5.9 Hazards and Hazardous Materials

5.9.1 Environmental Setting

Hazardous Waste and Substances Sites

The applicant conducted an Environmental Data Resources (EDR) DataMap Corridor Study to determine the locations of hazardous wastes and hazardous material release sites within 0.5 miles of the proposed project (EDR 2015). The distance (0.5 miles) covers contamination sites with the potential to migrate into the utility corridor. The analysis included database searches from local, state, and federal agencies with varying levels of enforcement related to the generation, storage and handling, transportation, and treatment of wastes, as well as emergency response activities and remediation of contaminated soil and groundwater sites. The report identified 41 sites, none of which are considered to represent a Recognized Environmental Condition.[1] There are no Superfund-listed or other National Priorities List sites in the vicinity of the proposed project. (EDR 2015)

In addition to EDR's search, the following databases were searched, which are often collectively referred to as the "Cortese List," as listed in Government Code Section 65962.5:

- State Water Resource Control Board's (SWRCB's) Geotracker database, Cease and Desist Orders and Cleanup and Abatement Orders list;
- California Environmental Protection Agency's highly hazardous solid waste sites; and
- California Department of Toxic Substance Control's (DTSC's) EnviroStor database and hazardous waste sites.

The search found no active Cortese List sites within 0.5 miles of the proposed project alignment (DTSC 2009; EDR 2015; SWRCB 2016). Four closed leaking underground storage tank cleanup sites are located in Happy Valley along the proposed project alignment. These sites are classified as "closed," indicating that the SWRCB considers appropriate corrective actions complete.

Emergency Evacuation Routes

The Shasta County Emergency Operations Plan does not identify any roads in the proposed project area as emergency evacuation routes (Shasta County 2014).

Airports

There are no airports located within 5 miles of the proposed project. The closest public airport is the Redding Municipal Airport 5.5 miles northeast of the proposed project area. Benton Airpark, a general use public airstrip, is 6.4 miles north of the proposed project area.

Schools

Two schools are located within 0.25 miles of the proposed project area and proposed alignment. Happy Valley Elementary School is adjacent to the proposed project area at the intersection of Palm Avenue and Happy Valley Road. Igo-Ono Elementary School is located on Placer Road, 0.13 miles south of the

[1] A Recognized Environmental Condition is defined by the American Society for Testing and Materials as "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

proposed project. The next closest school is Happy Valley Primary School, which is 0.33 miles east of the proposed project on Cloverdale Road.

Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) identifies and maps areas of substantial fire hazards based on fuels, terrain, weather, and other relevant factors (CAL FIRE 2012). CAL FIRE maps indicate that the proposed project area and vicinity are within a State Responsibility Area and classified as a "Very High" Fire Hazard Severity Zone (CAL FIRE 2007). The County's 2016 Multi-Jurisdictional Hazard Mitigation Plan (Draft) describes the community of Igo, the western terminus of the proposed fiber optic cable route, as in the "Brush Area" of the county. The Brush Area is characterized as urbanized with structures typically having single, unmaintained roads for fire emergency access. The threat to life and property from wildlife in these areas is considered high. During the 2013 Clover Fire, over 8,000 acres, 68 residences, and 128 outbuildings were destroyed in Igo (Cal FIRE 2013). Fire protection services and equipment near the proposed project alignment are discussed in further detail in Section 5.14, "Public Services." For a more detailed discussion of wildfire hazards and potential wildfire impacts associated with the proposed project, refer to Section 5.20 "Wildfire."

5.9.2 Regulatory Setting

Federal

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) regulates hazardous waste from generation, management, storage, transport, treatment, and final disposal. The U.S. EPA has authorized the DTSC to administer the state-level RCRA programs. A RCRA-regulated hazardous waste exhibits at least one of four characteristics: ignitability, corrosivity, reactivity, or toxicity. To track hazardous waste activities, treatment, storage, and disposal, facility owners and operators must keep records and submit reports to the EPA at regular intervals. All facilities that generate, transport, recycle, treat, store, or dispose of hazardous waste are required to notify the EPA (or its state agency) of their hazardous waste activities.

Hazardous Materials Transportation Act. The primary objective of the Hazardous Materials Transportation Act is to provide adequate protection against risks to life and property inherent in the transportation of hazardous materials in commerce. This act empowers the U.S. Department of Transportation to regulate the transportation of hazardous materials by rail, aircraft, vessel, or public highway. Hazardous materials regulations are subdivided by function into the following four areas within 49 Code of Federal Regulations (CFR) Parts 101, 106, 107, 171 to 177, and 178 to 180: Procedures and/or Policies, Material Designations, Packaging Requirements, and Operational Rules.

Occupational Safety and Health Standards. The Occupational Safety and Health Standards (CFR Title 29) are regulations for safety in the workplace and construction safety, including safety regarding the use of helicopters for construction. Occupational Safety and Health Administration (OSHA) standards require implementation of a Hazard Communication Plan to identify and inventory all hazardous materials and material safety data sheets. OSHA's standards also require employee training in safe handling of hazardous materials.

State

California Health and Safety Code Section 25501. California Health and Safety Code (HSC) Section 25501 defines the term *hazardous material* as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for

believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. Title 8, Section 339 of the California Code of Regulations (CCR) lists substances identified as *hazardous substances* for which employers must provide material safety data sheets to employees.

California Code of Regulations Title 22, Section 66261.1. CCR Title 22, Section 66261.1 identifies wastes subject to regulation and notification requirements, pursuant to the California HSC, as hazardous wastes. The HSC defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. It also provides lists of hazardous wastes regulated under RCRA, non-RCRA-regulated hazardous wastes, hazardous wastes from specific sources, extremely hazardous wastes, hazardous wastes of concern, and special wastes. The EPA has authorized the California DTSC to administer the RCRA program in California.

Certified Unified Program Agency and Hazardous Materials Plans. Administration of the Certified Unified Program Agency (CUPA) is authorized by the California HSC (Chapter 6.11, Sections 25404-25404.8) and CCR Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100–15620. This program is implemented at the local level by government agencies certified by the secretary of the California Environmental Protection Agency. The Shasta County Environmental Health Division is the designated CUPA for the county.

Hazardous Waste Control Act. The Hazardous Waste Control Act established the state hazardous waste management program, whose requirements are similar to, but more stringent than, those of RCRA. CCR Title 26 describes the requirements for the proper management of hazardous waste under the Hazardous Waste Control Act, including the following:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for the identification, packaging, and disposal of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must document waste from generation to transporter to disposal. Copies of this documentation must be filed with the California DTSC. Hazardous wastes that may be encountered or generated during the construction and operation of the proposed project would be subject to the requirements of the Hazardous Waste Control Act.

Government Code Section 65962.5: Cortese List. The Cortese List includes all hazardous waste facilities subject to corrective action; land designated as hazardous waste property or border zone property; information received from the California DTSC about hazardous waste disposals on public land; sites listed pursuant to the California HSC Section 25356 (removal and remedial action sites); and sites included in the Abandoned Site Assessment Program. Pursuant to Government Code Section 65962.5, the California DTSC compiles and updates the Cortese List as appropriate, but at least annually.

California Occupational Health and Safety Administration. The California Occupational Health and Safety Administration (CalOSHA) is responsible for the development and enforcement of workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. CalOSHA

requires businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. Its Hazards Communication Standard requires that workers be informed of the hazards associated with the materials they handle. Manufacturers are required to label containers, provide material safety data sheets in the workplace, and provide worker training. Employer are required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Similar to the federal OSHA, CalOSHA contains requirements to prevent worker exposure to certain types of hazardous substances, like asbestos and lead, in the workplace.

Underground Service Alert (DigAlert). California Government Code 4216 et seq. defines mandatory notification procedures for subsurface excavations and installations. Pursuant to Section 4216 et seq., the applicant must contact the Underground Service Alert of Northern California, also known as DigAlert, at least two, but no more than 14, working days prior to conducting excavation activities for each component of the proposed project.

Local

Regional Water Quality Control Board and Stormwater Pollution Prevention Plans. Under the National Pollutant Discharge Elimination System, California's Regional Water Quality Control Boards require a Construction Activities Storm Water General Permit (Order 2009-0009-DWQ) for stormwater discharges associated with any construction activity—including clearing, grading, excavation reconstruction, and dredge and fill activities—that results in the disturbance of at least 1 acre of total land area. Since the proposed project would disturb more than 1 acre, this permit would be required, along with a Stormwater Pollution Prevention Plan (SWPPP). SWPPPs require the use of site-specific best management practices during construction to reduce the potential for erosion and sedimentation and for vehicle and equipment fueling and maintenance, material storage, spill prevention, and waste management. Permits are administered by the Central Valley Regional Water Quality Control Board in Shasta County.

Shasta County Air Quality Management District. Local air quality management districts enforce standards set by the California Air Resources Board. The proposed project area is within the jurisdiction of the Shasta County Air Quality Management District (Shasta County AQMD). The Shasta County AQMD is part of the Shasta County Resource Management Department and is responsible for managing and permitting existing, new, and modified sources of air emissions within its boundaries, estimates releases of air contaminants, and maintains an emission inventory to track emissions of all permitted devices. Further discussion of air pollutants and contaminants in the proposed project area can be found in Section 5.3, "Air Quality."

Shasta County Multi-Jurisdictional Hazard Mitigation Plan. The Shasta County Multi-Jurisdictional Mitigation Plan identifies and analyzes existing hazards (such as flood, wildfire, extreme weather, earthquake, volcano, etc.) and implements and sustains actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects on people and property. This plan covers the entire project area and identifies that the proposed project is within a "Very High" Fire Hazard Severity Zone (see Section 4.3 of the plan). (Shasta County and City of Anderson 2011)

Shasta County General Plan. The Shasta County General Plan provides policy direction for land development in unincorporated Shasta County. Chapter 5.0, the Public Safety Group, describes elements that define basic constraints on land use, including seismic and geological hazards, flood protection, and dam inundation (Chapter 5.6); fire safety and sheriff protection (Chapter 5.14); noise (Chapter 5.12); and hazardous materials (Chapter 5.6). The objectives relevant to the proposed project, Objectives HM-1 and HM-2, focus on the protection of life and property from contact with hazardous material and in the event of the accidental release of hazardous materials. (Shasta County 2004)

5.9.3 Environmental Impacts and Mitigation Measures

The impact analysis below identifies and describes the proposed project's potential impacts on the environment related to hazards and hazardous materials within the proposed project area. Potential impacts were evaluated according to significance criteria based on the checklist items presented in Appendix G of the CEQA Guidelines and listed at the start of each impact analysis section below. Both the construction and maintenance/operations phases were considered; however, because the construction phase could result in physical changes to the environment, analysis of construction phase effects warranted a detailed evaluation. The proposed project would not be located on a hazardous materials site pursuant to Government Code Section 65962.5, within an airport land use plan, or within 2 miles of a public airport or public use airport (the closest public-use airport is Redding Municipal Airport, located 5.5 miles northeast of the proposed project area). Therefore, there would be no impact under criteria (d) or (e), and a detailed discussion is therefore not provided.

Applicant Proposed Measures

The applicant would implement the following APMs to minimize or avoid potential impacts related to hazards and hazardous materials. Mitigation Measure (MM) GEN-1 requires implementation of these APMs to mitigate impacts regarding hazards and hazardous materials and the impact analysis in this section applies these APMs to reduce impacts. A list of all proposed project APMs is included in Table 4-2 in Chapter 4.

APM HAZ-1: TDS and/or their contractor will ensure proper labeling, storage, handling, and use of hazardous materials in accordance with best management practices and OSHA's HAZWOPER requirements.

APM HAZ-2: TDS and/or their contractor will ensure that employees are properly trained in the use and handling of hazardous materials and that each material is accompanied by a MSDS.

APM HAZ-3: Any small quantities of hazardous materials stored temporarily in staging areas will be stored on pallets within fenced and secured areas and protected from exposure to weather. Incompatible materials will be stored separately, as appropriate.

APM HAZ-4: All hazardous waste materials removed during construction will be handled and disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility to the extent necessary to ensure the area can be safely traversed.

APM HAZ-5: Spill clean-up kits would be provided and kept on-site during construction, and equipment would remain in good working order to prevent spills. Significant releases or threatened releases of hazardous materials will be reported to the appropriate agencies.

APM HAZ-6: Workers shall be instructed regarding the danger of wildland fire and the need to carefully park equipment in areas without dry, brushy vegetation. All work vehicles shall

be equipped with working a fire extinguisher. All cigarettes and trash shall be disposed of in proper containers and taken off site at the end the day.

Significance Criteria

Table 5.9-1 describes the significance criteria from Appendix G of the CEQA Guidelines' hazards and hazardous materials section, which the CPUC used to evaluate the environmental impacts of the proposed project.

Table 5.9-1 Hazards and Hazardous Materials Checklist

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

During construction of the proposed project, common hazardous materials such as gasoline, diesel fuel, motor oil, antifreeze, transmission fluids, and hydraulic fluids would be used to operate construction equipment. Leaks or spills could occur due to improper use or storage and during the operation of construction equipment, refilling, transport, and disposal. Operation and maintenance activities would include periodic vehicle trips to Digital Loop Carrier cabinets to connect and disconnect customers and

periodic maintenance of vegetation around Digital Loop Carrier cabinets with small, portable vegetation trimming equipment, such as brush cutters. Hazardous materials would be limited to fuel for vegetation trimming equipment and common fluids found in standard work vehicles. Because of the temporary nature of the construction activity, lasting less than 60-120 days (and much more briefly in any one location along the alignment), the transport, use, and/or disposal of small quantities of hazardous materials is not routine or considered a permanent aspect of the proposed project. However, to minimize the potential impact, the applicant would implement **APM HAZ-1, APM HAZ-2, APM HAZ-3, APM HAZ-4**, and **APM HAZ-5** to ensure that hazardous materials are handled, stored, and transported properly and that response to spills is immediate. As with construction, TDS staff would be trained on safe handling of hazardous materials and all vehicles would be kept in good, working order to reduce the potential for leaks or spills during operation of the proposed project. **MM GEN-1** would ensure that the applicant would implement all proposed APMs. Such measures would ensure impacts due to construction and operation of the proposed project would be less than significant.

Significance: Less than significant with mitigation.

b. Would the project 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?

As discussed under criterion (a), the proposed project would use common hazardous materials to accommodate construction activities for a temporary period. The applicant would transport, use, or dispose of hazardous materials and petroleum products in accordance with the applicant's BMPs and all applicable federal, state, and local regulations. However, accidental releases or spills could still occur, representing a potential hazard to the public and environment during construction, which could be a significant impact. Such impacts could include risk of an oil or hazardous materials release from trenching or improper handling, inadvertent releases/spills to occur during construction, upset and accident conditions during installation activities could include vehicle collisions and/or fire. To minimize the potential of releasing hazardous materials into the environment, the applicant would implement **APM HAZ-1, APM HAZ-2, APM HAZ-3, APM HAZ-4**, and **APM HAZ-5** to ensure that hazardous materials are handled, stored, and transported properly and that response to spills is immediate. **MM GEN-1** would ensure that the applicant would implement all proposed APMs. Such measures would ensure that impacts due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be less than significant.

Significance: Less than significant with mitigation.

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

There are two schools located within 0.25 miles of the proposed alignment. Any accidental releases or spills could occur during construction activities or transporting these materials for disposal, which could result in a significant impact to schools if the release or spill occurred in close proximity to the school. The nearest school is approximately 260 feet from the proposed alignment, measured from the physical structure's (i.e., school building's) distance from the proposed alignment. As described under the discussion for impact criterion (a), the applicant would transport, use, or dispose of hazardous materials and petroleum products in accordance with all applicable federal, state, and local regulations.

Due to the short-term nature of construction, as well as the small quantity and types (e.g., fuels, oils, etc.) of hazardous materials being used during construction, it is unlikely that either of the schools would be affected by the accidental release of hazardous materials or emissions. However, to minimize potential

impacts, the applicant would implement the following APMs. **APM HAZ-1** and **APM HAZ-2** would ensure that all hazardous materials are labeled, handled, transported, and disposed of in an appropriate manner, reducing the potential for any spills or accidental releases during construction. **APM HAZ-4** would ensure that all hazardous waste materials removed during construction are handled and disposed of by licensed contractors, reducing the potential for any unexpected spills or leaks. Any potential impacts from accidental spills of hazardous materials would be minimal due to the implementation of **APM HAZ-5**, requiring that spill clean-up kits be provided and kept onsite during construction, as well as equipment and vehicles being kept in good working order to prevent spills and leaks and be compliant with emissions standards. **MM GEN-1** would ensure that the applicant would implement all proposed APMs. Impacts on the two schools located within 0.25 miles of the proposed project area would be less than significant.

Significance: Less than significant with mitigation.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction of the proposed project would occur within public ROW and would result in temporary, short-term lane closures throughout the proposed project area. Directional boring, for example, would be used to install 5 miles of the cable alignment in 1,500-foot increments via three to four bore shots per day. Bulldozers would be used along 10.3 miles of the cable alignment in 1,000-foot increments. Traffic control would be set up for the day's work operation. Shasta County's Emergency Operations Plan does not designate any roads within the proposed project area as major transportation or evacuation routes. Therefore, there would be no impact on implementation of emergency response plans or emergency evacuation plans during construction and operation of the proposed project.

Significance: No impact.

g. Would the project expose people or structures, either directly or indirectly, 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?

As previously described, the proposed project would be located in an area designated as a "Very High" Fire Hazard Severity Zone. Construction activities would involve the operation of construction equipment and support vehicles adjacent to wildlands. There is a minor risk of fire ignition by this equipment if the equipment is parked on dry vegetation. Any flammable liquids, such as gas and oil, spilled during construction would also contribute to an increased risk of fire if ignited by an open flame or spark. To minimize the potential impact, the applicant would implement **APM HAZ-1**, **APM HAZ-2**, and **APM HAZ-5**. These measures would reduce the risk of wildland fire by ensuring that flammable materials are labeled, stored, and used appropriately; ensuring that contractors are properly trained in handling flammable hazardous materials; and requiring that spill clean-up kits be provided and kept onsite during construction to clean up any spilled flammable liquids. **APM HAZ-6** would be implemented to reduce the potential for wildland fires caused by the proposed project by requiring workers to be instructed regarding the danger of wildland fire and carefully parking equipment in areas without dry, brushy vegetation. In addition, all work vehicles shall be equipped with a working fire extinguisher. Cigarettes and trash shall be disposed of in proper containers and taken offsite at the end of the day. **MM GEN-1** would ensure that the applicant would implement all proposed APMs. With the implementation of **APM HAZ-1**, **APM HAZ-2**, **APM HAZ-5**, and **APM HAZ-6**, and **MM GEN-1** impacts would be less than significant.

Significance: Less than significant with mitigation.

Mitigation Measures

See Section 5.3, "Air Quality" for **MM GEN-1**.

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