Big Oak Canyon Invasive Pest Mitigation and Fuels Reductions Project Notice of Exemption (NOE)

The Orange County Fire Authority (OCFA), as the lead agency under the California Environmental Quality Act (CEQA), has proposed the Big Oak Canyon Invasive Pest Mitigation and Fuels Reductions Project (Proposed Project or Project), which involves the spraying of barrier insecticide to eliminate and slow the spread rate of pests, enhancing the survival rate of existing tree populations and removal of dead, dying, and decaying vegetation, thus creating a fire safe condition in the area.

Project Location:

The Proposed Project would occur approximately 1 mile east of Silverado, an unincorporated community on the eastern edge of Orange County, California. The Proposed Project site is located on Acjachemen and Tongva territory, off Silverado Canyon Road, covering a total of approximately 29.70 acres. Trees treated as a result of the Proposed Project are in areas designated as Very High Fire Hazard Severity Zones (VHFHSZ) within the County's State Responsibility Area (SRA). Cleveland National Forest land exists immediately north, east, and south of the property. Only trees located outside the borders of the Cleveland National Forest would be sprayed and maintained (CAL FIRE 2024).

Existing Conditions:

Approximately 163,992 acres throughout Orange County (County) are experiencing high tree mortality due to recent severe drought conditions and tree pests. The Gold Spotted Oak Borer (GSOB) and Invasive Shot Hole Borer (ISHB) are weakening and killing native hardwood and ornamental species in the southern California wildland and urban landscapes. The California Board of Forestry and Fire Protection has declared some areas in the County as Zones of Infestation (ZOI) for these species. The Proposed Project site is located within the ZOI for GSOB. Many of the trees that will be treated as a result of the Proposed Project are located in areas designated as Very High Fire Hazard Severity Zones (VHFHSZ).

The Proposed Project site is zoned as open space and located within the Silverado-Modjeska Specific Plan. The land use designations within the Proposed Project site are open space, and its current uses are consistent with the existing land uses.

Description of Project:

The Proposed Project site is designated as ZOI for the GSOB. The pest mitigation and fuels reduction activities would include tree removal, branch removal, stump grinding (or flush cuts of stumps), and insecticide/fungicide application. Insecticides would be applied either as soil injection, trunk sprays, or trunk injection. Possible pesticides to be applied include the insecticides imidacloprid, bifenthrin, and emamectin benzoate, and the fungicides propiconazole and *Bacillus subtilis*. In order to successfully manage the pest infestations while maintaining tree health and reducing the risk of environmental harm, the pesticide (or combination of pesticides) and application method that will be used to treat each tree will depend on the pest being managed, the level of infestation, tree location, and tree overall health. When applying bifenthrin as a trunk spray, the surfactant Nu-Film 17 might be applied as well. A surfactant is used to change the surface tension of the insecticide so that the liquid will better adhere to the plant. Nu-Film 17 reduces pesticide loss from rainfall, wind erosion, heat, and ultraviolet (UV) radiation (Miller 2016). The surfactant will increase the efficacy of the bifenthrin, reducing the amount of pesticide needed and reducing overspray and drift.

The spray activities will involve the use of one to two diesel trucks that have attached booms with pressurized spray rigs. Contact spray would be applied to completely cover the trunk and any branches greater than 8 inches in diameter. Barrier spray application will be evaluated annually and, with consultation, be repeated, as necessary. Contact insecticides kill adult beetles when ingested at emergence and also kill eggs laid on the bark surface. These sprays will not control larvae feeding in the tree but are effective at killing adult beetles as they directly contact the insecticide on the bark surface.

Systemic pesticides and fungicides can be applied as soil injections or as trunk injections. Soil injections or drench methods involve placing chemicals in liquid form near the roots in moist (not saturated) soil for uptake, or injecting chemicals two to three inches deep with a high-pressure injector within 18 inches of the trunk. Trunk injections introduce chemicals using various devices under no, low-, or high-pressure systems. Drilling holes (typically around one-eighth to three-sixteenths inch in size) prior to injecting, allows for clean cuts to the plant tissue making uptake easier. Systemic pesticides and fungicides are then absorbed into the plant and distributed throughout the tissues, killing the insects and fungi inside the wood.

The insecticide products would be applied by a registered pesticide applicator (Qualified Applicator Certificate or License) licensed for Forestry (Category E). Qualified contractors have a Category E certification and the associated Operator Identifications (IDs) with the County Agricultural Commissioner to apply restricted chemicals. All pesticide applications would strictly follow label and label supplement specifications, and all pesticides use would be reported to the landowner and the Orange County Agricultural Commissioner at the end of each application month. Carbaryl is a restricted chemical, and its use would be reported to the Orange County Agricultural Commissioner in advance of treatment.

Applicability of Exempt Status:

The proposed activity is a project subject to CEQA. However, it is exempt from further environmental review under the following CEQA categorical exemption classes:

Minor Alterations to Land (Class 4)
Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes (CEQA Guidelines §15304(a)).

Actions By Regulatory Agencies For Protection Of Natural Resources (Class 7)
Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption (CEQA Guidelines §15307).

Actions By Regulatory Agencies For Protection Of The Environment (Class 8)
Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption (CEQA Guidelines §15308).

Exceptions to Use of a Categorical Exemption (CEQA Guidelines Section 15300.2):

The proposed activity is a project subject to CEQA. However, it is exempt from further environmental review under the following CEQA categorical exemption classes:

(a) Location. The Project activities will occur within the Silverado area of Orange County. The Project site, from a review of federal and state standard and supplemental hazardous site databases, is not assumed to be within a hazardous area. A review of biological records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise sensitive species or habitats, and critical habitat that may occur within or in the immediate vicinity of the Proposed Project site, revealed the presence of 6 special status plants, 11 special status wildlife species, 4 sensitive vegetation communities, and critical habitat for arroyo toad within or adjacent to the Project site. However, the Proposed Project activities would comply with all parameters for operational constraints and employ best management practices to avoid impacts to any biological resources or associated habitats. Removal of suitable habitat is not proposed and treatment will not occur within waters or wetted areas. The Project activities, as mentioned previously, would avoid ground disturbance and would not result in any significant erosion or sedimentation of creeks or long-term impacts. The Proposed Project would not impact environmentally sensitive areas or an environmental resource of hazardous or critical concern. This exception does not apply to the Proposed Project.

(b) Cumulative Impact. As further discussed below under (c) Significant Effects, the Proposed Project would not have a significant effect on the environment, including those due to unusual circumstances. The potential for cumulative impacts occurs when the independent impacts of the Proposed Project are combined with the impact of related projects in proximity to the Project such that impacts occur that are greater than the impacts of the Project alone. As discussed above, it has been determined that the Project would have no impact, or impacts would be less than significant, with respect to the environmental issues. Where the Project would have no impact or a less than significant impact, it would not contribute to cumulative impacts. The Project is only for maintenance activities and not growth-inducing; thus, it would not contribute to the cumulative effects of population growth. This exception does not apply to the Proposed Project.

(c) Significant Effect. The Proposed Project involves the spraying of pesticide, using up to two large diesel trucks with attached pressurized rigs, on beetle-infested trees in the designated Project area. As a part of Project activities, removal of trees or branches might be required, including felling, limbing, bucking, chipping or stump grinding of infested trees. As a result of the Project activities, as analyzed in the Initial Study, the Project would have no impacts, or less than significant impacts, with respect to the environmental issues. In some cases, the Project activities would be beneficial to improve the visual quality, access and safety in the site and its surroundings. None of the impacts on the environment, due to the implementation of the Project, will be significant or will require mitigation measures. Therefore, this exception does not apply to the Proposed Project.

(d) Scenic Highways. The Proposed Project activities would result in the treatment and subsequent removal of beetle-infested vegetation in the Project site and would not directly or indirectly affect an officially designated scenic highway or scenic resources near a scenic highway. Therefore, this exception does not apply to the Project.

(e) Hazardous Waste Sites. The Proposed Project site has not been identified as a hazardous waste site pursuant to Section 65962.5 of the Government Code (SWRCB 2024, DTSC 2024). Therefore, this exception does not apply to this Project.

(f) Historical Resources. The Proposed Project activities include the application of pesticides in selected trees and limited mechanized removal of beetle-infested trees, based on their types, as assessed by an OCFA hand crew or a qualified contractor. Subsequent fuel reduction and maintenance activities might require limited mechanized removal of dead and decaying trees. All felled tree parts will be hand-carried and chipped at predetermined locations that will not cause ground disturbance. Chippers onsite would remain on pavement or would be used off-pavement only on previously disturbed ground, when the ground is not wet, in order to avoid ground disturbance. Haul trucks required for the removal of tree material and green waste bins would remain on existing roadways, also avoiding ground disturbance. The Proposed Project is located along roads in both habited and uninhabited areas but will additionally not include any construction or modification of buildings or structures of historical significance. Thus, this exception does not apply to the Project.

References:

California Department of Forestry and Fire Protection (CAL FIRE)

2024 Fire Hazard Severity Zones in SRA. Available online at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

Department of Toxic Substances (DTSC)

2024 EnviroStor Database. Accessed online at: https://envirostor.dtsc.ca.gov/public/

Miller

2016 NufFilm 17 Safety Data Sheet. Accessed online at: https://labelsds.com/images/user_uploads/Nu%20Film%2017%20SDS%209-19-16.pdf. Accessed in September 2022.

State Water Resources Control Board (SWRCB)

2024 GeoTracker Database. Accessed online at: https://geotracker.waterboards.ca.gov/