

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section discusses existing hazards and hazardous materials in the Specific Plan Area and also future hazards and hazardous materials that could result from proposed redevelopment outlined in the Specific Plan. Hazards include human exposure to any contamination during construction and site redevelopment, as well as post development exposure risks that could result from changing land use and increased population.

The evaluation is based on review of existing environmental documentation available for the Specific Plan Area and adjacent areas, site reconnaissance and conversations, current regulatory laws and regulations concerning transportation, storage and use of hazardous materials in Santa Rosa.

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials include waste that has been abandoned, discarded, or recycled on the property and as a result represents a continuing hazard as the development is proposed. Hazardous materials also include any contaminated soil or groundwater.

A. Regulatory Setting

This section summarizes existing federal, State and City of Santa Rosa policies and regulations that apply to hazards and hazardous materials for the City of Santa Rosa.

1. Federal Laws and Regulations

At the federal level, the chief environmental regulator is the U.S. Environmental Protection Agency (EPA), Region IX for Northern California. The EPA maintains responsibility for cleanup of federal lands and waterways.

Since the Specific Plan Area does not include significant federal holdings most of the regulatory authority is delegated to the State of California.

A few of the databases with information on hazardous materials are the Federal Superfund list started through the Comprehensive Environmental Response, Conservation and Liability Act (CERCLA) of 1980, the United States EPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), HAZNET, the leaking underground storage tank information system (LUST) and the Cortese list. These databases are also a primary source of information for legal disclosures, such as Phase 1 Environmental Site Assessments (ESA) and to facilitate interagency cooperation.

2. State Laws and Regulations

In California, the Department of Toxic Substances Control (DTSC) is chiefly responsible for regulation, handling, use and disposal of toxic materials in California,¹ while the State Water Resources Control Board (SWRCB) regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in the various regions of the state.² The North Coast Regional Water Quality Control Board oversees surface and groundwater in the Santa Rosa area.³ Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under the Occupational Health and Safety Administration at both the federal level (OSHA) and at the State level through the California Division of Occupational Safety and Health (CAL/OSHA),⁴ as well as through the California Department of Health Services (DHS). Air quality is

¹ California Environmental Protection Agency's website. <http://www.calepa.ca.gov/About/History01/>, accessed on November 7, 2006.

² State Water Resources Control Board's website. <http://www.swrcb.ca.gov/>, accessed on November 7, 2006.

³ North Coast Regional Water Quality Control Board's website. <http://www.waterboards.ca.gov/northcoast/>, accessed on November 7, 2006.

⁴ California Department of Industrial Relations' website. <http://www.dir.ca.gov/dosh/>, accessed on November 7, 2006.

regulated through the Air Resources Board (ARB) and Bay Area Air Quality Management District (BAAQMD).

3. Transportation Regulations

Transportation of hazardous materials on the highways is regulated through the Federal Department of Transportation (DOT) and the California Department of Transportation (Caltrans). This includes a system of placards, labels and shipping papers required to identify the hazards of shipping each class of hazardous materials. Existing federal and State laws address risks associated with the transport of hazardous materials. These laws include regulations outlined in the Hazardous Materials Transportation Act administered by the DOT.⁵ Caltrans is mandated to implement the regulations established by the DOT, which are published as the Federal Code of Regulations, Title 49, commonly referred to as 49 CFR. The California Highway Patrol (CHP) enforces these regulations. Regulations of hazardous materials and wastes include the manufacture of packaging and transport containers; packing and repacking; labeling; marking or placarding; handling; spill reporting; routing of transports; training of transport personnel; and registration of highly hazardous material transport.

4. Local Regulations and Policies

a. Relevant City of Santa Rosa General Plan Goals and Policies

The Specific Plan will need to be consistent with the City of Santa Rosa's General Plan goals and policies. The following lists applicable General Plan goals and policies most pertinent to the Specific Plan in regards to hazards and hazardous materials.

⁵ Code of Federal Regulations, Title 49, Parts 100-185 Hazardous Materials Transportation Requirements.

i. Noise and Safety Element

Goal NS-A: Prepare for disasters.

- ◆ **Policy NS-A-1:** Maintain the Emergency Operations Plan as the City's disaster-response plan. Work with Sonoma County to update joint-emergency response and disaster response plans, as needed.
- ◆ **Policy NS-A-2:** Develop a public awareness program on the nature and extent of natural hazards in the Planning Area and ways of minimizing the effects of disasters.
- ◆ **Policy NS-A-3:** Establish community programs which train volunteers to assist police, fire and civil defense personnel during and after disasters.

Goal NS-E: Minimize dangers from hazardous materials.

- ◆ **Policy NS-E-1:** Require remediation and cleanup, and evaluate risk prior to reuse, in identified areas where hazardous materials and petroleum products have impacted soil or groundwater.
- ◆ **Policy NS-E-2:** Require that hazardous materials used in business and industry are transported, handled and stored in accordance with applicable local regulations.
- ◆ **Policy NS-E-3:** Restrict siting of businesses, including hazardous waste repositories, incinerators or other hazardous waste disposal facilities, that use, store, process, or dispose large quantities of hazardous materials or wastes in areas subject to seismic fault rupture or very violent ground shaking.
- ◆ **Policy NS-E-4:** Where applicable, identify and regulate appropriate regional and local routes for transportation of hazardous materials and hazardous waste. Require that fire and emergency personnel can easily access these routes for response to spill incidences.
- ◆ **Policy NS-E-5:** Require commercial and industrial compliance with the Sonoma County Hazardous Materials and Waste Management Plan.
- ◆ **Policy NS-E-6:** Generate and support public awareness and participation in household waste management, control and recycling through county

programs including the Sonoma County Household Hazardous Waste Management Plan.

Goal NS-F: Minimize the potential for wildland fires.

- ◆ **Policy NS-F-1:** Require proposed developments in high or medium fire hazard areas to investigate a site's vulnerability to fire and to minimize risk accordingly.
- ◆ **Policy NS-F-2:** Require new development in areas of high wildfire hazard to utilize fire-resistant building materials. Require the use of on-site fire suppression systems, including automatic sprinklers, smoke and/or detection systems, buffers and fuel breaks and fire retardant landscaping.
- ◆ **Policy NS-F-3:** Prohibit untreated wood shake roofs in areas of high fire hazard.
- ◆ **Policy NS-F-4:** Continue monitoring water fire-flow capabilities throughout the City and improving water availability at any locations having flows considered inadequate for fire protection.
- ◆ **Policy NS-F-5:** Require detailed fire prevention and control measures, including community firebreaks, for development projects in high fire hazard zones.
- ◆ **Policy NS-F-6:** Minimize single-access residential neighborhoods in development areas near open space and provide adequate access for fire and other emergency response personnel.

ii. Transportation Element

Goal T-M: Continue the availability of air transportation services.

- ◆ **Policy T-M-1:** Encourage the provision of convenient air travel opportunities for Santa Rosa residents.
- ◆ **Policy T-M-2:** Work with Sonoma County to maintain Charles M. Schulz-Sonoma County Airport's continued safe and successful operation by discouraging the development of incompatible uses in airport safety zones.

- ◆ **Policy T-M-3:** Support efforts at the Charles M. Schulz-Sonoma County Airport to minimize negative effects of air transportation, such as surface street congestion, air pollution, noise and safety concerns.
- ◆ **Policy T-M-4:** Support continued operation of commercial air services at Charles M. Schulz-Sonoma County Airport.
- ◆ **Policy T-M-5:** Support continued operation of private shuttle services to San Francisco and Oakland International Airports.

b. Environmental Standards

While there are many regulatory programs, there are fewer standards for determining exposure risks due to contamination. Currently the most commonly used are the Regional Water Quality Control Board (RWQCB) environmental screening levels (ESLs) for commercial/industrial and residential developments,⁶ the California Environmental Protection Agency's, and the Department of Toxic Substances Control California Human Health Screening Levels (CHHSL).⁷ According to their publication, environmental screening levels (ESL) are to be used as Tier 1 guidelines. In other words the presence of a chemical at concentrations in excess of an ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring, but indicates that a potential for adverse risk may exist and that additional evaluation is warranted.

In general, the ESLs facilitate a site review, including comparison of contaminant levels with standards, review of remediation plans and procedures and review of closure documentation and limitations on future land use. Other standards, such as the Total Threshold Limit Concentration (TTLC) and Soluble Threshold Limit Concentration (STLC) have been developed to establish hazardous materials concentrations for industrial sites and landfills

⁶ California Environmental Protection Agency, 2005, *Screening of Sites with Contaminated Soil and Groundwater*, CALEPA.

⁷ California Environmental Protection Agency, 2005, *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*, CALEPA.

through work completed by the DTSC. Most of this information can be found through a search of environmental databases and file review at local agencies. Regulatory agencies maintain a database of properties and businesses affected by contamination or properties and businesses where there is significant risk from contamination due to use, storage, or disposal of hazardous materials, underground fuel tanks, or other hazards.

c. Local Hazardous Materials Oversight

In the Specific Plan Area, hazardous materials and contaminants are locally regulated through the Santa Rosa Fire Department (SRFD). The SRFD operates as a Certified Unified Program Agency (CUPA). CUPA programs include the Hazardous Materials Business Plan Program, Hazardous Waste Program, Underground Storage Tank Program, Accidental Release Program and the portions of the Uniform Fire Code that address hazardous materials. General program requirements include inspections of businesses and review of permit conditions and procedures for the handling, storage, use and disposal of hazardous materials. The Hazardous Materials Business Plan is used to keep track of the use of hazardous materials by businesses in accordance with both State and federal laws. The Hazardous Waste Generator Program is based on the Hazardous Waste Control Law found in the California Health and Safety Code Division 20, Chapter 6.5 and regulations found in the California Code of Regulations, Title 22, Division 4.5.⁸

The SRFD also administers the local oversight program (LOP). The LOP oversees the investigation and cleanup of fuel releases from underground storage tanks. Sites are entered into the LOP when a release from an underground tank is reported. A similar program provides for the permitting, monitoring and surveillance of septic tanks, chemical toilets and vaults, as well as abandonment and disposal of septic waste within Sonoma County.

⁸ California Department of Toxic Substances Control's website. <http://www.dtsc.ca.gov/LawsRegsPolicies/Title22/index.cfm>, accessed on November 7, 2006.

The Santa Rosa Industrial Waste Program enforces regulations issued to businesses that discharge wastewater into the Santa Rosa Sub-regional Water Reclamation System. The Industrial Waste Program consists of inspections, monitoring and permitting of businesses to ensure their compliance.⁹

First responders to hazardous material emergencies could be the SRFD or hazardous material specialists such as the Sonoma County Hazardous Materials Response Team. State law requires that first responders to a release of hazardous materials have a minimum 40 hours of training in accordance with the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) standard.¹⁰

d. Hazardous Material Regulatory Enforcement

Enforcement of environmental regulations depends upon both public and private reporting of spills, leaks, or other violations. The Santa Rosa Police Department Environmental Crimes Unit also provides enforcement. Officers in this program have specialized training in environmental crime investigations and hazardous materials recognition and work closely with regulatory specialists from other City departments such as the SRFD Hazardous Materials Team; Utilities Department Industrial Waste Section; Community Development Building Code Inspectors; and the Public Works Department Storm Water Management Program, to ensure that environmental regulations are adhered to.

The Sonoma County Environmental Health Division is charged with administering the State of California's Medical Waste Program. Regulation of potentially hazardous pesticide and herbicides is under the jurisdiction of the Sonoma County Agricultural Commissioner. The City of Santa Rosa Public Works Department administers the Stormwater Management Program that is

⁹ City of Santa Rosa's website. <http://ci.santa-rosa.ca.us/default.aspx?PageId=2119>, accessed on November 7, 2006.

¹⁰ Code of Federal Regulations, Title 29, Section 1910.120 Hazardous Waste Operations Training.

designed to reduce urban runoff from polluting local waterways through use of best management practices, monitoring and other techniques.

B. Existing Conditions

This section discusses the existing conditions in regards to hazards and hazardous materials within the Specific Plan Area.

1. Historical Hazardous Materials

There is a long history of hazardous materials use and storage that is directly related to the types of industries that have operated in the Specific Plan Area. Downtown Santa Rosa developed rapidly following arrival of the railroad in 1870 with the construction of warehouses and mills. The 1894 Sanborn Map in the vicinity of the old railroad station shows a wool mill and several fruit packing warehouses.¹¹ Later in 1908, several new storage facilities were added, including a lacquer tank. As automobiles became popular, service stations and automotive repair facilities opened with accompanying storage and use of petrochemicals. Agricultural supply warehouses have continued to operate and the Western Farm Center is still operating on 7th street. Other industries have occupied the larger parcels in undesirable areas such as next to Highway 12 and the railroad tracks. Industrial parcels include wrecking yards, cement factories and various corporate yards. Much recent contamination is associated with leaking underground fuel tanks, especially older tanks placed in the 1970's and 1980's, while remnant contamination from old lead paint or asbestos containing building materials persists in many older structures.

2. Hazardous Materials Records Review

An Environmental Data Resources (EDR) report was obtained for the area within one-mile radius of the proposed railroad station between 4th and 5th street, including the entire Specific Plan Area. Federal databases that reported sites within the Specific Plan Area are CERCLIS, CERCLIS-NFRAP and

RCRA. State and local databases include REF, CORTESE, LUST, CA FID, CA SLIC, UST, HIST UST, SWEEPS and NOTIFY 65. Many sites are reported in multiple databases.¹²

a. Federal Review

CERCLIS, the Comprehensive Environmental Response, Compensation and Liability Information System, contains sites proposed or on the National Priorities List. These sites have been reported to the federal Environmental Protection Agency (EPA). Only one site was documented to be on the list and likely require further remediation. That site is called C&D Batteries, a division of Electra Corporation at 265 Roberts Avenue. Another site, the PG&E Gas Plant at 5th and Mendocino is listed in the CERCLIS-NFRAP database (no further remedial action planned). C&D Batteries is reported for lead contaminated soil and generating aqueous solution with less than 10 percent organic residue.

Resource conservation and recovery act (RCRA) sites transport, store, treat and/or dispose of significant volumes of hazardous waste. Reported sites are Westside Foreign Auto at 12 West 3rd Street, Burt Olhiser Painting at 206 West 6th Street and De Paz Autobody at 77 West 3rd Street. Westside Foreign Auto is reported for leaking waste oil, storing aqueous solution with less than 10 percent total organic residues and oil/water separation sludge. The other businesses are small quantity waste generators with no reported violations.¹³

b. Local Review

The distribution of hazardous materials sites is controlled by zoning and proximity to transportation corridors. Residential areas have few sites, while

¹¹ Environmental Data Resources, 2006, EDR Sanborn Map Report for the Specific Plan Area.

¹² Environmental Data Resources, 2006, EDR Area Report for the Specific Plan Area.

¹³ Environmental Data Resources, 2006, EDR Area Report for the Specific Plan Area.

there are many sites along the railroad corridor near Downtown Santa Rosa. There is also a concentration of sites east of Santa Rosa Plaza in the area between Mendocino Avenue and B Street. Older service stations and other businesses with fuel storage tanks occasionally leaked petroleum hydrocarbons such as gasoline or diesel fuel from underground tanks. Other businesses with contaminant issues are automotive repair sites or maintenance yards, which have a high risk from leaking petrochemicals, solvents and other hazardous materials. Other types of businesses found through the environmental database search include utility plants, cement factories and even restaurants that may maintain significant volumes of oil and grease considered hazardous.

Due to the close proximity of sites, there may be an area-wide contamination issue, rather than that constrained to individual sites. The primary factor controlling the spread of subsurface contamination is shallow groundwater and groundwater flow. The flow of groundwater may be constrained through the network of monitoring wells often constructed about sites with contaminated groundwater. The “geotracker” database maintained by the State of California includes this information, some of which was included in the EDR report. The EDR report also summarized some basic information about groundwater. According to their map, groundwater flow in the area is generally westerly, except near Santa Rosa Creek, where subsurface flow is influenced by seepage into the creek and is therefore southwesterly north of the creek and northwesterly north of the creek. The depth to groundwater in the area is recorded at between 7 and 25 feet below the ground surface, but mainly between 9 and 15 feet in depth.

While there may be general low-level contamination of groundwater due to industrial history within the Specific Plan Area this could be difficult to trace to one source. Remediation will likely be completed on a site-specific basis in accordance with general protection for the underlying aquifer and well protection. Moreover, there would be future enhancement of the underlying aquifer if industrial areas prone to pollution were replaced with environmen-

tally engineered parking and housing structures designed to protect underlying groundwater.

3. Sub-Area Hazardous Material Summary

The Specific Plan Area is divided into Sub-Areas with specific land use planning designations. These are described below in terms of the known potential environmental hazards. A majority of the identified hazards are from fuel leaks of gasoline or diesel oil. Most of these sites were cleaned up to a level satisfactory to Sonoma County and/or the Regional Water Quality Control Board. Other sites present a hazard due to storage of materials such as fertilizer, muriatic acid, or other products that are potentially hazardous. There are several concrete yards and warehouses. The Specific Plan calls for many of these areas to be redeveloped for residential and mixed use to promote local economic growth and create a base population that will commute via the proposed transit system. These sites are listed in Table 4.6-1 identified by location on Figure 4.6-1.

a. Courthouse Square

The Courthouse Square Sub-Area is one of the largest and includes several sites with a history of fuel leaks, notably the old hospital site on A Street in the western portion, where an underground storage tank released diesel fuel in 1991. Subsequently, contaminated soils were excavated and disposed of and the case was closed on August 11, 1998.

Another site is the Greyhound bus depot at 416 B Street, which was reported for a minor leak of diesel requiring no further remedial action. AT&T communications at 520 East 3rd Street was reported for a minor leak of gasoline with no further action required. Aside from these sites the most serious incidents reported in any database were a minor leak of gasoline in 1990 north of National Bank of the Redwoods and a diesel leak at 90 Santa Rosa Avenue, where contaminated soil was excavated and disposed of.

CITY OF SANTA ROSA
DOWNTOWN STATION AREA SPECIFIC PLAN EIR
HAZARDS AND HAZARDOUS MATERIALS

TABLE 4.6-1 **LOCATION OF HAZARDOUS MATERIAL SITES BY SUB-AREA**

Sub-Area	Hazardous Material Site	Site Address
Courthouse Square		
CS 1	Old Hospital Site	437 A Street
CS 2	Greyhound Bus Depot (former)	416 B Street
CS 3	AT&T Communications	520 East 3rd Street
CS 4	National Bank of the Redwoods	90 Santa Rosa Avenue
Railroad Square		
RS 1	N.W.R.R	20 West 6th Street
RS 2	Occhipinti One Step Service Center	210 Fifth Street
RS 3	Shell Gas Station	200 Fourth Street
Railroad Corridor		
RC 1	Chevron Chemical, Purity Products	1005 Cleveland Avenue
RC 2	Kaiser Sand and Gravel Company	1060 Maxwell Drive
RC 3	Purity Products *	4 Maxwell Court
RC 4	City of Santa Rosa Corporate Yard	819 Donahue Street
RC 5	Santa Rosa Ice and Cold Storage	806 Donahue Street
RC 6	Grace Property	802 and 803 Donahue Street
RC 7	Westside Engine & Machine / Westside Foreign Auto	12 W 3 rd Street
RC 8	Mead Clark Lumber Supply	175 Railroad Street
RC 9	Yellow and Roadway Freight	270 Dutton Avenue
RC 10	Shell Gas Station	255 Dutton Avenue
RC 11	DZ Inc, Shell Bulk Plant	257 Dutton Avenue

TABLE 4.6-1 LOCATION OF HAZARDOUS MATERIAL SITES BY SUB-AREA
(CONTINUED)

Sub-Area	Hazardous Material Site	Site Address
RC 12	McGowan Auto Wrecking Yard	112 Holbrook Street
RC 13	C&D Batteries	265 Roberts Ave
RC 14	Allefax	1 Sebastopol Road
RC 15	Pt. St. George Fisheries	8 Sebastopol Avenue
Historical Residential		
HR 1	Sonoma County Water Agency	330 Hewett Street
Residential Areas		
RA 1	10th Street Partnership	24 Tenth Street

Note: For a complete list of hazardous material sites and hazardous material site descriptions see Appendix E.

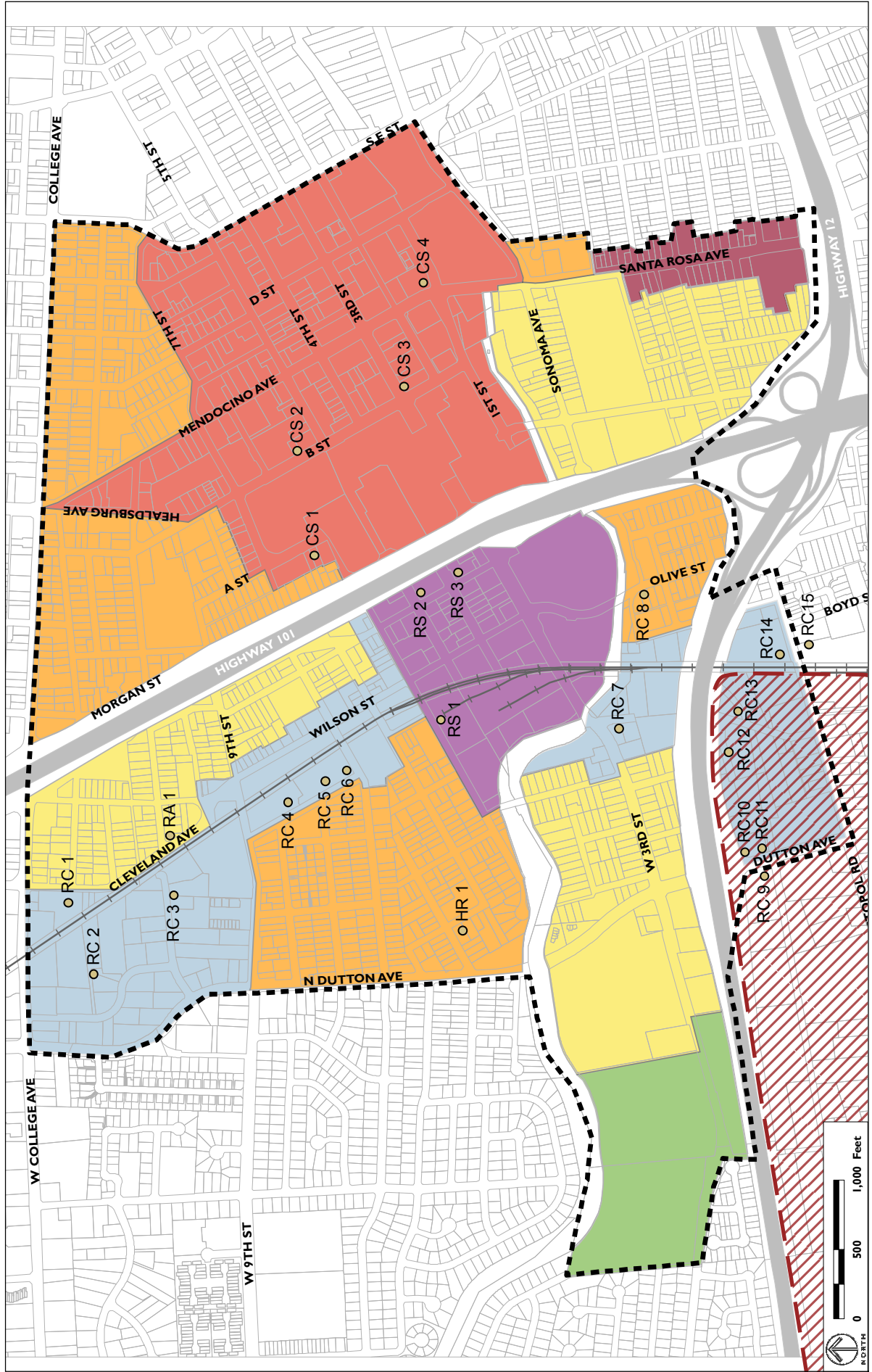
* This site was identified during a site visit by Questa Engineering Corporation and is not identified in the Environmental Data Resources Report

Source: Environmental Data Resources, Inc., 2006.

b. Railroad Square

The Railroad Square Sub-Area includes a visitor’s center and railroad museum housed in the old station building. East of the tracks are coffee shops and small retail shops. N.W.R.R. is a nearby sites reported in the databases searched in this area. The N.W.R.R. site is located at 20 West 6th Street, was reported for an active underground storage tank.

The eastern portion includes a Shell gas station and the Occhipinti One Step Service Center that was reported for a leaking underground storage tank with release of MTBE, as well as for use, storage and disposal of common chemicals at automotive sites such as waste oil and aqueous solution with less than 10 percent total organic residue and hydrocarbon solvents like benzene.



Specific Plan Area
 - - - - - Railroad
 - - - - - Courthouse Square Sub-Area
 - - - - - Park and Gardens Sub-Area
 - - - - - Railroad Square Sub-Area
 - - - - - Railroad Corridor Sub-Areas
 - - - - - Historic Residential Sub-Areas
 - - - - - Residential Sub-Areas
 - - - - - Inwalle Gardens Sub-Area
 - - - - - McMinn Avenue State Superfund Site Area
 - - - - - HHazardous Material Site

HAZARDOUS MATERIALS SITES

FIGURE 4.6-1

c. Railroad Corridor

The railroad corridor includes several former and existing industrial and commercial warehouse sites, as well as several automotive repair businesses. The auto repair businesses store and use various common petrochemicals, including gasoline, motor oil, hydraulic oil and waste oil. In addition to these businesses with registered potentially hazardous materials there are several larger installations, including the Chevron Chemical and Purity Products at 1005 Cleveland Avenue and the Kaiser Sand and Gravel Company at 1060 Maxwell. Both Chevron Chemical and the Kaiser Sand and Gravel Company were reported in the Notify 65 database, but are not reported for any particular contaminant. Kaiser Sand and Gravel was reported in the Cortese database, but with no apparent violation. Not included in any database was Purity Products at 4 Maxwell Court. During the inspection on January 17, 2006, this company was observed to be storing hazardous chemicals, including muriatic acid, within 100 feet of the railroad track in closed drums and polycarbonate containers on a concrete slab next to the building.¹⁴

The largest industrial parcel located immediately northwest of the Railroad Square Sub-Area is occupied by the Western farm center, which retails and wholesales feed and supplies for pets and livestock. Sites with potentially hazardous materials in the immediate vicinity include an old city corporate yard at 819 Donahue Street, the Grace property at 802 and 803 Donahue Street and Santa Rosa Ice and Cold Storage at 806 Donahue Street. The Grace property was reported to the regional water quality control board, but the problem was not indicated. Santa Rosa ice and cold storage was reported for unspecified oil containing waste and historic underground diesel tanks. A leak of gasoline in 1987 from the corporate yard was remedied through excavation and removal of contaminated soil and use of biodegradation.

South of the Railroad Square Sub-Area and north of Highway 12 are the Westside Engine and Machine and Westside Foreign Auto. Westside Engine

¹⁴ Questa Engineering Corporation, 2006, Observations during site reconnaissance.

and Machine at 12 West 3rd Street has an inactive underground fuel tank. Westside Foreign Auto at 12 West 3rd Street was listed for waste oil, oil/water separation sludge and aqueous solution with less than 10 percent total organic residues.

An environmental impact report (EIR) for the entire proposed Sonoma Marina Area Rail Transit (SMART) system from Healdsburg to Larkspur was certified in July of 2006.¹⁵ The report includes a discussion of hazardous materials along the Santa Rosa segment. Identified sites in the Specific Plan Area included the former Mead Clark lumberyard at 175 Railroad Avenue and multiple facilities in the 100-300 block of West 3rd Street. These sites were listed for possible contamination of soils and groundwater with petroleum hydrocarbons and solvents with low potential to affect the Specific Plan.

Potential impacts during construction that were identified were exposure to phenol, creosol or aerial deposited lead. These compounds may be contained in railroad timbers and could have leached into soils near road grade crossings and other areas where track improvements would be needed, or other grading planned. These represent an exposure risk from possible inhalation.

Southwest of the Highway 12 and Highway 101 Intersection is the McMinn Avenue State Superfund Site Area, with a history of mixed industrial uses centered on Sebastopol Avenue. Businesses with reported environmental contamination include Allefax, Point St. George Fisheries, Yellow and Roadway Freight, C&D Batteries, and the former McGowan Auto Wrecking yard. C&D Batteries is listed in the federal EPA database for lead contamination, while another site, Yellow Roadway Freight, had a sample of drinking well water taken in 1993 that was found to contain carbon tetrachloride and chloroform. The DZ Inc., Shell Bulk Paint, located at 257 Dutton Avenue is contained in the NOTIFY 65 Emissions database for emissions of organic hydrocarbon and reactive organic gases, each reported to be emitted at a rate of 2 tons per year in 1987 and 6 tons per year in 1990. Continuing emissions

¹⁵ <http://www.sctainfo.org/smart.htm>

could pose a significant environmental concern. Several vehicle service stations are also present or were recently operating, including franchises owned by Shell among other gas station retailers. The primary hazard from these businesses is of a leak from an underground storage tank spreading gasoline and the gasoline additive methyl-tertiary butyl ether (MTBE), or diesel fuel into soil and groundwater.

Contamination in the area is well documented through a series of remediation and cleanup efforts starting in the 1980s and continuing today with ongoing monitoring of groundwater and soil. These cases were summarized in a status report by the Sonoma County Environmental Health Department, Santa Rosa Division, in 2001.¹⁶ According to the report, the Regional Water Board is continuing to collect samples throughout the McMinn Avenue State Superfund Site Area to assess the health threat from exposure to groundwater to residents with domestic wells, and determine the extent and potential remaining sources of volatile organic compound (VOC) and methyl-tertiary butyl ether (MTBE) contamination in groundwater.

d. Park and Gardens

The Park and Gardens Sub-Area at the southeast edge of the Specific Plan Area is the only Sub-Area with no reported environmental sites probably due to its small area and lack of historical industry or fuel tanks.

e. Historic Residential

The Sonoma County Water Agency yard at 330 Hewett Street, was reported for an underground fuel tank that leaked.

f. Residential Areas

There are several industrial sites and gas stations where new residential areas are proposed in the Specific Plan. This includes the 10th Street Partnership, which was reported for another leak of gasoline with MTBE detected. Con-

¹⁶ County of Sonoma Environmental Health Department, City of Santa Rosa Unit, January 11, 2001, *Summary and Status Report on Implementation of the Roseland Plan of Action and Cleanup Actions in the McMinn Avenue Superfund Site*.

taminated soil from this site was also excavated and removed. In the residential area proposed northeast of the intersection of Highway 101 and Highway 12 is a reported dry cleaner with air emissions and a few other gasoline and diesel leaks.

g. Imwalle Gardens

No sites were identified within this Sub-Area.

4. Wildfire Hazards

The Specific Plan Area is within and surrounded by a highly urbanized area and is not perceived to be threatened by possible wildfires.

5. Airport Hazards

The nearest airport, Sonoma County airport at 2200 Airport Boulevard, is located 6.5 miles northwest of the Specific Plan Area. The comprehensive Airport Land Use Plan for Sonoma County indicates the Outer Safety Zone (OSZ) ends at Guerneville Road, north of the Specific Plan Area.¹⁷

C. Standards of Significance

The Specific Plan would have a significant impact regarding hazards and hazardous materials if it would:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

¹⁷ Sonoma County's website. <http://www.sonoma-county.org/prmd/docs/airport/ch8-excerpt.htm>, accessed on November 9, 2006.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

D. Impact Discussion

This section discusses potential impacts that could occur regarding hazards and hazardous materials. This discussion is organized by and responds to each of the potential impacts identified in the Standards of Significance.

1. Project Impacts

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

An impact could result if development causes hazardous materials transport, use and storage to occur in close proximity to residences, commercial business or other population centers and endanger the public. An impact could also

occur if development creates an environment where hazardous materials could easily contaminate surrounding soil, water and air. The most likely scenarios would be from rainwater runoff spreading contaminated waste, leaking tanks or drums, or from an industrial accident causing a fire or explosion.

Proposed residential and commercial or retail usage includes storage, use and disposal of potentially hazardous materials, but not in sufficient quantities to pose a significant hazard to the public or environment. The risk from reasonably foreseeable upset or accident conditions involving the release of hazardous materials is discussed below.

Since the Specific Plan calls for a reduction in industrial zoning there should be a decreased risk from an industrial accident, chemical spill, or other such accident most foreseeable on an industrial site. Under the Specific Plan the greatest increase in land use will be residential and to a lesser extent, commercial/retail. As a result, the existing General Plan policies are considered adequate to mitigate for this risk to a *less-than-significant* impact.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

While significant new routine, use, storage and disposal of hazardous materials would not occur under the Specific Plan, there will be a significant increase in population and greater usage of common and potentially hazardous household cleaners, use of pesticides and herbicides to maintain landscape and control pests and a greater need for vehicle maintenance, railroad maintenance, etc.

The Specific Plan calls for a reduction of heavy industry with a general increase in moderate to high-density residential units and mixed commercial and retail use. As a result, there will be an overall reduction in the risk of industrial accidents endangering the surrounding community and environment. However, there will be an increased population and development of

potentially hazardous infrastructure such as natural gas pipelines, storage of potentially hazardous chemicals in a commercial or retail setting, additional use of landscaping and cleaning chemicals and increased population requiring basic garbage or litter disposal, as well as special disposal of used motor oil, antifreeze, paint, batteries, etc.

Existing General Plan Policies NS-E-1 through NS-E-6 are already aimed at reducing the risk from accidental release of chemicals, waste or other hazardous materials. Policies NS-E-4, NS-E-5 and NS-E-6 specifically address the accidental release of hazardous materials. Implementation of these measures will be critical to reducing the risk from a hazardous materials spill. Particularly pertinent is reduction and cleanup of spills of normal household hazardous wastes as this is the biggest growth area proposed in the Specific Plan. However, since the Specific Plan would result in a projected increase of 3,250 residential units and employment uses, the increased risk from an accidental spill, fire, or other accident associated with the increase in development is considered a *significant* impact.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Schools already exist within the Specific Plan Area. Therefore, any hazardous emissions or handling of hazardous waste in the Specific Plan Area would be considered a potentially significant impact. However, the Specific Plan does not include development of factories or other major emitters, and the Specific Plan would reduce industry most likely to involve the handling of large volumes of hazardous materials. General Plan policies and other existing restrictions are considered adequate mitigation. The impact is considered *less than significant*.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

There are several environmentally sensitive sites with a history of contamination in the Specific Plan Area. There are also industrial sites that have not yet been evaluated, but are considered likely to have some remnant contamination of soil and underlying groundwater. These sites pose an existing threat to soil and groundwater, a threat to workers during construction from exposure and to a lesser extent to future occupants and visitors to the site. Post development impacts depend upon the nature of the new development. Replacement of industrial areas with environmentally engineered commercial and residential development is expected to lower public risk from hazardous materials exposure.

The general exposure risk to future railroad users, residents and visitors within the plan area from hazardous materials is expected to be negligible since the railroad is not proposed for hazardous material freight and new development is not expected to permit use of hazardous materials. The greatest exposure risk is likely to occur during site redevelopment, when excavation or construction may expose and potentially spread contaminated soil and debris from impacted areas. Contamination would most likely be spread through surface runoff, wind blown dust, or groundwater seepage.

Identified construction and demolition hazards include inhalation of possible asbestos, lead and creosote associated with old structures and railroad ties; and general exposure associated with site redevelopment, including remediation. Certain sites will require closure of existing hazardous material storage facilities. These sites may contain lingering contamination that will need remediation.

In order to protect worker safety on these sites a health and safety plan will need to be developed including provisions for personal protective equipment such as respirators, impermeable clothing and gloves. Other sites that have had leaks or documented contamination that have been remedied to no further action levels may require reevaluation when redeveloped. This will require some oversight, where applicable, by the Santa Rosa Fire Department, Department of Toxic Substances Control, Regional Water Quality Control

Board, or another jurisdiction, to determine if the remediation is adequate for the proposed land use (such as changes in land use from industrial to residential). The level of exposure risk on these sites would be variable. Finally, sites with no hazards or hazardous materials outside of normal construction related risks would have a low exposure risk. Development of sites on hazardous materials lists is considered a *significant* impact.

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

An impact would occur should development interfere with air traffic and increase the risk of a crash by impinging upon airspace. This is most likely to occur should high-rise development alter takeoff and landing routes. However, the nearest airport is located six to seven miles northwest of the Specific Plan Area. Given the distance from the Specific Plan Area, the impact to and from public aviation is considered *less than significant*.

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

An impact would occur should development increase the risk of a private aircraft crashing and therefore endanger both passengers and those on the ground. This risk is often more difficult to predict than the risk from large commercial aircraft due to the variability in flight paths and range of pilot experience. Private aircraft also tend to fly nearer the ground where there is an increased risk from collision. However, as there are no private airstrips in close proximity and considering building height restrictions, the impact is considered *less than significant*.

- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

An impact would occur should development not include adequate emergency access and evacuation plans. In the event of a fire, explosion, earthquake, or

even a terrorist attack, an emergency response and evacuation plan is used to coordinate the response from firefighters, police and other personnel who have the job of saving lives and reducing casualties. Lack of a plan could be disastrous by hindering response time and critical access and evacuation routes.

Currently, Santa Rosa is developing a plan with the Sonoma County Office of Emergency Services. This plan is always being updated to address changing land use and development needs. The dynamic plan requires open access and traffic controls on the major roads, building plans in accordance with the fire code and use of a sophisticated communications network between responders.

Policy NS-A-1 under the General Plan requires the City to maintain the Emergency Operations Plan as the City's disaster response plan and to work with Sonoma County to update joint-emergency response and disaster response plans, as needed. Furthermore, Policy NS-A-3 requires the establishment of a community program to train volunteers to assist police, fire, and civil defense personnel during and after disasters.

While taken together, these existing goals, policies and guidelines would reduce the environmental impact of interference with an emergency access or evacuation plan; however, the scope of new development and potential for interference is such as to still represent a *significant* impact.

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

There would be an impact if there is a risk from a wildland fire spreading to neighboring development. Such a conflagration could cause severe damage, injury and loss of life. However, since the Specific Plan Area is urbanized and does not border wildlands this is considered to have *no impact*.

2. Cumulative Impacts

Development within the Santa Rosa Urban Growth Boundary has the potential to result in a cumulative impact related to hazards and hazardous materials. However, the 2002 General Plan EIR identified that with the policies included in the General Plan, that the potential for development under the General Plan to result in a hazards-related impact would be reduced to a less than significant level. Because neither the Specific Plan nor any of the reasonably foreseeable development would involve the transport, use or disposal of significant amounts of hazardous materials that would not be closely monitored and regulated, they would not cumulatively result in hazardous environmental impacts.

The Specific Plan focuses on redevelopment and proposes less industrial area, where hazardous materials are permitted, in exchange for more residential and mixed commercial area where they are not expected to have an impact from hazardous materials. Remaining uses that utilized hazardous materials, are allowed under the terms of the Hazardous Materials Business Plan Program and other related programs. Provided these programs and other Certified Unified Program Agencies designed to regulate the storage, use and disposal of hazardous materials related with the Specific Plan would not contribute to a significant cumulative impact.

E. Impacts and Mitigation Measures

Impact HAZ-1: The increased risk from an accidental spill, fire, or other accident associated with the increase in development is considered a *significant* impact.

Mitigation Measure HAZ-1a: Each sub-development in the Specific Plan area shall be required to prepare and implement a post development Stormwater Pollution Prevention Plan (SWPPP) to prevent runoff from dumpsters, maintenance areas and other areas where potentially hazardous or hazardous materials are stored or used from discharging into site

waterways and into Santa Rosa Creek. This plan shall be approved by the City in conjunction with design approval for the project. The SWPPP plan shall include, but not be limited to the following:

1. Location of dumpsters and the location of hazardous and potentially hazardous materials storage, including paints, cleaning agents, petrochemicals, and any other potentially hazardous materials storage facilities. The plan shall include details showing coverings and berms to prevent intrusion of rainwater and prevent escape of runoff. Location of signs prohibiting littering and illegal dumping, as well as signs detailing garbage collection services and emergency contacts in the event of a spill.
2. Maintenance and cleanup schedule. This shall include procedures and schedules for sweeping, protecting storm drain inlets from contaminated runoff, cleaning up spills, and eliminating the majority of litter and debris washing into storm drains that may enter local waterways. Regular sweeping is a simple and effective BMP aimed at reducing the amount of litter in storm drain inlets (to prevent clogging) and public waterways (for water quality). The project applicant shall enter into an agreement with the City of Santa Rosa to ensure this maintenance is completed.

Mitigation Measure HAZ-1b: Registration and compliance with the Hazardous Materials Business Plan (HMBP), Hazardous Waste Generator Program and Accidental Release Program, wherever applicable, is required for businesses with the following quantities of hazardous materials: at least 55 gallons (liquids), 500 pounds (solids) or 200 cubic feet (gases).

Significance After Mitigations: Less than significant.

Impact HAZ-2: Development of sites on hazardous materials lists is considered a *significant* impact.

Mitigation Measure HAZ-2a: Developers shall be required to complete a Phase 1 environmental site assessment for each property to be redeveloped. Should the Phase 1 ESA determine a need for additional sampling and testing to determine the extent of any contamination then a Phase 2 shall be completed with sampling and testing of soil and groundwater if applicable. Should contamination be found at potentially harmful levels the developer shall complete site remediation in accordance with Mitigation Measure HAZ-2B.

Mitigation Measure HAZ-2b: Developers shall complete site remediation in accordance with OSHA Standards, Santa Rosa Fire Department, Sonoma County Environmental Health Department and State Water Resources Control Board Guidelines. The Department of Toxic Substances Control (DTSC) may become involved wherever toxic levels of contamination are found that pose an immediate hazard. Remediation shall reduce human exposure risk and environmental hazards both during and after construction. The remediation plan shall be prepared in accordance with recommendations of the environmental consultant and established procedures for safe remediation. Specific mitigation measures designed to protect human health and the environment will be provided in the plan. Requirements shall include, but not be limited to the following:

1. Documentation of the extent of previous environmental investigation and remediation at the site, including closure reports for Underground Storage Tanks (UST's) and contaminant concentrations.
2. A site specific Health and Safety Plan (HASP) to be prepared by all contractors at the project site, where applicable. This includes a HASP for all demolition, grading and excavation on the site, as well as for future subsurface maintenance work. The HASP shall include appropriate training, any required personal protective equipment, and monitoring of contaminants to determine exposure. The HASP will be reviewed and approved by a Certified Industrial Hygienist.
3. Description of protocols for the investigation and evaluation of previously unidentified hazardous materials that could be encountered

during project development, including engineering controls that may be required to reduce exposure to construction workers and future users of the site.

4. Requirements for site-specific construction techniques that would minimize exposure to any subsurface contamination, where applicable. This shall include treatment and disposal measures for any contaminated groundwater removed from excavations, trenches, and dewatering systems in accordance with local and Regional Water Quality Control Board guidelines.
5. Sampling and testing plan for excavated soils to determine suitability for reuse or acceptability for disposal at a State licensed landfill facility.
6. Restrictions limiting future excavation or development of the subsurface by residents and visitors to the proposed development, and prohibition of groundwater development should it be determined from test results.
7. Completion of an approved remediation plan should land use restrictions be insufficient to allow development to proceed safely. Remediation measures may include excavation and replacement of contaminated soil with clean fill, pumping and treatment of groundwater, thermal treatment, etc.

Significance After Mitigations: Less than significant.

Impact HAZ-3: Environmental impact of potential interference with an emergency access or evacuation plan is considered a *significant* impact.

Mitigation Measure HAZ-3a: The Fire Department shall review construction plans for roadway modifications, and establish temporary alternative emergency routes necessary for the duration of the construction project. During design review the City shall ensure that roads and driveways are established that meet ordinance and uniform building code requirements for emergency access. The Fire Department shall also re-

view building plans for compliance with the Fire Code and establish future inspection schedule for continuing compliance.

Mitigation Measure HAZ-3b: The City shall revise the current City of Sonoma and County Emergency Services Plan to reflect new development. It is recommended that any adopted emergency response or evacuation plan include training provisions such as those adopted through the Community Emergency Response Team (CERT) program.

Significance After Mitigations: Less than significant.