3.5 Hazardous Waste/Material

3.5.1 Affected Environment

This section addresses potentially adverse environmental, health, and safety hazards in the action area associated with hazardous or regulated material/waste. This discussion is based upon an initial site assessment (ISA) (Mactec 2006a), which is included in Appendix J. The ISA was performed in conformance with American Society of Testing and Materials (ASTM) Standard E-1527.00 and Caltrans ISA preparation requirements. The purpose of the ISA was to evaluate the potential occurrence of recognized environmental conditions in the proposed action area. Recognized environmental conditions are defined in ASTM E-1527.00 as "the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the property or into the soil, groundwater or surface water of the property." Based on the findings of the ISA, a Phase II Site Assessment was conducted to further evaluate the extent of contamination and the likelihood of encountering hazardous materials or contaminated soils during construction. The Phase II Site Assessment, dated October 31, 2006, is presented in Appendix K.

Historical and current aerial photographs were reviewed in preparation of the ISA. Subtle changes in the action area since 1970 were noted from the historical aerial photographs. The action area has had very little redevelopment to structures on individual parcels, which were largely developed during the 1950s and 1960s. Several parcels have had a change in land use, or historically had retail service stations (Appendix J).

As reported in the ISA, soil and groundwater contaminated with petroleum hydrocarbons are known to exist in the action area. The regulatory agency data reviewed in the ISA identified 20 locations for registered underground storage tanks (UST) and aboveground storage tanks (AST), 10 of which are currently listed as active sites. Nine sites identified

in the registered UST and AST list have been identified as having reported release incidents and thus appear on the leaking underground storage tank (LUST) database. These LUST sites are reported to have caused recognized environmental conditions to the soils and/or groundwater in the action area. These sites include:

- Kings Beach Swiss Mart, 8797 North Lake Boulevard;
- Beacon Oil, 8070 North Lake Boulevard;
- Former Kings Beach Texaco, 8755 North Lake Boulevard;
- Fairway Excavating, 8472 Speckled Avenue;
- Ken's Tire Center, 8001 North Lake Boulevard;
- Patterson-Tippin Property, 712 Bear Street;
- Ann's Cottages, 8199 North Lake Boulevard;
- Smith Building (Brook Street Apartments), 8537 Brook Avenue; and
- Ronning Property, 8784 North Lake Boulevard.

Site investigations (Mactec 2006a) did not identify any obvious hazardous environmental conditions that would be encountered during proposed action activities. Other than surface staining in locations where vehicles routinely park, no observations were made of potentially hazardous materials being abandoned, carelessly handled, or stored in the action area. However, based on data collected and other observations made during the ISA, several locations in the proposed action area have the potential to degrade soil and/or groundwater with hazardous substances. These locations consist primarily of existing and historical retail fuel suppliers.

In addition, a review of case files at the California Regional Water Quality Control Board was conducted to obtain additional information related to reported LUST sites and UST/AST locations. This review found the following locations in the action area had the potential to affect soil and/or groundwater with hazardous substances:

- TransAm (formerly Beacon) Service Station, 8070 North Lake Boulevard;
- Ken's Tire Center, 8100 North Lake Boulevard;
- Dave's Ski Shop (formerly Kings Beach Mobil), 8299 North Lake Boulevard;
- Subway Store (formerly Arco), 8700 North Lake Boulevard;
- Smith Building (Brook Street Apartments), 8537 Brook Street;
- KFC (formerly Union 76), 8697 North Lake Boulevard;
- Kings Beach Car Wash (formerly Kings Beach Texaco), 8755 North Lake Boulevard;
- Swiss Mart (formerly Kings Beach Chevron), 8797 North Lake Boulevard;
- Ronning UST (formerly service station), 8784 North Lake Boulevard;
- Fairway Excavation, 8472 Speckled Avenue; and
- Lake Tahoe Specialty Stove & Fireplace (formerly dry cleaner business site), 8731 North Lake Boulevard.

These sites are described in detail in Appendix J. All sites with existing and historical retail fuel suppliers adjacent and up gradient (north) of SR 28 in the action area have had the potential for unauthorized petroleum hydrocarbon release(s). Ken's Tire Store and the Swiss Mart sites have documented release and remediation histories. The current Dave's Ski Shop on the northwest corner of SR 28 and Deer Street, and the Kentucky Fried Chicken (KFC) store on the northwest corner of SR 28 and Fox Street, appear to have been retail service stations in historical aerial photographs and database reviews.

Because groundwater moves in a generally southern direction in the action area, retail service stations adjacent to and south of SR 28 are less likely to have affected soils and/or groundwater during historical unauthorized petroleum hydrocarbon release incidents that would be encroached upon during proposed construction activities associated with the proposed action. In other words, it is less likely that the proposed action would encounter release incidents on the south side of SR 28 than on the north side.

The TransAm (formerly Beacon) service station on the west end of the action area is an active groundwater remediation case, with one monitoring well north of the USTs that has reported historical petroleum hydrocarbon contamination. The current Subway store and the Ronning UST site are on the south side of SR 28. These locations are reported historical petroleum retail businesses.

A Phase II Site Assessment was conducted to further evaluate the extent of contamination and the likelihood of encountering hazardous materials or contaminated soils during construction. Soil samples and groundwater samples were collected during this investigation to evaluate the level of contamination in the soil and groundwater that may be encountered during construction.

Yellow traffic markings (thermoplastic and paint) used for traffic striping may include hazardous levels of chromium and lead (lead chromate). Yellow traffic markings that are removed separate from the adjacent pavement may have to be managed as hazardous waste.

Aerially deposited lead (ADL) is known to exist along the California State Highway System. Lead-contaminated soil may exist attributable to the historical use of leaded gasoline. The areas of primary concern in relation to highway facilities are soils along routes that have had high vehicle emissions from large traffic volumes, congestion, or stop-and-go situations, during the time period when leaded gasoline was in use. For practical purposes, most aerially deposited lead from vehicle emissions would have been deposited prior to 1986. If the action area was constructed or reconstructed with clean material after 1986, it is likely that the levels of ADL-contaminated soil are low. Typically, ADL is found in the top 0.6 meter (2 feet) of material in unpaved areas within the highway ROW. The levels of lead found along the highway ROW typically range from less than 0.5 up to 3,000 milligrams per kilogram (mg/kg) and have been found as high as 10,000 mg/kg total lead, as analyzed by EPA Test Method 6010 or EPA Test Method 7000 series. Caltrans takes samples for ADL analysis at projects that have a peak average daily traffic volume of 10,000 or greater. To date, all projects sampled

have contained hazardous levels of ADL (per *Title 22, California Code of Regulations [CCR]*). The presence of ADL also requires that *Title 8, Division 1, Chapter 4, Subchapter 4, Section 1532.1, Lead*, be addressed. Because the traffic volume for the proposed action exceeds this standard, ADL sampling and analysis are required.

3.5.2 Regulatory Setting/ Tahoe Regional Planning Agency Thresholds

This section discusses the federal, state, and local policies and regulations that are relevant to the analysis of the proposed action. A *hazardous material* is defined by the California Department of Toxic Substances Control (DTSC) as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics *(26 CCR 25501)*. Hazardous materials that would be used during construction activities for the proposed action include diesel fuel and other liquids used in construction equipment. Applicable hazardous material regulations and policies are summarized below.

3.5.2.1 Federal Policies and Regulations

The EPA is the principal federal regulatory agency responsible for the safe use and handling of hazardous materials. Two key federal regulations pertaining to hazardous materials and hazardous wastes are described below. Other applicable federal regulations are contained primarily in *Titles 29*, *40*, and *49* of the *CFR*.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) enables the EPA to administer a regulatory program that extends from the manufacture of hazardous materials to their disposal, thereby regulating the generation, transport, treatment, storage, and disposal of hazardous materials and hazardous waste at all facilities and sites in the nation.

Comprehensive Environmental Response, Compensation, and Liability Act, and Superfund Amendment and Reauthorization Act Title III

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund, was passed to facilitate the cleanup of the nation's toxic waste sites.

In 1986, Superfund was amended by the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws), also called the Emergency Planning and Community Right-to-Know Act, which states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup even if the material was dumped illegally when the property was under different ownership. These regulations also establish reporting requirements that provide the public with important information on hazardous chemicals in their communities to enhance community awareness of chemical hazards and facilitate development of state and local emergency response plans.

In addition to these regulations, which specifically regulate hazardous materials or hazardous wastes, several other federal laws control or regulate exposure to hazards or hazardous materials in some form. These additional federal regulations are:

- Community Environmental Response Facilitation Act (CERFA) of 1992,
- Clean Water Act,
- Clean Air Act,
- Safe Drinking Water Act,
- Occupational Safety and Health Act (OSHA),
- Toxic Substances Control Act (TSCA), and
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

In addition to the acts listed above, EO 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

3.5.2.2 State Policies and Regulations

California regulations are as stringent or in some instances more stringent than federal regulations. The EPA has granted the state primary oversight responsibility to administer

and enforce hazardous materials and waste management programs. State regulations require planning and management to ensure that hazardous materials and wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key state laws pertaining to hazardous wastes are discussed below.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses that use hazardous materials to prepare a hazardous materials business plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste, but health concerns pertaining to the release of hazardous materials are similar to those relating to hazardous waste.

Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including the EPA, California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

California Occupational Safety and Health Administration Standards

Worker exposure to contaminated soils, vapors that could be inhaled, or groundwater containing hazardous constituents would be subject to monitoring and personal safety equipment requirements established in the Cal-OSHA regulations in *8 CCR (Title 8)*. The primary intent of the *Title 8* requirements is to protect workers, but compliance with some of these regulations would also reduce potential hazards to non-construction workers and action area occupants because required controls related to site monitoring, reporting, and other activities would be in place.

Other Laws, Regulations, and Programs

Various other state regulations have been enacted that affect hazardous materials and hazardous waste management, including the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), which requires labeling of substances known or suspected by the state to cause cancer, and *California Government Code Section 65962.5,* which requires the DTSC Office of Permit Assistance to compile a list of possible contaminated sites in the state.

State and federal regulations also require that hazardous materials sites be identified and listed in public records. These lists include sites that have been identified through the CERCLIS; National Priorities List for Uncontrolled Hazardous Waste Sites; RCRA; California Superfund List of Active Annual Work plan Sites; and lists of state-registered USTs and LUSTs.

TRPA does not maintain any thresholds for hazardous waste. The TRPA Initial Environmental Checklist asks whether the proposed action will result in the creation of or increased possibility of exposure to health hazards.

3.5.3 Environmental Consequences (Including Permanent, Temporary, Direct, Indirect)

Impact HAZ-1: Potential Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur. It is assumed that the existing conditions would persist under this alternative and that there would be no incremental change in the public's exposure to hazardous waste/material associated with the routine transport, use or disposal of hazardous materials. Alternative 1 would not result in any adverse effects and no mitigation is required.

Alternatives 2, 3, and 4

The proposed action is a roadway and streetscape improvement. Operation of either Alternative 2, 3, or 4 would not involve the routine transport, use, or disposal of hazardous materials in excess of current conditions in the area and surrounding areas. There would be no adverse effects, and no mitigation is necessary.

Impact HAZ-2: Potential Accidental Release of Hazardous Materials Into the Environment

Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur. It is assumed that the existing conditions would persist under this alternative and that there would be no incremental change in the public's exposure to hazardous waste/material because there would be no increase in hazardous material use. Alternative 1 would not result in any adverse effects, and no mitigation is required.

Alternatives 2, 3, and 4

Small quantities of hazardous materials or potentially toxic substances (such as diesel fuel and hydraulic fluids) would be used in the action area during construction. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Because of the relatively small volumes of materials on site and the limited duration of construction, the potential for release and exposure is limited.

Should any removal of yellow traffic markings in the existing portion of the roadway occur, it is important to note that they may contain heavy metals such as lead and chromium, which may produce toxic fumes when heated. Mitigation has been identified to reduce the severity of this effect (Mitigation Measure HAZ-1).

Impact HAZ-3: Potential Exposure of Schoolchildren to Hazardous Materials

Alternatives 1 (No Build) and Alternatives 2, 3, and 4

As noted in the *Physical Setting* section above, no schools are located within 0.25-mile of the project site. There would not be any adverse effects, and no mitigation is necessary.

Impact HAZ-4: Potential Exposure of the Public to Contaminated Soils

Alternative 1

Alternative 1 represents the existing roadway configuration, which would remain unchanged into the future. Under Alternative 1, no construction or associated earth moving would occur. It is assumed that the existing conditions would persist under this alternative and that there would be no incremental change in the public's exposure to hazardous waste/material because there would be no increase in hazardous material use. Alternative 1 would not result in any adverse effects, and no mitigation is required.

Alternatives 2, 3, and 4

As discussed above and in detail in the ISA, soil and groundwater contaminated with petroleum hydrocarbons are known to exist in the action area. Proposed construction activities associated with the proposed action may require excavation and dewatering activities in locations where recognized environmental conditions occur. Currently, engineering design for proposed improvements has not been completed. Information reviewed in the preparation of the ISA suggests sufficient subsurface characterization has not been performed on the majority of these identified sites to determine the horizontal and vertical location and concentrations of petroleum hydrocarbon occurrences that may be encountered during construction activities related to the proposed action. Seasonal surface and groundwater movements may substantially relocate petroleum hydrocarbon compounds from the point of origin over time. Inconsistent subsurface conditions, and buried utility corridors, may also contribute to irregular, accelerated, or restricted movements of these compounds through soil and groundwater.

Project features in potential conflict with contaminated soil/groundwater will be eliminated or moved if possible. If conflicts cannot be eliminated, the handling of the contaminated material can be covered in contract special provisions.

No aboveground or underground heating oil tanks were observed during the site visit, nor were any home heating oil tanks identified in data reviewed during this report preparation. However, there is still a potential for the existence of unregistered USTs in the action area that may have been, or are being, used for heating oil storage as many parcels in Kings Beach historically used oil to heat structures. Often, individual heating oil tanks were placed underground on each parcel. However, it is unlikely that any such heating oil tanks are in the ROW.

An ADL investigation was performed to evaluate whether lead attributable to ADL from motor vehicle exhaust exists in the surface and near-surface soils within the action boundaries (Geocon 2004). The investigation collected and analyzed soil samples to determine the highest lead values. The investigation compared the highest reported total lead values in the action area to the EPA Region 9 preliminary remediation goal (PRG) for lead in residential soil. PRGs are used to estimate contaminant concentrations in environmental media (soil, air, and water) that are protective of human health, including sensitive groups, over a lifetime. The California modified PRG for lead in residential soil is 150 mg/kg. The 2004 ADL investigation determined that the highest calculated upper confidence level (UCL) for lead concentration was 66 mg/kg, which is below the PRG of 150 mg/kg. The analysis concluded that lead in the soil in the area did not pose a significant risk to the health of workers performing the construction activities or to surrounding sensitive receptors.

Known hazardous materials and potentially contaminated soils located in the proposed action area could create a hazard to the public or the environment by creating a potential exposure pathway for the hazardous materials and surrounding residences and sensitive receptors. Soil disturbance could generate windblown particulates that also contain hazardous material. This material could be transported to nearby sensitive receptors or

create an increased health risk for construction workers. Disturbance of soils potentially contaminated with hazardous materials could create a short-term exposure through airborne transport and inhalation. Long-term exposure through local waterways could also potentially occur. Mitigation has been identified to reduce the severity of this effect (Mitigation Measure HAZ-2).

Impact HAZ-5: Potential Safety Hazards in an Airport Zone

Alternatives 1 (No Build) and Alternatives 2, 3, and 4

As noted in the *Physical Setting* section above, the proposed action is not located in any of the airport land use planning areas of nearby airports. Therefore, no adverse effects related to potential safety hazards for people residing or working in the action area are anticipated. No mitigation is necessary.

Impact HAZ-6: Potential Conflict with Emergency Response

Alternative 1

As noted in the setting section, the proposed action would not involve any construction and therefore would not result in an incremental change in emergency response. Therefore, no impacts related to potential emergency response are anticipated, and no mitigation is necessary.

Alternatives 2, 3, and 4

During construction, emergency access to and in the vicinity of the project site could potentially be affected by lane closures, detours, and construction-related traffic. Mitigation has been identified to reduce the severity of this effect (Mitigation Measure HAZ-3).

Impact HAZ-7: Potential Risk of Wild Fire

Alternative 1

As noted in the setting section, the proposed action would not involve any construction and therefore would not result in an incremental change in risk of wild fire. Therefore,

no impacts related to potential risks of wild fire are anticipated. There would be no impact, and no mitigation is necessary.

Alternatives 2, 3, and 4

The urban/rural interface is generally considered an area of concern, as these areas tend to have a large amount of vegetation and, when construction activities are introduced to the area, have the potential to result in wildfires. The proposed action corridor is primarily urban. However, the risk of wild fire could be increased in some parts of the proposed action area. Mitigation has been identified to reduce the severity of this effect (Mitigation Measures HAZ-4 and HAZ-5).

3.5.4 Mitigation, Avoidance, Minimization, and Compensation Measures

Mitigation Measure HAZ-1. Incorporate Measures to Reduce Potential for Accidental Release or Exposure to Hazardous Materials

- If yellow stripe is to be removed, the roadway will be ground in its entirety instead of removing just the yellow paint stripe. If it is not feasible to grind the roadway in its entirety, the removed paint material will be disposed of at a Class 1 disposal facility. If any yellow traffic markings are going to be removed separate from the adjacent pavement, the levels of lead and chromium need to be determined. Common practice has been to determine the levels during construction. Otherwise, a preliminary site investigation (PSI) to determine the concentration of lead chromate should be performed prior to construction.

- Potential exposure to chromium and lead from traffic striping will be minimized. A project-specific Lead Compliance Plan approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene to prevent or minimize worker exposure to lead in accordance with the *CCR Title 8, Section 1532.1 (Title 8, "Lead"*) will be implemented. Before performing work in areas containing lead, personnel who have no prior training, including state personnel, will complete a safety training program, including use of personal protective equipment and washing

facilities, as required by *Title 8, "Lead."* In addition, an EPA hazardous waste generator identified number (EPA ID#) is to be obtained for this project and is to be included on the labels of any containers holding hazardous waste.

- Any removed yellow thermoplastic and yellow painted traffic stripe and pavement marking residue will be stored and labeled in covered containers in a secured enclosure at a location within the project limits for no more than 90 days until disposal. Labels will conform to the provisions of *CCR Title 22*. Labels will be marked with the date when the waste is generated, the words *Hazardous Waste*, composition and physical state of the waste (for example, asphalt grindings with thermoplastic or paint), the word *Toxic*, the name and address of the Placer County project Resident Engineer (RE), the RE's telephone number, contract number, and Contractor or subcontractor. The containers will be a type approved by the U.S. Department of Transportation for the transportation and temporary storage of the removed residue. The containers will be handled so that no spillage will occur. Removed yellow thermoplastic and yellow paint will be disposed of at a Class 1 disposal facility in conformance with the requirements of the disposal facility operator. Testing will include, at a minimum, (1) total lead and chromium by EPA Method 7000 series, (2) soluble lead and chromium by California Waste Extraction Test, and (3) soluble lead and chromium by the Total Characteristic Leaching Procedure. If the yellow thermoplastic and yellow-painted traffic stripe and pavement-marking residue is transported to a Class 1 disposal facility as a hazardous waste, a manifest will be used, and the transporter will be registered with the DTSC.
- If the project involves any structure modifications, such as widening or demolition, asbestos and lead based-paint surveys will be performed prior to construction. The asbestos surveys must be performed by qualified Asbestos Hazard Emergency Response Act (AHERA)/Cal-OSHA certified asbestos

inspector, and a lead based–paint survey will be performed by a California Department of Health Services (DHS) certified inspector/assessor.

- Placer County is to provide records regarding any contamination encountered in regards to this project, to any appropriate requesting party, concerning any investigation as to the extent of any such contamination. An appropriate requesting party includes, but is not limited to, the LRWQCB, Placer County HHS-Environmental Health, any responsible party or potentially responsible party, or the designated environmental consultant to any responsible party or potentially responsible party.
- All encountered soil and groundwater impacted with petroleum hydrocarbons must be managed.

Mitigation Measure HAZ-2. Implement Measures to Reduce Potential Exposure to Contaminated Soils

- Project features in potential conflict with contaminated soil/groundwater will be eliminated or moved if possible. If conflicts cannot be eliminated, the handling of the contaminated material can be covered in contract special provisions. If encountered, all soil and groundwater impacted with petroleum hydrocarbons and/or all solvents must be removed, managed and disposed of properly, as hazardous waste or as non-hazardous waste or as a non-hazardous waste disposed to a receiving landfill facility. This will apply to excavated soil as well as groundwater or water resulting from dewatering activities. Impacted soil is not to be used as backfill. Impacted soil and groundwater encountered during this project are to be removed to the fullest extent feasible, within areas of the project that are accessible to Placer County (i.e., public ROWs, under the control of Placer County or Caltrans).
- A Phase II Site Assessment was prepared and areas with elevated levels of petroleum hydrocarbons were identified through soil and groundwater sampling. Prior to performing any excavation work at the location containing material classified as petroleum-impacted, all personnel, including state

personnel, will complete a safety training program that meets requirements of the Contractor's Health and Safety Work Plan covering the potential hazards as identified. The Contractor will provide the training and a certification of completion of the safety-training program to all personnel.

- During excavation activities, monitoring will be conducted for any suspected petroleum hydrocarbons contamination with a photo ionization detector, combustible gas meter, or similar equipment approved by Caltrans. The Consultant must be present to on site to identify any impacted soil/groundwater. If any suspected contaminated materials are encountered, work will immediately stop, and the suspected contamination will be managed appropriately. If contamination is confirmed, the Contractor will prepare a detailed Health, Safety and Work Plan for all site personnel in accordance with the DTSC and Cal-OSHA regulations. The Health, Safety and Work Plan will include a plot plan indicating the exclusion zones and clear zones as defined by *CCR, Title 26*, a schedule of procedures, sampling and testing procedures, and physical barrier; and will be submitted at least 10 working days prior to beginning any excavation for review and acceptance by the RE. Prior to submittal, the Contractor will have the Health, Safety and Work Plan approved by a civil engineer registered in the State of California and by an industrial hygienist certified by the American Conference of Governmental Industrial Hygienists (ACGIH).
- In the event suspected contaminated materials are encountered, the Contractor will stop work in the affected area and notify the RE immediately. The Contractor, or the Contractor's listed environmental subcontractor, will prepare, and submit for approval, a Site Safety Plan consistent with the requirements of *29 CFR 1910.120*. The contractor will be required to comply with the provisions of the approved Site Safety Plan during construction.
- Any construction that is found to hinder any ongoing/future remediation needs to be reviewed/modified so as to not hinder the remediation.

Mitigation Measure HAZ-3. Prepare a Construction Traffic Management Plan

Placer County will ensure that its Contractor will prepare a Construction TMP in accordance with the *Manual on Uniform Traffic Control Devices*, California Supplement 2003, Part 6 Temporary Traffic Control (or current version) (American Association of State Highway and Transportation Officials 2003) and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) during the final stage of project design to ensure local traffic is accommodated during construction and that access to businesses and residences is maintained. Among other things, the TMP will provide the following:

- reduce, to the extent feasible, the number of vehicles (construction and other) on the roadways adjacent to the proposed action;
- reduce, to the extent feasible, the interaction between construction equipment and other vehicles;
- promote public safety through actions aimed at driver and road safety;
- ensure safety for bicyclists and pedestrians throughout the action area; and
- ensure adequate emergency access for police, fire, ambulance, and other emergency service vehicles.

The provisions of the TMP will be incorporated into the project bid documents. In addition, the following measures will be incorporated into the TMP prepared for the proposed action.

- Notify law enforcement, fire protection, and emergency medical services at least 1 week in advance of detours and roadway or lane closures so that alternative routes or response actions can be taken. Notifications will specify the location and duration of closures, allowing providers to advise dispatchers and station personnel about alternative routes. Notification and providing

continued access on SR 28 would ensure that response times for emergency service providers are not adversely affected during construction periods.

- Allow emergency vehicles through any roadway segments temporarily closed for construction purposes.

Mitigation Measure HAZ-4: Require Spark-Generating Construction Equipment be Equipped with Manufacturers' Recommended Spark Arresters

Placer County will require contractors to fit any construction equipment that normally includes a spark arrester with an arrester in good working order. Subject equipment includes, but is not limited to, heavy equipment and chainsaws. Implementation of this measure will minimize a source of construction-related fire.

Mitigation Measure HAZ-5. Clear Materials That Could Serve as Fire Fuel from Areas Slated for Construction Activities Before Construction Begins

If dry vegetation or other fire fuels exist on or near staging areas, welding areas, or any other area on which equipment will be operated, contractors will clear the immediate area of fire fuel. To maintain a firebreak and minimize the availability of fire fuels, Placer County will require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible. To avoid conflicts with policies to preserve riparian habitat, areas to be cleared will be identified with the assistance of a qualified biologist.

3.5.5 Compliance with Tahoe Regional Planning Agency Code

TRPA does not maintain thresholds or codes for hazardous waste. The proposed action will include the provisions listed above to ensure that any potential exposure to heath hazards is minimal.