing conditions. Additionally, as discussed in the Regulatory Setting, transportation of hazardous materials is regulated by the DOT and Caltrans. Therefore, the impact is considered **less than significant** and no mitigation is required for the RSPU, RSPU Land Use Variant, KP Medical Center, and MLS Stadium. The Stormwater Outfall would result in no impact as it would not require occupancy during operation.

Mitigation Measure

None required.

Impact 4.8-7: Operation of the proposed projects could result in the exposure of people to health risks associated with contaminated soils and groundwater.

Impact 6.5-2 on pages 6.5-26 through 6.5-30 of the 2007 RSP EIR found that development of the RSP would not substantially increase the risk of exposure of construction workers or future occupants to hazardous substances contamination in soil or groundwater at the project site as long as development is consistent with the remediation action plans and LUCs. However, porous utility lines could be infiltrated by contaminated groundwater create a significant impact. The 2007 RSP EIR recommended Mitigation Measure 6.5-2, requiring measures to prevent infiltration of groundwater in accordance with DTSC requirements.

The potential risk associated with soil and groundwater exposure is primarily based on possible land uses. Typically, the greatest soil and groundwater exposure potential is found in single-family residential development. Typically with single family development, the resident family could choose to grow and eat produce from the property and children routinely play in or could ingest soil. Under this land use, children are the population with the greatest potential for exposure. Remediation standards that are protective of the single-family occupants are considered residential or unrestricted use standards.

Substantially lesser exposure potential exists in higher density residential uses, commercial or industrial land uses where property occupants or users have little to no opportunity for contact with soil. Under commercial or industrial land uses, the residents or occupants are considered the population with the greatest potential for exposure to soil. Remediation standards that are protective of commercial or industrial uses are considered restricted use standards.

With the exception of parks and open spaces, anticipated land uses in the RSP Area would be mixed commercial, residential and office uses. Currently, there are no plans for single-family residential development. Furthermore, the 2015 LUC states that, for properties covered by the

LUC, where direct human exposure to Native Soil remains possible after construction, the Owner or Occupant should install, keep and maintain a top layer of clean soil to prevent exposure to such Native Soil, regardless of land use.

Development of the proposed projects would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes.

Railyards Specific Plan Update

As described in the Environmental Setting, DTSC concluded that these properties, as remediated and when used in compliance with the Environmental Restrictions of the 2015 LUC would not present an unacceptable risk to present and future human health or safety or the environment. Specifically, the Environmental Restrictions limit the type of development and actions that can be taken on the property. The RSPU also contains policies that fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1).

Some areas in the RSP Area are not covered by the 2015 LUC, because they are not owned by the applicant and/or still require remediation. Such areas are also required to comply with the relevant provisions and requirements of an approved SGMP (these areas are referred to as Non-Certified Areas in the SGMP). The following summarizes the impact associated with risk of exposure to contaminated soil and debris in Certified and Non-Certified Areas (see Figures 4.8-4 and 4.8-5).

When remediation is completed to DTSC remedial goals, DTSC would issue certifications of completion and record a LUC on the property. The LUC would limit uses of the property to those activities that are consistent with the implemented level of remediation, similar to what has been done for other portions of the RSP Area. LUC components could include the following:

1. Groundwater cannot be extracted without DTSC approval.
2. Industrial and commercial land uses, including construction and maintenance of utility corridors and street rights-of-way, are allowed under an appropriate management plan.
3. Landscaping is allowed provided that clean soil to appropriate depths is placed in areas where direct soil contact can occur.
4. Post-certification excavation or soil removal is not permitted without prior DTSC approval.
5. Environmental restrictions, which include implementation and compliance with the SGMP.

The RSP Area remediation process ensures that the remedial goals combined with the LUCs takes into account the mixed-use nature of the project to ensure the health and safety of construction workers and future occupants. The following summarizes the impact associated with risk of exposure to contaminated soil and debris in the RSP Area.

Certified Areas Owned by DVR

Certified Areas in the RSP Area include the Lagoon, Central Corridor, Car Shop Nine, Northern Shops Study Areas, and a portion of the Sacramento Station Study Area owned by the DRV. Development of these areas would be conducted in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP. The Environmental Restrictions require that any soils that are brought to the surface be managed in compliance with all applicable provision of the State and federal laws, and the approved SGMP. Additionally, the Environmental Restrictions limit activities associated with the extraction of groundwater. Because development of the Certified Area would be conducted in compliance with the Environmental Restrictions of the 2015 LUC and approved SGMP, the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. However, development of these areas would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potential significant** impact.

Non-Certified Areas Owned by DRV

Central Shops Study Area

Certification of soil remediation within the Central Shops Study Area is anticipated from DTSC in late 2016, followed by a LUC. The LUC would limit uses of the property to those activities that are consistent with the implemented level of remediation. The LUC would also place restriction on the extraction of groundwater. Because development within the Central Shops Study Area would be required to comply with a LUC and an approved SGMP, the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. However, development of the Central Shops Study Area would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

Sims Metal Site

Although part of the Lagoon Study Area the portion of the Sims Metal site located within the RSP Area is not covered under the 2015 LUC. The Sims Metal site is undergoing a separate remediation process with DTSC as past uses at the site include industrial uses such recycling facility. Development of the Sims Metal site would be required to comply with a LUC and an approved SGMP. The LUC would limit uses of the property to those activities that are consistent with the implemented level of remediation complete on the site. The LUC would also place restriction on the extraction of groundwater. As a result, the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. However, development in the Lagoon Study Area would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

Manufactured Gas Plant Study Area and Northwest Corner

Soil remediation in the Manufactured Gas Plant Study Area and the Northwest Corner would be conducted in accordance with the 1988 Enforceable Agreement and the DTSC-approved Remedial Action Plans. If soils are not remediated to levels protective for unrestricted land uses the Remedial Action Plans may require a LUC for these areas. However, any development in the Manufactured Gas Plant Study Area and the Northwest Corner would be subject to the requirements of an approved SGMP which includes measures to reduce risk of exposure and protect health and safety. However, porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

Other Areas

Sacramento Station Study Area

The portion of the Sacramento Station owned by the DRV is covered under the 2015 LUC and the SGMP. Therefore, the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk.

Other areas within the Sacramento Station Study Area owned by Administrative offices of the Courts and City of Sacramento and would be developed in accordance with the restrictions in the Sacramento Station Covenant.⁷⁰ The Sacramento Station Covenant allows for industrial uses, commercial uses, and landscaped and paved areas without restriction. The Sacramento Station Covenant also includes restrictions on soil exaction and groundwater extraction.⁷¹ Because development within the Sacramento Station Study Area would be accomplished in compliance with the Sacramento Station Covenant the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. However, development of the area would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

7th Street Corridor

In 2000, remediation activities for the 7th Street Corridor were deemed complete by DTSC. The 7th Street Corridor Covenant prohibits residential uses, hospitals, schools and childcare centers. Additionally, Environmental Restrictions of the 7th Street Corridor Covenant require a soil Management Plan and a Health and Safety Plan be prepared and approved by DTSC prior to any

⁷⁰ Department of Toxic Substances Control, 2015. Land Use Covenant and Agreement, County of Sacramento, Portions of APNs 002-0010-049, 002-0010-052, 002-0010-056 and 002-0010-058, Specified Study Area within the Sacramento Railyards, September 30, 2015.

⁷¹ Department of Toxic Substances Control, 1994. Covenant and Agreement to Restrict use of Property, Sacramento Station site at the southern Pacific Transportation Company, Sacramento Locomotive Works, Sacramento, California, May 6, 1994.

soil disturbance activities.⁷² These measures would ensure that potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

West Jibboom Street Property

The RSP does not propose any new uses on the West Jibboom Street Property that would require future occupancy. Therefore, the potential exposure of future occupants to contaminated soil or groundwater would not present an unacceptable health risk. As previously discussed, comprehensive multi-phase soil and groundwater remedial investigations established that soil and groundwater impact boundaries do not extend to this property.⁷³ Never the less, past activities at this site could have contaminated underlying soil and/or groundwater. Although contaminated soil and groundwater would not be expected to be encountered, porous utility lines could be infiltrated by unidentified contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potentially significant** impact.

Railyards Specific Plan Update Land Use Variant

Similar to the RSPU, development of the RSPU Land Use Variant would be required to comply with a LUC. Therefore, the discussion above would be the same for the RSPU Land Use Variant. The potential use of porous pipelines in areas with contaminated groundwater would be a **potentially significant** impact.

KP Medical Center

The KP Medical Center site is located primarily within the Northern Shops Study Area, which is covered by the 2015 LUC. As discussed above, development in this area must be conducted in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP. The RSPU also contains policies fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1). Therefore, operation of the KP Medical Center would not present an unacceptable health risk to future occupants associated with contaminated soils and groundwater. Development of the KP Medical Center would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potential significant** impact.

⁷² Department of Toxic Substances Control, 2001. Covenant to Restrict Use of Property, Environmental Restrictions, 7th Street Corridor, Former Southern Pacific Transportation Company, Sacramento Locomotive Works, Sacramento County, California. June 14, 2001.

⁷³ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

MLS Stadium

The MLS Stadium site is located within the Lagoon Study Area and Car Shop Nine Study Area, which is covered by the 2015 LUC and the SGMP. As discussed above, development in these study areas must be accomplished in compliance with the Environmental Restrictions of the 2015 LUC and the SGMP. The RSPU also contains policies fully protect human health and the environment through implementation of DTSC approved remedial action plans (Policy HAZ-4.1). Therefore, operation of the MLS Stadium would not present an unacceptable health risk to future occupants associated with contaminated soils and groundwater. Development of the MLS Stadium would include the installation of underground utility lines. Porous utility lines could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potential significant** impact.

Stormwater Outfall

During operation the proposed Stormwater Outfall would not be occupied. As a result, operation of the Stormwater Outfall would not present an unacceptable health risk to future occupants associated with contaminated soils and groundwater. As previously discussed, comprehensive multi-phase soil and groundwater remedial investigations established that soil and groundwater impact boundaries do not extend to this property.⁷⁴ Never the less, past activities at this site could have contaminated underlying soil and/or groundwater. Although contaminated soil and groundwater would not be expected to be encountered, porous utility lines associated with the Stormwater Outfall could be infiltrated by unidentified contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potential significant** impact.

Summary

The KP Medical Center, MLS Stadium, and a portion of the Stormwater Outfall are located where the Environmental Restrictions of the 2015 LUC and the SGMP are required to be implemented. Therefore, operation would not present an unacceptable health risk to future occupants associated with contaminated soils and groundwater. For the areas not covered by the 2015 LUC other existing or future LUC would require compliance with development restrictions. Therefore, risk of exposing future occupants to contaminated soil or groundwater would not present an unacceptable health risk. However, porous utility lines associated with all development could be infiltrated by contaminated groundwater or volatile contaminants in soil vapor that could contaminate water flowing through the pipes, resulting in a **potential significant** impact.

⁷⁴ Stantec, 2016. Draft Supplement-Environmental Status Summary. Western Project Components of the Outfall Project [Supplemental Memorandum], June 1, 2016.

Mitigation Measure

Mitigation Measure 4.8-7 expands upon Mitigation Measure 6.5-2 on page 6.5-30 of the 2007 RSP EIR. This measure would be required for all development in the RSP Area.

Mitigation Measure 4.8-7 (RSPU, KPMC, MLS, SO)

- a) *In areas where the groundwater contamination has the potential to reach water, sewer or storm drainage pipelines due to fluctuations in the elevation of the groundwater table, or where volatile contaminants in soil vapor could enter porous utility lines, measures such as concrete trenches, membrane barriers and venting will be used to prevent infiltration in accordance with DTSC requirements.*
- b) *Routine monitoring of the above areas shall be performed by the landowners and/or the City, reported to DTSC and Regional Water Board, and corrective actions implemented if the results indicate adverse change in water quality. For stormwater, the monitoring may be conducted through the City's MSR 4 program.*

Impact Significance After Mitigation: Mitigation Measure 4.8-7 would ensure all appropriate measures are taken to minimize contaminated groundwater reaching water, sewer or storm drainage pipelines. With the implementation of Mitigation Measure 4.8-7, this impact would be reduced to a **less-than-significant** level.

Cumulative Impacts

Exposure to existing soil and groundwater contamination and contaminated building materials (asbestos, lead paint, etc.) is generally site-specific and depends on past, present, and future uses, and existing soil and groundwater conditions. Any existing or previously unidentified contaminated soil or groundwater uncovered during construction activities would be managed consistent with applicable federal, State and local laws to limit exposure and to clean up the contamination at each site. Therefore, construction of the proposed projects would not combine with other projects to result in the cumulative exposure of people to contaminated soil, groundwater or hazardous building materials during construction activities and no cumulative impact would occur.

Since the certification of the 2007 RSP EIR, soil remediation and/or certification has been completed for the majority of the RSP Area. As a result, the potential exposure to contaminated soils and debris is less likely than previously analyzed in 2007. The proposed projects would contribute to potential cumulative exposure associated with interference with remediation of the South and Lagoon Plume and accidental or inadvertent release of hazardous substances during transportation. Each of these cumulative impacts is further discussed below. Impacts 6.5-11 and 6.5-12 of the 2007 RSP EIR are not further discussed in this section as the associated impacts are generally site-specific and would not result in a cumulative impact. Impacts 6.5-11 and 6.5-12 of the 2007 RSP EIR are located on pages 6.5-40 through 6.5-41.

Impact 4.8-8: The proposed projects in combination with development of other projects in the surrounding area known to contain, or could contain contaminated soil or groundwater, could present a hazard to construction workers if not properly managed.

Impact 6.5-10 of the 2007 RSP EIR found that the 2007 RSP would have a less-than-significant impact relating to the RSP construction effects due to soil or groundwater contamination in combination with development on properties that are known to contain, or could contain contaminated soil or groundwater. This topic can be located on pages 6.5-39 and 6.5-40 of the 2007 RSP EIR.

Areas surrounding the RSP past and current uses have included industrial uses such as recycling facilities and metal scrap yards. Other uses could have included the use of underground storage tanks or other hazardous materials. Such uses could have resulted in soil or groundwater contamination and the potential exists for release of hazardous substances during construction and/or remediation of those sites. Groundwater and some soil remediation are ongoing within the RSP Area. Development of the RSP Area located in the Certified and Non-Certified Areas including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall (as shown in Figures 4.8-4 and 4.8-5), would occur in areas where the Environmental Restrictions of a LUC and the SGMP are required to be implemented. In the West Jibboom Street property and the portion of the Stormwater Outfall to be constructed on property currently owned by the California Department of Parks and Recreation, although contaminated soil and/or groundwater would not be anticipated to be encountered, because these areas are not currently covered by the requirements of a LUC or an approved SGMP, development could result in the increased exposure to unidentified contaminated soils or groundwater if not properly managed. Although considerable uncertainty exists regarding the construction schedules for the proposed projects as well as other projects in the vicinity, exposure to contaminated soils or groundwater with those projects in combination with the proposed projects would be considered a temporary **significant cumulative** impact and the contribution of the proposed projects would be cumulatively considerable.

Mitigation Measure

Mitigation Measure 4.8-8 (RSPU, West Jibboom only, SO)

Implement Mitigation Measure 4.8-1.

Impact Significance After Mitigation: Mitigation Measure 4.8-8 would minimize risk of exposure to previously unidentified soil and/or groundwater contamination by requiring that work stop and the appropriate analysis occur to identify the type and extent of the contamination. Depending on the results, appropriate remediation would be completed prior to resuming construction activities in the affected area. The handling, storage, transportation and disposal of any contaminated soil or groundwater would be accomplished with applicable federal, State and local laws. Therefore, with implementation of Mitigation Measure 4.8-8 the contribution of the

proposed projects to this cumulative impact would be less than considerable and this cumulative impact would be reduced to a **less-than-significant** level.

Impact 4.8-9: The proposed projects could contribute to cumulative dewatering activities that could interfere with remediation of the existing South Plume and Lagoon Plume.

Within the RSP Area there are two existing groundwater plumes that extend beyond the boundaries of the RSP Area, South Plume and Lagoon Plume (see Figure 4.8-2). As discussed in Section 4.5.1 Environmental Setting, the plumes contain contaminants of concern and are at various stages of remediation. The South Plume extends from the RSP Area beneath downtown Sacramento to approximately Q Street to the south, 5th Street to the west, and 12th Street to the east. Groundwater and soil vapor investigation and remediation are underway for the South Plume in accordance with the approved plans. The Lagoon Plume is mostly contained within the RSP Area; however does extend slightly north past North B Street. Projects in areas that overlie the existing South Plume and Lagoon Plume and require dewatering, depending on the rate and length of time, could interfere with on-going remediation efforts by pulling the contamination farther to the north or south and/or closer to the ground surface, resulting in a **significant cumulative impact**.

Development of the RSP Area located in the Certified and Non-Certified Areas including the KP Medical Center, the MLS Stadium and the eastern portion Stormwater Outfall (as shown in Figures 4.8-4 and 4.8-5), would occur in areas where the Environmental Restrictions of a LUC and the SGMP are required to be implemented. Therefore, the risk of interfering with groundwater remediation would be less than considerable. In those areas that have not been remediated and/or are still undergoing remediation that are not in the Certified or Non-Certified Area and, therefore not covered by the requirements of a LUC or the SGMP (West Jibboom Street, including a portion of the Stormwater Outfall), although contaminated soil and/or groundwater is not anticipated to be encountered, development could encounter unidentified contamination requiring remediation resulting in an increased risk of interfering with groundwater remediation and the contribution would be considerable.

Mitigation Measure

Mitigation Measure 4.8-9 (RSPU, West Jibboom only, SO)

Implement Mitigation Measure 4.8-1.

Impact Significance After Mitigation: Mitigation Measure 4.8-9 would minimize risk of exposure to previously unidentified soil and/or groundwater contamination by requiring that work stop and the appropriate analysis occur to identify the type and extent of the contamination. Depending on the results, appropriate remediation would be completed prior to resuming construction activities in the affected area. The handling, storage, transportation and disposal of

any contaminated soil or groundwater would be accomplished with applicable federal, State and local laws. Coordination with appropriate regulatory agencies would ensure that the public is not exposed to contaminated soil or groundwater as a result of the disruption of remediation activities. With the implementation of Mitigation Measure 4.8-9, the contribution of the proposed projects to this cumulative impact would be less than considerable and this cumulative impact would be **less than significant**.

Impact 4.8-10: The proposed projects could contribute to cumulative risk of exposure of people due to inadvertent or accidental releases of hazardous substances transported on local or regional roadways or rail lines.

Impact 6.5-13 of the 2007 RSP EIR found that the 2007 RSP would have a less-than-significant impact relating to the cumulative increases in the number of people who could be exposed to accidental or intentional release hazardous substances on rail lines and roadways. This topic can be located on pages 6.5-41 and 6.5-42 of the 2007 RSP EIR.

The transportation of hazardous materials associated with the RSPU, when considered with other projects in the region, would increase the amount of hazardous substances transported on local and regional roadways, which could increase the risk of exposure due to the inadvertent or accidental release of hazardous substances. As discussed in the Regulatory Setting, transportation of hazardous materials is regulated by the DOT and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release. Because numerous laws and regulations govern the transportation of hazardous materials to reduce the potential hazards this cumulative impact would be **less than significant** and the RSPU's contribution would be less than considerable.

Mitigation Measure

None required.