

1 **6.7 HAZARDS AND HAZARDOUS MATERIALS**

	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1 **6.7.1 Approach to Analysis**

2 This impact analysis focused on potential effects of hazardous materials or waste that may be
3 encountered during project construction or that might be associated with the project. The
4 evaluation was made in light of project plans, current conditions at several of the POP sites,
5 applicable regulations and guidelines, and the effectiveness of remedial measures.

6 **6.7.2 Impact Significance Criteria**

7 In accordance with the California Environmental Quality Act (CEQA) Guidelines, and agency and
8 professional standards, the project would be considered to pose a significant impact if it would
9 violate the criteria in the above checklist or:

- 10 • Create a hazard resulting from hazardous materials that may be encountered during
11 trenching or other subsurface excavation activity.
- 12 • Result in improper disposal of hazardous materials encountered during trenching or other
13 subsurface excavation activity.

14 **6.7.3 Impact Mechanisms**

15 Impacts from hazardous material use or handling could result from the project via the following
16 mechanisms:

- 17 • Potential exposure to existing contaminated soils, contaminated groundwater, abandoned
18 underground storage tanks, and piping and contaminated material from existing
19 undocumented dumping and landfilling;
- 20 • Potential exposure to, and releases of, hazardous materials such as oils, grease, lubricants,
21 and solvents used during normal construction operations; and
- 22 • Potential risk of upset to the public or the environment.

23 **6.7.4 Impact Assessment**

24 **6.7.4.1 San Francisco Bay Area Network**

- 25 a. *Would the proposed project create a significant hazard to the public or the environment through the*
26 *routine transport, use, or disposal of hazardous materials, or*
- 27 b. *Would the proposed project create a significant hazard to the public or the environment through*
28 *reasonably foreseeable upset and accident conditions involving the release of hazardous materials?*

29 **Impact HAZ-1:** Possible temporary exposure to or release of hazardous materials during
30 construction. (Less than Significant with Identified Mitigation)

31 The project would not require long-term storage, treatment, disposal, or transport of significant
32 quantities of hazardous materials; however, small quantities of hazardous materials would be
33 stored, used, and handled during construction. These relatively small quantities would be below

1 reporting requirements for hazardous materials business plans and would not be considered to
2 pose public health and safety hazards through release of emissions or risk of upset. The hazardous
3 materials anticipated to be used are small volumes of petroleum hydrocarbons and their
4 derivatives (e.g., gasoline, oils, lubricants, and solvents) required to operate the construction
5 equipment and bentonite for boring lubrication. These materials would generally be used in
6 excavation equipment, generators, and other construction equipment and would be contained
7 within vessels engineered for safe storage. Due to the rate of installation, storage of significant
8 quantities of these materials at the construction site is not anticipated. Rather, tender vehicles
9 would most likely provide fuel and lubricant to construction equipment on a daily basis and
10 would be mobilized from an off-site location. Spills during on-site fueling of equipment or an
11 upset condition (i.e., puncture of a fuel tank through operator error or slope instability), could
12 result in a release of fuel or oils into the environment, including sensitive waterways along the
13 project alignment.

14 Materials proposed for use in the conduit could include polyethylene and polyvinyl chloride
15 (PVC). Polyethylene is a common inert plastic used to fabricate soda bottles (PET bottles) and
16 children's toys, and does not pose an environmental hazard. PVC is also an inert material
17 commonly used in the residential community for sprinkler piping. While vinyl chloride, a known
18 toxic substance, is used in the production of PVC piping, once fabricated (polymerized), PVC has
19 no vapor pressure and does not pose an immediate environmental hazard. Degradation of some
20 PVC products (such as window blinds) has been shown to release lead dust and chlorine to the
21 environment over time, given exposure to sunlight. However, pipelines would be buried in over 3
22 feet of soil and would not be exposed to environmental conditions that would result in substantial
23 degradation. No mitigation is required.

24 This impact is considered less than significant because a Storm Water Pollution Prevention Plan
25 (SWPPP) has been prepared for the San Francisco Bay Area Network (Appendix C) as described in
26 section 6.8, which includes methods to protect water quality in response to emergency spills.

27 Subsurface hazardous materials may be encountered during construction. A regulatory database
28 search was conducted for each of the seven new POP sites to identify known contaminated sites so
29 that they can be avoided. During construction, the construction team may encounter unexpected
30 materials that may be considered hazardous waste once they are exposed. Procedures for proper
31 handling and disposal are established by federal, state, and local regulations. Metromedia's
32 contractors will be trained in the handling of such materials prior to construction.

33 **Mitigation Measure HAZ-1a:** Ensure proper labeling, storage, handling, and use of hazardous
34 materials.

35 Metromedia would ensure proper labeling, storage, handling, and use of hazardous materials in
36 accordance with best management practices and the Occupational Safety and Health
37 Administration's HAZWOPER requirements. Metromedia would ensure that employees are
38 properly trained in the use and handling of these materials and that each material is accompanied
39 by a material safety data sheet. Additionally, any small quantities of hazardous materials stored
40 temporarily in staging areas will be stored on pallets within fenced and secured areas and
41 protected from exposure to weather. Incompatible materials will be stored separately, as
42 appropriate.

6.7 Hazards and Hazardous Materials

1 To avoid unexpected releases of hazardous materials, Metromedia would include individuals
2 trained in accordance with the Occupational Safety and Health Administration's HAZWOPER
3 requirements. Additionally, Metromedia would have a written plan outlining how to respond if
4 hazardous materials are unexpectedly encountered. The plan will specify identification, handling,
5 reporting, and disposal of hazardous materials. All hazardous waste materials removed during
6 construction, to the extent necessary to ensure the area can be safely traversed, will be handled and
7 disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an
8 appropriately licensed and permitted disposal or recycling facility. Metromedia would require in
9 its contracts that contractors meet federal, state, and local requirements.

10 **Mitigation Measure HAZ-1b:** Prepare hazardous materials management/spill prevention plan.

11 A Hazardous Materials Management/Spill Prevention Plan would be developed and given to all
12 contractors working on the project. At least one copy shall be on site with the construction
13 manager at all times. The purpose of the plan is to provide on-site construction managers,
14 environmental compliance monitors, and regulatory agencies with a detailed description of
15 hazardous materials management, spill prevention, and spill response/cleanup measures
16 associated with the construction of project elements. The primary objective of the plan is to
17 prevent the spill of hazardous materials. Elements of the plan shall include, but not be limited to,
18 the following:

- 19 • A discussion of hazardous materials management, including delineation of hazardous
20 material and hazardous waste storage areas, access and egress routes, waterways,
21 emergency assemble areas, temporary hazardous waste storage areas;
- 22 • Spill control and countermeasures, including employee spill prevention/response training;
23 and
- 24 • Notification and documentation procedures.

25 **Mitigation Measure HAZ-1c:** Prepare Health and Safety Plan.

26 Metromedia would prepare a Health and Safety Plan that includes a contingency plan for
27 hazardous materials and waste operations and submit the plan to the agency with jurisdiction
28 before site activities could proceed. The Health and Safety Plan, applicable to all excavation
29 activities, would establish policies and procedures to protect workers and the public from potential
30 hazards posed by hazardous wastes. The plan would be prepared according to federal and
31 California OSHA regulations for hazardous waste site Health and Safety Plans.

32 This Health and Safety Plan would also provide for proper storage and/or disposal of any
33 contaminated soils that meet the definition of a hazardous waste. Such a protocol could include
34 off-site treatment of contaminated materials or disposal at an appropriate landfill.

35 **Mitigation Measure HAZ-1d:** Implement dust abatement program.

36 As discussed in the section 6.3, Metromedia would prepare and implement a Dust Abatement
37 Program. This Dust Abatement Program would minimize potential public health impacts
38 associated with exposure to contaminated soil dust.

1 **Mitigation Measure HAZ-1e:** Reduce excavation impacts.

2 During construction, Metromedia would monitor for odors and analyze excavated material with a
3 photo-ionization detector to determine the potential for soil contamination and the need for
4 specialized soil-handling procedures to reduce excavation impacts in areas of suspected
5 contamination.

6 **Impact HAZ-2:** The project could require disposal of potentially contaminated soils. (Less than
7 Significant with Identified Mitigation)

8 Material excavated from network segments in public rights-of-way would be loaded into dump
9 trucks and hauled away for disposal. As detailed in section 5.7, contaminated soil or groundwater
10 may exist at the San Mateo and Fremont POP sites and the potential exists for contaminated soil or
11 groundwater to be encountered during excavation or dewatering activities of network segments.
12 If encountered, contaminated materials may be classified as a hazardous waste, a designated
13 waste, or a special waste, depending on the type and degree of contamination. Disposal of
14 excavated soils as standard demolition waste or use as fill for another construction site could result
15 in a significant impact if those soils are contaminated. This would be considered a significant
16 impact. For this reason, the project could result in disposal of materials that pose a hazard to
17 people, or animal or plant populations, in the vicinity of unknown but potentially present site
18 contamination.

19 **Mitigation Measure HAZ-2a:** Conduct a list search of all network segments requiring excavation.

20 A list search of known state and federal hazardous waste sites and leaking underground tanks
21 within 1,000 feet of the excavation would be conducted to identify high risk areas, where a
22 moderate or high potential for encountering contaminated soil or groundwater may exist during
23 shallow (6 feet or less) excavations.

24 **Mitigation Measure HAZ-2b:** Characterize excavated materials for disposal.

25 Within high-risk areas identified by Mitigation Measure HAZ-2a, excavations would be observed
26 by a trained health and safety professional equipped with an organic vapor analyzer (or other
27 appropriate methods for detecting anticipated contaminants) to screen excavated materials and
28 ensure worker safety. If contamination is encountered, excavated soils would be segregated and
29 sampled relative to the profiling requirements of the accepting landfill, and disposed of in
30 accordance with policies of the accepting landfill and applicable regulations.

31 **Mitigation Measure HAZ-2c:** Test groundwater.

32 Conduct groundwater testing for petroleum hydrocarbons before dewatering is performed.
33 Treatment would be applied, in consultation with the Regional Water Quality Control Board
34 and/or wastewater treatment plant operators, to ensure that all discharges meet applicable water
35 quality requirements.

36 c. *Would the proposed project emit hazardous emissions or involve handling hazardous or acutely*
37 *hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

6.7 Hazards and Hazardous Materials

1 No hazardous emissions would be generated by the project. No hazardous emissions or acutely
2 hazardous materials, substances, or waste, would be handled within ¼-mile of an existing or
3 proposed school. Metromedia would not locate a staging area near (within 500 feet) an existing or
4 proposed school.

5 All institutional controls governing the storage, transportation, use, handling, and disposal of
6 hazardous materials would be followed by project personnel during construction of the project.

7 *d. Would the proposed project be located on a site that is included on a list of hazardous materials sites*
8 *compiled pursuant to Government Code section 65962.5 and, as a result, would it create a*
9 *significant hazard to the public or the environment?*

10 **Impact HAZ-3:** Possible exposure of the public or environment to hazardous materials sites (Less
11 than Significant)

12 As noted above, a regulatory database search was performed for all proposed new POP sites to
13 locate areas that may be viewed as potential areas of hazardous materials contamination or
14 locations where it is permitted to perform various hazardous waste activities. In addition, along
15 the project routes a regulatory database search would be performed to identify high-risk areas as
16 described in Mitigation Measure HAZ-2a.

17 State and federal laws regulate the manner in which contamination and hazardous conditions are
18 investigated and remediated. Contaminated sites can be expected along some of the project routes,
19 particularly in highly urbanized areas. The U.S. EPA and Cal-EPA maintain databases listing
20 known contaminated sites. The databases include information on leaking underground storage
21 tanks; hazardous waste generators; treatment, storage, and disposal facilities; sites known to have
22 contaminated groundwater; and sites currently undergoing remediation or corrective action.
23 Coordination with waste disposal activities with local regulatory agencies will be needed along the
24 project routes. This impact is considered less than significant because all listed hazardous materials
25 sites will be identified prior to construction and avoided through reroutes, as described in
26 Mitigation Measure HAZ-2a.

27 **Mitigation Measure:** No mitigation is required.

28 *e. Would the proposed project be located within an airport land use plan or, where such a plan has not*
29 *been adopted, within two miles of a public airport or public use airport, and result in a safety hazard*
30 *for people residing or working in the proposed project area?*

31 As discussed in Chapter 3, the project involves the installation of fiber optic cable and conduit
32 underground. There will be no project structures that will impair airport operations or endanger
33 other land uses. Any helicopter operations will be undertaken in accordance with Federal Aviation
34 Administration safety and flight regulations. As a result, the project would have no impact on the
35 safety of aircraft activity at airports near the proposed cable segments.

36 *f. Would the proposed project be located in the vicinity of a private airstrip, and result in a safety*
37 *hazard for people residing or working in the proposed project area?*

1 As discussed above, the project will not result in a safety hazard for people working or residing in
2 the surrounding area. No trenches or holes will be left open overnight, and no equipment or
3 construction materials will be left accessible to the public once construction activities cease for the
4 day.

5 g. *Would the proposed project impair implementation of or physically interfere with an adopted*
6 *emergency response plan or emergency evacuation plan?*

7 **Impact HAZ-4:** Possible temporary limited emergency access. (Less than Significant)

8 The project will involve the operation of heavy machinery. Emergency response times may be
9 affected in areas where the proposed routes are adjacent to or within road rights-of-way.
10 Emergency access will be regulated as a condition of road encroachment permits by the applicable
11 regulatory agency. Also, as discussed in section 6.15, a traffic control plan shall be prepared as
12 part of the construction mitigation strategy to further reduce impacts on traffic and emergency
13 response vehicles and programs to less-than-significant levels.

14 **Mitigation Measure:** No mitigation is required.

15 h. *Would the proposed project expose people or structures to the risk of loss, injury, or death involving*
16 *wildland fires, including where wildlands are adjacent to urbanized areas or where residences are*
17 *integrated with wildlands?*

18 The project would not be constructed near wildlands and there will be no impact due to exposure
19 of people or structures to a significant risk of loss, injury, or death attributable to wildland fires.

20 **Mitigation Measure:** No mitigation is required.

21 **6.7.4.2 Los Angeles Basin Network**

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

24 b. *Create a significant hazard to the public or the environment through reasonably foreseeable upset*
25 *and accident conditions involving the release of hazardous materials?*

26 Impacts would be the same for the Los Angeles Basin Network as for the San Francisco Bay Area
27 Network, except that a separate SWPPP would be prepared for the Los Angeles Basin Network.
28 Mitigation measures HAZ-1a-e and HAZ-2a-c would apply in their entirety.

29 c. *Would the proposed project emit hazardous emissions or involve handling hazardous or acutely*
30 *hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

31 No hazardous emissions would be generated by the project. No hazardous emissions or acutely
32 hazardous materials, substances, or waste, would be handled within ¼-mile of an existing or
33 proposed school. Metromedia would not locate a staging area near an existing or proposed school.

34 All institutional controls governing the storage, transportation, use, handling, and disposal of
35 hazardous materials would be followed by project personnel during construction of the project.

6.7 Hazards and Hazardous Materials

1 d. *Would the proposed project be located on a site that is included on a list of hazardous materials sites*
2 *compiled pursuant to Government Code section 65962.5 and, as a result, would it create a*
3 *significant hazard to the public or the environment?*

4 **Impact HAZ-5:** Installation of the Los Angeles Basin Network could encounter methane gas or
5 hydrogen sulfide gas during excavations and borings. (Less than Significant with Identified
6 Mitigation)

7 Much of the Los Angeles Basin Network would be constructed within pre-disturbed city streets.
8 Excavations would be expected to be up to 5 feet deep; boring under intersections or waterways
9 could be deeper. Pockets of hydrogen sulfide or methane gas could be encountered during
10 excavation activities near operating or historic oil production fields. However, the naturally
11 occurring gases generally occur at greater depths. The likelihood of encountering gases in shallow
12 trenches or borings would be slight.

13 Methane can be explosive in elevated concentrations but exhibits no toxicity. Hydrogen sulfide is
14 toxic at elevated concentrations and can be fatal if encountered during excavation or drilling
15 activities. The permissible exposure limit for hydrogen sulfide is 10 parts per million (ppm). The
16 National Institute of Occupational Safety and Health (NIOSH) has determined the immediate
17 danger to life and health (IDLH) concentration for hydrogen sulfide to be 300 ppm. The naturally
18 occurring underground gases are generally encountered at depths of 40 feet and deeper (although
19 shallower occurrence is possible) where concentrations of hydrogen sulfide can exceed 3,000 ppm.¹

20 As part of the project, standard construction procedures would include preparation of Health and
21 Safety Plans for excavation and boring activities. These Health and Safety Plans would include
22 contingencies for encountering methane and hydrogen sulfide including work stoppage if odors
23 are detected. Hydrogen sulfide monitoring equipment would be available on the construction
24 sites near operating or historic oil production fields during boring operations for such a possibility.
25 If any odors were detected, work would stop and the area would be monitored by the Site Health
26 and Safety Officer using a calibrated hydrogen sulfide meter. The procedures outlined in the Site
27 Safety Plan would minimize the potential impact to less-than-significant levels.

28 **Mitigation Measure HAZ-5:** Implement Measure HAZ-1c.

29 e. *Would the proposed project be located within an airport land use plan or, where such a plan has not*
30 *been adopted, within two miles of a public airport or public use airport, and result in a safety hazard*
31 *for people residing or working in the proposed project area?*

32 As discussed for the San Francisco Bay Area Network above, the project would have no impact on
33 the safety of aircraft activity at airports.

34 f. *Would the proposed project be located in the vicinity of a private airstrip, and result in a safety*
35 *hazard for people residing or working in the proposed project area?*

¹ Concentrations of 3,300 ppm H₂S were found 56 feet below ground surface at Pico Boulevard and San Vicente Boulevard during sampling activities conducted for the Los Angeles Rail Rapid Transit Project Mid City segment in 1992.

1 As discussed for the San Francisco Bay Area Network above, the project would not result in a
2 safety hazard for people working or residing in the surrounding area.

3 *g. Would the proposed project impair implementation of or physically interfere with an adopted*
4 *emergency response plan or emergency evacuation plan?*

5 The impact/mitigation for the Los Angeles Basin Network is the same as Impact HAZ-1 and
6 Mitigation Measure HAZ-1d above.

7 *h. Would the proposed project expose people or structures to the risk of loss, injury, or death involving*
8 *wildland fires, including where wildlands are adjacent to urbanized areas or where residences are*
9 *intermixed with wildlands?*

10 As with the San Francisco Bay Area Network, the Los Angeles Basin Network would not be
11 constructed near wildlands and there will be no impact due to exposure of people or structures to
12 a significant risk of loss, injury, or death attributable to wildland fires.