

4.8 Hazardous Materials, Public Health and Safety

4.8.1 Thresholds of Significance

4.8.1.1 Hazardous Substances

Project-related impacts associated with hazardous materials and public health and safety issues would be considered potentially significant if one or more of the following guidelines are exceeded:

1. The Project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials including the use/transport of explosives.
2. The Project would result in upset or accident conditions involving the release of hazardous materials into the environment.

Guideline Nos. 1 and 2 are derived from criteria provided in Appendix G of the State CEQA Guidelines, the County Guidelines for Determining Significance for Hazardous Materials and Existing Contamination (2007e). These guidelines are intended to ensure conformance with the applicable regulatory requirements listed in Section 3.8.2 and protect public health/safety from impacts related to hazards and hazardous materials.

4.8.1.2 Vector Hazards

Project-related impacts associated with hazardous materials and public health and safety issues are considered potentially significant if the following guideline is exceeded:

3. The Project would cause substantial adverse effects on humans related to vectors.

Guideline No. 3 is derived from the County's DEH-VSC Program. This guideline is intended to protect public health/safety from impacts related to hazards associated with vectors.

4.8.1.3 Wildland Fire Hazards

Project-related impacts associated with hazardous materials and public health and safety issues are considered potentially significant if the following guideline is exceeded:

4. The Project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildland fires are adjacent to urbanized areas or where residences are intermixed with wildlands.

Guideline No. 4 is based on the Project's conformance to the PRC; County CFC; and the Memorandum of Understanding between the USFWS, CDFW, CDF, County Fire Chief's Association and the Fire District's Association of San Diego County.

4.8.2 Proposed Project

4.8.2.1 Analysis of Project Effects and Determination as to Significance

Hazardous Substances (Guideline Nos. 1 and 2)

Implementation of the Proposed Project would involve the on-site use, storage, and off-site disposal of hazardous materials related to mining equipment and vehicles. Specific materials identified for use/storage as part of Project operations include diesel fuel, gasoline, lubricants (e.g., grease and engine oil), solvents (for equipment maintenance), and coolant. On-site storage of these materials is anticipated to involve approximately 2,000 gallons for diesel fuel, 1,000 gallons for gasoline, and substantially smaller amounts for lubricants, solvents, and coolant. All noted hazardous materials would be stored in fully contained sites (e.g., double containment in enclosed buildings), with all on-site use and storage of hazardous materials to conform to applicable regulatory requirements as described above. Specifically, such conformance would entail implementing an approved HMBP or Risk Management Plan if appropriate, as well as conformance with other pertinent requirements such as OSHA, CalARP, and HMMMD standards. Conformance with these requirements would ensure appropriate handling of hazardous materials and would avoid or reduce associated potential impacts related to hazardous materials to less than significant levels.

The Proposed Project also would involve the on-site use of explosives for quarrying operations, although no on-site storage of explosives is proposed. Specifically, the proposed use of explosives would entail transporting such materials into the site on an as-needed basis, with any unused explosives to be removed daily from the site for storage in an approved off-site facility. All transport and use of explosives associated with the Proposed Project would conform to applicable regulatory requirements as outlined in Subchapter 3.8, *Existing Conditions/Affected Environment, Hazardous Materials, Public Health and Safety*. Specifically, this would involve using a licensed blaster pursuant to SDIR requirements and submitting all requisite information to the County Sheriff's Department for review and approval prior to transporting explosives and implementing blasting operations. Conformance with these requirements would avoid or reduce associated potential impacts related to blasting to less than significant levels.

Based on the above discussions regarding the transport, use and storage of hazardous materials in association with the Proposed Project, as well as the isolated nature of the Project site, impacts related to EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) would be less than significant.

Proposed mining operations would not affect transmission line facilities within the noted SDG&E easement, based on the fact that a 50-foot setback from the on-site towers would be maintained. Similarly, potential impacts to the gas line located along the western and southern boundaries of the Project impact footprint would also be avoided through a 50-foot setback. For this reason, Project impacts to gas and electric facilities would be less than significant.

Vector Hazards (Guideline No. 3)

A Vector Management Plan was prepared for the Project (EnviroMINE 2014; see Appendix J). Vector attraction is possible within the vicinity of the proposed open pit, processing plant area

ponds, and detention basins that would be constructed near the northwesterly outflow location. Water that flows into the pit would be collected in a sump and pumped to the processing plant area ponds for use with materials processing and dust control. Rainwater would be collected over a period of six to eight months, and it would be unlikely that any single rain event would overwhelm the site given the size of the proposed pit area. In addition, evaporation would reduce the amount of runoff within the pit. The following conditions would be implemented as part of Project design to ensure that water collected in the open pit, detention basin and processing plant ponds does not propagate the breeding of vectors:

- If water collects in the open pit, it would be collected in a sump and pumped to the processing plant area ponds for use with materials processing and dust control. Therefore, this water would be constantly circulating and would help to prevent the propagation of vectors. If groundwater accumulates in the excavation area, excavation would halt at that elevation. Groundwater, if present, would be treated that same way as surface water.
- During the wet season (October through March), the open pit, processing plant area ponds and detention basins would be visually inspected monthly by the operations staff for the presence of vectors and mosquito fish (*Gambusia affinis*). If necessary, corrective measures, described in this list of conditions, would be initiated.
- During the dry season (April through September), the open pit, processing plant area ponds and detention basins would be visually inspected weekly by the operations staff for the presence of vectors and mosquito fish (*Gambusia affinis*). If necessary, corrective measures, described in the next bullet in this list of conditions, would be initiated.
- Mosquitoes within the open pit, processing plant area ponds or detention basin would be controlled with the use of mosquito fish (*Gambusia affinis*). Ongoing maintenance of the open pit would be conducted in a manner that complies with DEH-VCS regulations. Ongoing maintenance would include minor grading to eliminate potential water retention pockets and to ensure slope stability and drainage, and monitoring of the open pit, processing plant area ponds vector conditions. Maintenance would continue until backfilling of the pit is complete.

Implementation of Project design measures listed above and in Table 2-4 would avoid the potential for an increase in vector populations at the Project site and would reduce potential public health and safety impacts to less than significant levels, pursuant to Significance Guideline No. 3.

Wildland Fire Hazards (Guideline No. 4)

A Conceptual Fire Protection Plan (FPP) was prepared for this Project (EnviroMINE 2019a, provided in Appendix K of this EIR). The FPP is the basis for determining the potential public health and safety risk to people and structures on or in the vicinity of the Project impact footprint as a result of wildfires. The Proposed Project itself would not involve the development of any permanent structures that might be vulnerable to wildfires; structures on site would consist of mining and processing equipment, lab, equipment maintenance shop, and a modular office trailer. Other habitable structures would include an equipment maintenance shop (10,330 sf) and lab (1,000 sf). The equipment maintenance shop would include metal-sided or concrete tilt-up

construction and large roll-up doors. Therefore, the shop would not be fully enclosed during regular business hours. The lab would be used for various material testing for the duration of the operation and would include fire sprinklers. An SDG&E access road (14-ft wide decomposed granite) would be located between the lab and the eastern project boundary. Existing vegetation near these structures would be cleared in preparation for mining activities, creating a buffer, or vegetation management zone, of at least 100 feet wide and would surround all habitable structures. This buffer would make it unlikely that a vegetation fire would affect the structures on site, so a risk assessment/fire spread model would not be necessary for the Project site. However, a fire originating on site could spread to nearby inhabited residential, commercial, or industrial structures, the closest of which are the Calpine power plant on a lot abutting the northwestern edge of the Project impact footprint and the Vulcan Materials Company asphalt plant on a lot abutting the southwestern edge of the impact footprint. The most likely scenario for a wildland fire event would occur during the summer months, when fuel moisture and humidity are low and temperature is high, and/or during the initial stages of clearing, when heavy equipment is working in the brush and overburden prior to start up. The cause would most likely be associated with heavy equipment, such as a spark struck from an equipment blade on a rock; hot carbon particles from exhaust or catalytic converters; or fire in the equipment itself due to a mechanical malfunction. Other possibilities could include welding, carelessly discarded smoking materials, or other vehicle use.

As part of the Project design features, the Proposed Project would include implementation of the Project-specific Conceptual Fire Protection Plan (Appendix K). Implementation of the following Project design features would reduce the potentially significant Project impact to public safety from wildfires in the area surrounding the Project impact footprint to less than significant levels:

- Existing vegetation near the proposed trailer and processing equipment would be cleared in preparation for mining activity. A buffer, or vegetation management zone, of at least 100 feet wide would surround all habitable structures. The vegetation management zone would begin at the structures or processing equipment and extend out on all sides to the unmodified vegetation. Vegetation management zones would be installed at the time of construction and would be maintained annually at the expense of the Project operator, prior to May 1, on an ongoing basis.
- There would be a 30-foot wide vegetation management zone maintained by the applicant around all retention basins and water district and power line rights-of-way within the Project impact footprint.

An annual vegetation management inspection, funded by the Project operator, would be conducted by a qualified wildland fire protection consultant to assure compliance with the Conceptual Fire Protection Plan, and a report shall be submitted to the operator, the SDCFA Fire Chief, and the County PDS Fire Marshal.

- All structures greater than 500 sf would be equipped with automatic fire sprinkler systems designed and installed per the appropriate National Fire Protection Association (NFPA) standard.
- Access roads would comply with the California Fire Code, County Fire Code and County CFC and would be provided when the closest exterior wall of the first floor of any structure

is beyond 150 feet from the closest Fire Department vehicle access. All fire apparatus access roads would be a minimum of 24 feet wide and would be all-weather and meet RFPD and PDS requirements for fire access. Access roads would be installed and usable before combustible construction occurs on site. There would be no overhanging canopies. There would be no road grades over 15 percent, unless approved by the Fire Chief and mitigated (20 percent maximum). Dead end access roads would have an approved turnaround. Angle of departure and approach would be approved by the Fire Chief (Fire Code maximum is 7 degrees). Automatic gates would comply with the County Fire Code Section 902.2.4.3. All gates on access roads would have Knox (or equivalent) emergency key-operated switches overriding all command functions and opening the gate. The key switch would be dual keyed or have dual switches to allow law enforcement access. Gates would be subject to SDCFA and PDS approval.

- Prior to introduction of combustible material on site, a fire hydrant would be installed and operable at the nearest intersection to the site (such as the existing fire hydrant located approximately 500 feet west of the northeastern corner of the Project impact footprint). If other hydrants are required, their location(s) would be determined prior to initiation of mining activities. Fire hydrants would be of an approved type and have one 4-inch outlet and one 2.5-inch outlet, unless otherwise specified by the SDCFA Fire Chief. Fire hydrants would have a 3-foot by 3-foot gravel (for dry barrel hydrant) or concrete pad at base for weed control. Reflective blue dot hydrant markers would be located in the center of the road to indicate the location of a hydrant.

Implementation of the Project design features described above would not avoid the public health and safety risk associated with wildfires altogether; therefore, it is anticipated the potential impacts associated with loss, injury, or death as a result of wildfires would be less than significant.

4.8.2.2 Significance of Impacts Prior to Mitigation

Hazardous Substances

Identified potential impacts associated with hazardous substances during implementation of the Proposed Project would be less than significant.

Vector Hazards

The Project would implement Project design features, which would result in vector impacts being less than significant.

Wildland Fire Hazards

The Project would implement Project design features, which would result in wildland fire impacts being less than significant.

4.8.2.3 Mitigation Measures

Because impacts identified with respect to hazardous materials, vectors and wildland fire hazards would be less than significant, mitigation is not necessary.

4.8.2.4 Conclusion

Based on the discussions provided above, potential Project-specific and cumulative hazardous materials impacts associated with implementation of the Proposed Project would be effectively avoided or reduced below identified significance guidelines through proposed design/operation measures and conformance with established regulatory requirements. Accordingly, no mitigation measures are required or proposed with respect to hazardous materials. The Proposed Project would include the implementation of Project design features to reduce impacts related to vectors and wildland fires to less than significant levels.

4.8.3 Extraction to Natural Grade Alternative

4.8.3.1 Analysis of Project Effects and Determination as to Significance

Hazardous Substances (Guideline Nos. 1 and 2)

This alternative would involve similar on-site use/storage and off-site disposal requirements for hazardous materials as described for the proposed project. Specifically, this would entail materials such as diesel fuel, gasoline, lubricants, solvents and coolant, with stored quantities generally the same as or less those described for the proposed project. All on-site use and storage of hazardous materials would require conformance with applicable regulatory requirements as noted above in Section 4.8.2 (refer also to Subchapter 3.8, *Hazardous Materials, Public Health and Safety*, including implementation of an approved HMBP and/or Risk Management Plan (as appropriate), as well as other pertinent requirements such as OSHA, California Accidental Release Plan and HMMD standards. Similar to the Proposed Project, conformance with these requirements would avoid or reduce associated potential impacts related to hazardous materials below a level of significance.

The use of explosives under this alternative would also be similar to the proposed project, with all transport and use required to conform with applicable regulatory requirements as outlined in Subchapter 3.8. As noted above in Section 4.8.3 for the Proposed Project, conformance with these requirements would avoid or reduce associated potential blasting impacts from the Extraction to Natural Grade Alternative below a level of significance.

Mining operations under this alternative would not impact on-site transmission line facilities or the relocated natural gas line easement, for similar reasons as noted above for the Proposed Project.

Vector Hazards (Guideline No. 3)

The Extraction to Natural Grade Alternative would not involve a mining pit component, as is proposed under the Project; instead, this alternative would result in generally sloping pads. Accordingly, it is less likely that vector attraction and breeding with occur under this alternative when compared to the Proposed Project. Nonetheless, this alternative would implement the same design measures for the processing plant area ponds and detention basins as under the Proposed Project, which would reduce impacts related to vector hazards to less than significant levels.

Wildland Fire Hazards (Guideline No. 4)

As in the case of the Proposed Project, the Extraction to Natural Grade Alternative would not involve the development of any permanent structures that might be vulnerable to wildfires, and existing vegetation near the proposed mining, processing and management facilities would be cleared in preparation for mining activities, creating a buffer at least 100 feet wide. However, a fire originating on site could spread to nearby inhabited residential, commercial or industrial structures. As described in Subsection 4.8.3.1 above, the greatest potential for a wildland fire event would occur during the summer months, and/or during the initial stages of clearing, when heavy equipment is working in the brush and overburden prior to start up.

Such a fire would have the potential to become a catastrophic fire event, spreading rapidly through brush; however, similar to the Proposed Project, this alternative would implement the design features presented above in Subsection 4.8.3.1. Implementation of these design features would not avoid the public health and safety risk associated with wildfires altogether. Nonetheless, it is anticipated the potential impacts associated with loss, injury or death as a result of wildfires would be reduced to a level that is less than significant.

4.8.3.2 Significance of Impacts Prior to Mitigation

Hazardous Substances

Identified potential impacts associated with hazardous substances during implementation of the Extraction to Natural Grade Alternative would be less than significant.

Vector Hazards

The Extraction to Natural Grade Alternative would implement design measures, which would reduce vector impacts to less than significant levels.

Wildland Fire Hazards

The Extraction to Natural Grade Alternative would implement design features, which would reduce wildland fire impacts to less than significant levels.

4.8.3.3 Mitigation Measures

Because no significant impacts were identified with respect to hazardous materials, vectors or wildland fire hazards, mitigation is not necessary.

4.8.3.4 Conclusion

Based on the discussions provided above, potential Project-specific and cumulative hazardous materials impacts associated with implementation of this alternative would be effectively avoided or reduced below identified significance guidelines through proposed design/operation measures and conformance with established regulatory requirements. Accordingly, no mitigation measures are required or proposed with respect to hazardous material. This alternative would include the

implementation of design features to reduce impacts related to vectors and wildland fire hazards to less than significant levels.

4.8.4 Extraction to Varying Depth Alternative

4.8.4.1 Analysis of Project Effects and Determination as to Significance

Hazardous Substances (Guideline Nos. 1 and 2)

This alternative would involve similar on-site use/storage and off-site disposal requirements for hazardous materials as described for the Proposed Project. These materials would include diesel fuel, gasoline, lubricants, solvents and coolant, with stored quantities generally the same as or less those described for the Proposed Project. All on-site use and storage of hazardous materials would require conformance with applicable regulatory requirements as noted above in Section 4.8.2 (refer also to Subchapter 3.8), including implementation of an approved HMBP and/or Risk Management Plan (as appropriate), as well as other pertinent requirements such as OSHA, California Accidental Release Plan and HMMD standards. Conformance with these requirements would avoid or reduce associated potential impacts related to hazardous materials below a level of significance.

The use of explosives under this alternative would also be similar to the Proposed Project, with all transport and use required to conform with applicable regulatory requirements as outlined in Subchapter 3.8. As noted above in Section 4.8.3 for the Proposed Project, conformance with these requirements would avoid or reduce associated potential blasting impacts from the Extraction to Varying Depth Alternative below a level of significance.

Mining operations under this alternative would not impact on-site transmission line facilities or the relocated natural gas line easement, for similar reasons as noted above for the Proposed Project.

Vector Hazards (Guideline No. 3)

The Extraction to Varying Depth Alternative, similar to the Proposed Project, would result in a pit in which water could pond, and thus, attract vectors. This alternative would, however, implement the same design measures as under the Proposed Project, which would reduce impacts related to vector hazards to less than significant levels.

Wildland Fire Hazards (Guideline No. 4)

The Extraction to Varying Depth Alternative would not involve the development of any permanent structures that might be vulnerable to wildfires. Existing vegetation near the proposed mining, processing and management facilities would be cleared in preparation for mining activities, creating a buffer at least 100 feet wide. However, a fire originating on site could spread to nearby inhabited residential, commercial or industrial structures. As described in Subsection 4.8.3.1 above, the greatest potential for a wildland fire event would occur during the summer months, and/or during the initial stages of clearing, when heavy equipment is working in the brush and overburden prior to start up.

Such a fire would have the potential to become a catastrophic fire event, spreading rapidly through brush; however, similar to the Proposed Project, this alternative would implement the design features presented above in Subsection 4.8.3.1. Implementation of these design features would not avoid the public health and safety risk associated with wildfires altogether. Nonetheless, it is anticipated the potential impacts associated with loss, injury or death as a result of wildfires would be reduced to a level that is less than significant.

4.8.4.2 Significance of Impacts Prior to Mitigation

Hazardous Substances

Identified potential impacts associated with hazardous substances during implementation of the Extraction to Varying Depth Alternative would be less than significant.

Vector Hazards

The Extraction to Varying Depth Alternative would implement design measures, which would reduce vector impacts to less than significant levels.

Wildland Fire Hazards

The Extraction to Varying Depth Alternative would implement design features, which would reduce wildland fire impacts to less than significant levels.

4.8.4.3 Mitigation Measures

Because no significant impacts were identified with respect to hazardous materials, vectors or wildland fire hazards, mitigation is not necessary.

4.8.4.4 Conclusion

Based on the discussions provided above, potential Project-specific and cumulative hazardous materials impacts associated with implementation of this alternative would be effectively avoided or reduced below identified significance guidelines through proposed design/operation measures and conformance with established regulatory requirements. Accordingly, no mitigation measures are required or proposed with respect to hazardous material. This alternative would include the implementation of design measures to reduce impacts related to vectors and wildland fires to less than significant levels.

4.8.5 No Project/Existing Plan Alternative

4.8.5.1 Analysis of Project Effects and Determination as to Significance

Hazardous Substances (Guideline Nos. 1 and 2)

This alternative would entail development of the site for mixed industrial and rural residential uses, as described in Section 2.5 of this EIR. The exact type and extent of industrial uses that would be implemented under this alternative are not known, with associated hazardous material use also

unknown. Based on the nature of existing industrial development in the Project site vicinity, however (refer to Section 3.8.3.1), it is considered likely that similar uses would occur on-site under this alternative. Accordingly, associated hazardous material use and storage may include hazardous materials/related hazards such as propane/fire, fuel and oil/fire, compressed gases/pressure release, and acids and bases/reactive and acute hazards. While specific hazardous material use and storage under this alternative may vary from these assumptions based on the type of development as noted, all associated use and storage of hazardous materials would be subject to applicable regulatory requirements as described in Section 3.8.2 of this document. Accordingly, potential impacts related to such activities would be avoided or reduced below a level of significance for similar reasons as described under the proposed project.

It is anticipated that the use of explosives under this alternative would not be required, or that such use would be limited to minor, short-term efforts related to site grading and excavation. If blasting were to be required, all transport and use would be required to conform with applicable regulatory requirements as described for the Proposed Project and outlined in Subchapter 3.8. As noted above in Section 4.8.2 for the Proposed Project, conformance with these requirements would avoid or reduce associated potential blasting impacts from the No/Project Existing Plan Alternative below a level of significance.

Site development under this alternative would be required to avoid physical effects to on-site transmission line facilities and the relocated natural gas line easement, as described above for the proposed project (e.g., through the use of setbacks). Accordingly, no associated significant impacts to those facilities would occur from implementation of the No Project/Existing Plan Alternative.

Vector Hazards (Guideline No. 3)

The No Project/Existing Plan Alternative would not result in a pit, as would the Proposed Project. Accordingly, it is less likely that vector attraction and breeding with occur under this alternative when compared to the Proposed Project. Nonetheless, this alternative would implement the same design measures as under the Proposed Project, which would reduce impacts related to vector hazards to less than significant levels.

Wildland Fire Hazards (Guideline No. 4)

Implementation of the No Project/Existing Plan Alternative would involve the development of permanent structures on the Project site for industrial and residential uses. Given the prevailing conditions on site described in Section 3.8.3.3, including the type and continuity of vegetation, topography, erratic winds, and potential drought conditions, these permanent structures would be vulnerable to wildfires. This would represent a potentially significant project impact to public safety from wildfires; however, similar to the Proposed Project, this alternative would implement the design features presented above in Subsection 4.8.2.1. Implementation of these design features would not avoid the public health and safety risk associated with wildfires altogether. Nonetheless, it is anticipated the potential impacts associated with loss, injury, or death as a result of wildfires would be reduced to a level that is less than significant.

4.8.5.2 Significance of Impacts Prior to Mitigation

Hazardous Substances

Identified potential impacts associated with hazardous substances during implementation of the Existing Plan Alternative would be less than significant.

Vector Hazards

The No Project/Existing Plan Alternative would implement design measures, which would reduce vector impacts to less than significant levels.

Wildland Fire Hazards

The No Project/Existing Plan Alternative would implement design measures, which would reduce wildland fire impacts to less than significant levels.

4.8.5.3 Mitigation Measures

Because no significant impacts were identified with respect to hazardous materials, vectors or wildland fire hazards, mitigation is not necessary.

4.8.5.4 Conclusion

Based on the discussions provided above, potential Project-specific and cumulative hazardous materials impacts associated with implementation of this alternative would be effectively avoided or reduced below identified significance guidelines through proposed design/operation measures and conformance with established regulatory requirements. Accordingly, no mitigation measures are required or proposed with respect to hazardous materials. This alternative would include the implementation of design measures to reduce impacts related to vectors and wildland fires to less than significant levels.

4.8.6 No Project Alternative

4.8.6.1 Analysis of Project Effects and Determination as to Significance

Under this alternative, no development of the site would occur. Accordingly, there would be no potential impacts related to hazardous materials or public health and safety.

4.8.6.2 Significance of Impacts Prior to Mitigation

Under this alternative, no impacts associated with hazardous materials, public health or safety would occur.

4.8.6.3 Mitigation Measures

Because no impacts associated with hazardous materials, public health or safety would occur, no mitigation measures would be required.

4.8.6.4 Conclusion

Implementation of the No Project Alternative would not entail any proposed development or disturbance, with the project site remaining in its current (largely undeveloped) condition. Accordingly, no project-specific or cumulative impacts related to hazardous materials or public health and safety would occur, and no mitigation measures would be required.