

Lee Vining Avalanche Control System

Mono County
District 9-MNO-395-PM 52.8
EA 09-313800
SCH No.: 2007052008

Initial Study with Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

June 2007



General Information About This Document

What's in this document?

This document contains a Mitigated Negative Declaration, which examines the environmental effects of a proposed project on U.S. 395 in Mono County.

The Initial Study and proposed Mitigated Negative Declaration was circulated to the public from May 1 to May 31, 2007. No comments were received.

What happens after this?

The proposed project has completed environmental compliance after the circulation of this document. When funding is approved, the California Department of Transportation can design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Tom Dayak, Eastern Sierra Environmental Branch, 500 South Main Street, Bishop CA 93541; (760) 872-0690 Voice, or use the California Relay Service TTY number, (760) 872-9043.

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to install an avalanche control system (GazEx) in the hills above U.S. Highway 395 near Lee Vining. The project is a Director's Order.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the project would not have a significant effect on the environment for the following reasons.

- The proposed project would have no effect on agricultural resources, mineral resources, paleontological resources, population and housing, public services, recreation, or utility and service systems.
- The proposed project would have no significant effect on aesthetics, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, or transportation/traffic.

In addition, the proposed project would have no significantly adverse effect on biological resources because the following mitigation measure would reduce potential effects to insignificance:

- Exploder detonation data would be shared with the California Department of Fish and Game to determine if bighorn sheep are affected by the detonation of avalanche exploders. The bighorn sheep are not likely to be affected given that their winter range is approximately 1/2 mile to the west of the project area on an adjacent wind-blown ridge. The GazEx exploders are located on the east side of the Lee Vining Hill, so sound would be reduced having to travel up and over a ridge and to the west. The prevailing winds blow from west to east and noise from avalanche exploders would be muffled due to the presence of snow.



Christine Cox-Kovacevich, Office Chief
Office of Environmental Management North
Central Region Environmental Division
California Department of Transportation

6/5/07
Date

Section 1 Project Information

Project Title

Lee Vining Avalanche Control System

Lead Agency Name and Address

Caltrans

District 9

500 South Main Street

Bishop, CA 93514

Contact Person and Phone Number

Tom Dayak, Branch Chief, Eastern Sierra Environmental Branch
(760) 872-0690

Project Location

The project is in Mono County, upslope or west of U.S. Highway 395, near Mono Lake and the town of Lee Vining (see Project Location Map). The tank farm and exploders would be placed at approximately 9,000 feet above sea level on a ridge sometimes referred to as Lee Vining Hill or the Warren Bench. U.S. Highway 395 is at about 6,500 feet above sea level in this location. The project ranges from 1/4 mile away (at U.S. 395 or the base of the avalanche slopes) to over one mile away (where avalanche exploders will be installed) from Mono Lake. The project area is about 1/2 mile west of the U.S. Forest Service Mono Lake Visitor's Center and about 1/2 mile north of the town of Lee Vining.

General Plan Description

The project would take place within the Mono Basin National Scenic Area in the Inyo National Forest. U.S. Highway 395 in this location is designated as a State Scenic Highway.

Description of Project

The California Department of Transportation (Caltrans) proposes to install an avalanche control system in the hills above U.S. Highway 395 near Lee Vining. Avalanches affect approximately a 1/2-mile section of U.S. Highway 395. The project would improve the safety and reliability of the transportation system. Currently, Caltrans maintenance staff, after closing U.S. Highway 395 to traffic, launches explosive charges into the mountains and hand throws charges off the cornices

(overhanging ridges) to purposefully release avalanches (large slides of snow down a mountain). This avoids the build-up of snow that could result in larger, uncontrolled avalanches that would endanger the traveling public, cause road closures, and potentially cause serious highway damage.

The current practice of launching charges and hand throwing charges from a cornice has many disadvantages. Charges shot from a long distance have low accuracy to a target, especially in unfavorable weather conditions, and it is difficult to verify if the charges have hit the intended target area and if they have exploded. Hand throwing charges exposes maintenance personnel to a high risk of injury from falling, exposure, explosive accident, and being stranded by mechanical failure. The wind can blow so strong that drifting snow can obscure the line between the ground and the air making it difficult to see where the edge of the cornice is. Sometimes unexploded charges present a false sense of security because the snow may appear more stable than it is in reality. Unexploded charges may also be a potential hazard to wildlife and people in the summer. Although Caltrans staff attempts to retrieve them, it is possible that some unexploded charges are not located or are mistakenly thought to have exploded. Closure of U.S. Highway 395 can result in an extremely long detour. Northbound travelers must return to Bishop (State Route 120 East is closed in the winter), take U.S. Highway 6 into Nevada, and return to U.S. Highway 395 north of Mono Lake on State Route 167. The distance of the alternative route is 245 miles and can take approximately 6 1/2 hours.

The project is to install between nine and 11 permanent propane and oxygen gas explosion chambers (GazEx) at the head of avalanche chutes, approximately 3/4 mile upslope from U.S. Highway 395. The GazEx system is a patented proprietary product of GazEx Industries Incorporated, a French company. The GazEx system consists of exploders mounted in the avalanche starting zones above the highway. The exploders are large tubes, closed at one end, open at the other, with their open ends located above and directed onto the snow. The exploders are filled by remote control with propane and oxygen, then remotely detonated. The shelters contain the remote control system and the oxygen and propane tanks for the system. The operator controls the system from a safe location using a computer linked by radio to the control systems in the shelters. The propane and oxygen tanks would be removed in the spring and replaced in late fall/early winter (October 15-November 1). This would avoid having propane and oxygen gas tanks on the mountain during fire season. Pipelines would run from the propane and oxygen gas tanks to the explosion chambers. The proposed

project would be more reliable than the current system of using charges and would be more likely to fully release the avalanche slopes.

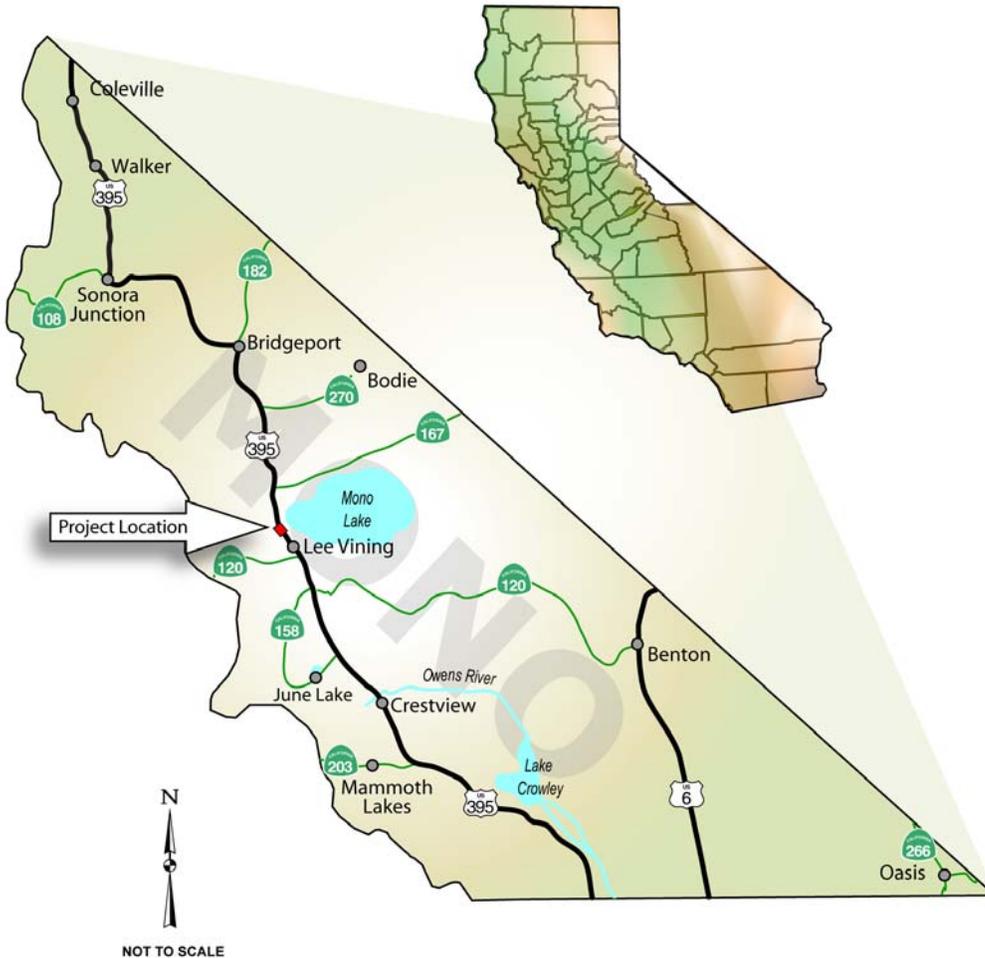
Each tank farm would be about 256 square feet and consist of a box with a deck on top. Each block of concrete that an exploder mounts to would be about 25 square feet with two smaller pads (about one foot square) that hold up the end of each exploder tube. The exploder height varies depending on the slope but would be about 15 feet. The pipelines would be $\frac{3}{4}$ inch in diameter and the total pipeline distance, including both propane and oxygen lines to all exploders from the two tank farms, would be approximately one and a half miles. Most of the pipelines would be above ground due to rocky soil, but some shallow (18") trenches would be used.

Surrounding Land Uses and Setting

The land is U.S. Forest Service land in the Inyo National Forest. The terrain is mountainous, from 6,500 feet in elevation at U.S. 395 to 9,000 feet at Lee Vining Hill (Warren Bench). Rocky and steep slopes descend towards Mono Lake. There is a rough dirt road through the area that is rarely accessed. There are no hiking trails or camping sites in the area. Cross-country skiing and snowmobiling are not common in the area.

Other Public Agencies Whose Approval is Required

- U.S. Forest Service Special Use Permit. The project is on U.S. Forest Service land.

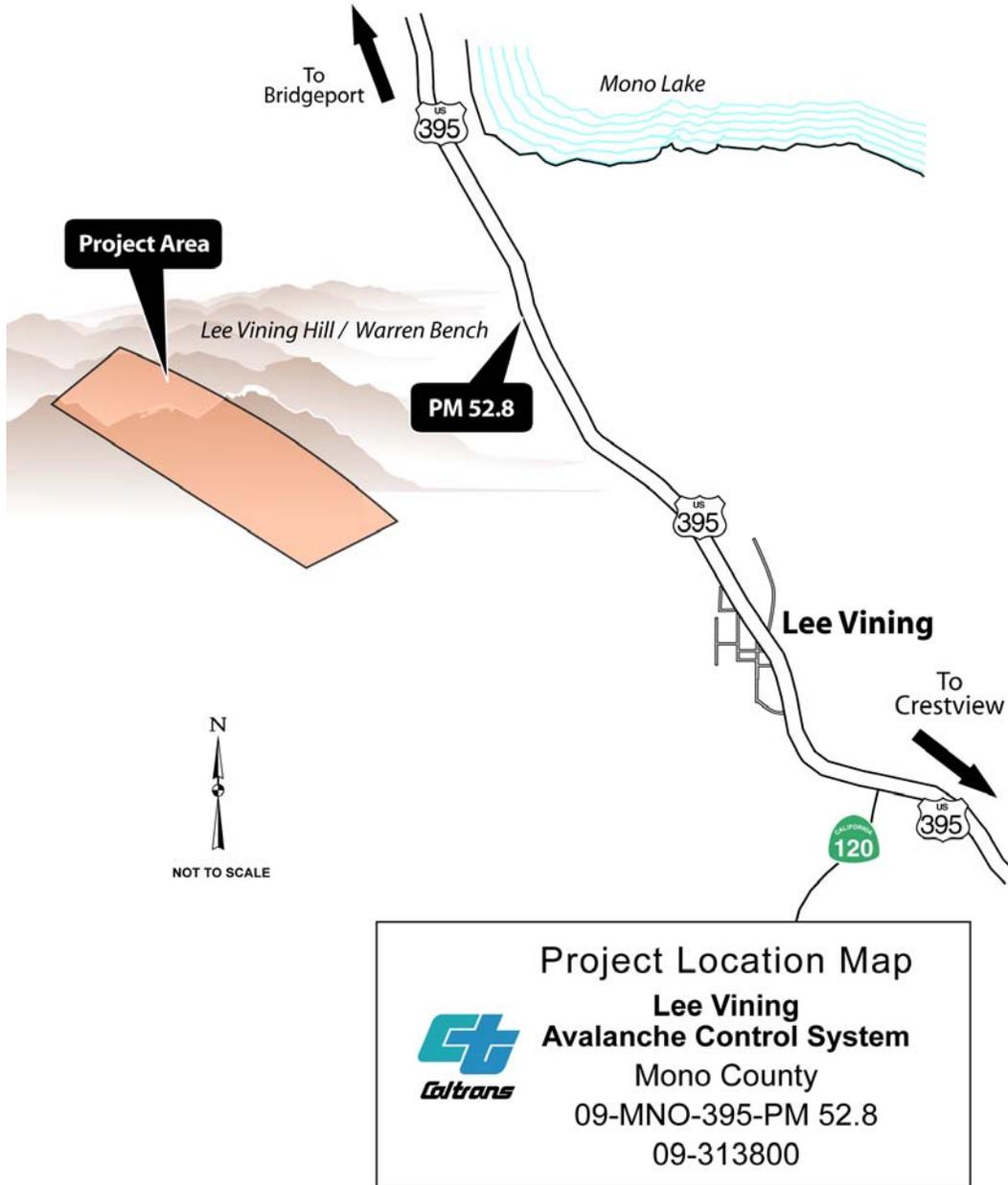


Project Vicinity Map
Lee Vining
Avalanche Control System
 Mono County
 09-MNO-395-PM 52.8
 09-313800



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Project Vicinity Map



Project Location Map

Section 2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

Section 3 Determination

On the basis of this determination:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Christine Cox-Kovacevich, Office Chief
Office of Environmental Management North
Central Region Environmental Division
California Department of Transportation

4/24/07
Date

Section 4 Impacts Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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I. AESTHETICS — Would the project:

- a) Have a substantial adverse effect on a scenic vista?

Explanation: See additional explanations following the checklist. (Caltrans Visual Impact Assessment. October 2006)

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Explanation: The project would have a minimal effect on scenic resources such as trees and rock outcroppings. The exploders and tank farms are sited in low areas that would not be visible from a distance. Existing vegetation, mainly mountain mahogany, would be preserved where possible and construction access would mainly occur on existing roads and disturbed sites. (Caltrans Visual Impact Assessment. October 2006).

- c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Explanation: The tank farms and exploders would blend in with the surrounding environment. The tank farms are adjacent to existing dirt roads in the hills and would be placed on a low deck with a footprint of approximately 16 feet x 16 feet, painted a neutral color such as mesquite green. The exploders are located away from the tank farms in steep avalanche chutes, which are rarely accessed by hikers and pedestrians and are not visible from the crest of Lee Vining Hill (Warren Bench). The project would have little effect on the visual character of the site and its surroundings. (Caltrans Visual Impact Assessment. October 2006)

- d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Explanation: The project would not have any lights associated with it. The avalanche exploders and tank farms would be painted a non-reflective natural color (such as mesquite green) so they would have minimal reflectivity. (Caltrans Visual Impact Assessment. October 2006)

II. AGRICULTURE RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

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Explanation: There is no farmland in the project area. (State of California Farmland Mapping and Monitoring Program, e-mail, 11/20/06.)

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

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Explanation: The project is located in the Inyo National Forest. Therefore, there are no Williamson Act contracts.

c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: See II(a) and II(b) above.

III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

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Explanation: No. The project is exempt under Table 2 of 40 CFR 93.126.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Explanation: If the contractor's activities would generate excessive dust, excavation would not begin until the exposed soil is treated with water and/or other stabilizers to reduce dust and the wind subsides. (Caltrans Standard Specification for dust control)

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project would not result in a cumulatively considerable increase in air pollutants.

d) Expose sensitive receptors to substantial pollutant concentrations?

Explanation: There are no sensitive receptors in the area and the project would not increase air quality pollutants.

e) Create objectionable odors affecting a substantial number of people?

Explanation: The project would not create objectionable odors.

IV. BIOLOGICAL RESOURCES — Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Explanation: See additional explanations following the checklist. (Caltrans Natural Environment Study. January 2007)

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Explanation: The project would not disturb any sensitive natural communities. (Caltrans Natural Environment Study. January 2007)

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Explanation: There are no wetlands in the project area and the project would not affect wetlands. (Caltrans Natural Environment Study. January 2007)

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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corridors, or impede the use of native wildlife nursery sites?

Explanation: The project would not affect movement of native resident fish or wildlife species. Sierra Nevada bighorn sheep do not access this area in the winter. The construction footprint of the project would be very minor with GazEx exploders on a steep rocky hillside, supply lines, and two tank farms. The total distance of gas line would be one and a half mile. Approximately 0.02 acres would be disturbed (about 900 square feet). (Caltrans Natural Environment Study. January 2007)

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Explanation: The project would not conflict with any local policies or ordinances protecting biological resources. (Caltrans Natural Environment Study. January 2007)

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Explanation: There is no Habitat Conservation Plan for the project area. The project is compatible with the U.S. Forest Service Sierra Nevada Forest Plan Amendment (January 2001) and the Mono Basin National Forest Scenic Area Comprehensive Management Plan (1989). (Caltrans Natural Environment Study. January 2007)

V. CULTURAL RESOURCES — Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Explanation: The U.S. Forest Service conducted cultural surveys and found no historical resources in the project area. There are no identified archaeological resources in the project area. (Caltrans cultural resources memorandum, March 2007).

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Explanation: Archaeological resources are considered “historical resources” and are covered under question V(a). -

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project is unlikely to impact any paleontological resources. (Paleontological Identification Report, April 24, 2007) The project would not destroy a unique geologic feature.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Explanation: No human remains are expected in the project area. If buried cultural materials are unearthed during construction, work must be halted immediately until a qualified Caltrans archaeologist can assess the significance of the find. If human remains are exposed during construction, work must be halted immediately until the County Coroner makes the necessary findings as to origin and disposition of the remains pursuant to Public Resources Code 5097.98 (State Health and Safety Code 7050.5)

VI. GEOLOGY AND SOILS — Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Explanation: The soils in the project area consist of Rock Outcrop-Cryumbrepts-Tinker (CA861) at the higher elevations and Rubble Land-Clanal Pine Family (CA 751) (California On-line Soil Survey, University of California at Davis Land, Air and Water Resources Department). These soil types are characterized by steep slopes and rocky material. The project features are designed to withstand seismic activity. The structures should not alter the existing seismic risk. The nature of the project does not pose a risk to either the structures or people from seismic activity. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

ii) Strong seismic ground shaking?

Explanation: Strong seismic ground shaking would not affect the project. The project is designed to withstand seismic activity and does not pose a risk to structures or to people in the event of seismic activity. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

iii) Seismic-related ground failure, including liquefaction?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: Liquefaction is not possible on the steep rocky slopes where the project would occur. The project does not pose a risk to structures or people due to seismic activity, above the existing risk of rockfall without the project. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

iv) Landslides?

Explanation: The project should not increase the frequency of landslides. The project features are small in scale. No water would be used in the project, nor would the project features affect existing runoff, which might increase landslide frequency. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

b) Result in substantial soil erosion or the loss of topsoil?

Explanation: The project area is steep, granitic, rocky ground. The project would not result in substantial soil erosion or loss of topsoil. The avalanche exploders would occupy a small area and would be sited in rocky areas, with little topsoil. Topsoil would be conserved and replaced in areas where the oxygen and propane gas lines are buried (Site visit with Caltrans maintenance engineering staff, 6/12/06).

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Explanation: The project is located on rocky soils and would not increase the instability of the soils. The avalanche exploders would only be detonated when there is considerable snow on the slopes and, therefore, explosions should not affect the base rock layer. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Explanation: The project is located on rocky, nonexpansive soil. (Site visit with Caltrans maintenance engineering staff, 6/12/06).

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project does not involve septic tanks or wastewater disposal systems. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/20/06).

VII. HAZARDS AND HAZARDOUS MATERIALS —

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Explanation: Propane and oxygen tanks would be removed from the tank farms annually during the fire season (from late spring through mid-October), so there are no tanks present during the fire season. The propane and oxygen tanks would be replaced between October 15 and November 1. Transport of the propane and oxygen tanks would occur along the rarely used dirt road or by helicopter. The propane and oxygen tanks would be enclosed in tank farms (box structures with a wooden deck on top) and not present a hazard to the public. The propane and oxygen reaction in the exploders consumes the chemicals and produces no waste products. (E-mail from Caltrans maintenance engineering staff, 11/20/06).

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?

Explanation: The propane and oxygen tanks and gas lines would be tightly sealed so no gas would escape into the environment. The controlled explosions at the GazEx exploders are in remote locations and on steep rocky slopes, where the public does not go. Construction best management practices would be employed so no hazardous substances are released to the environment during construction. The public would be restricted from entering the project site during construction. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/20/06).

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

Explanation: No. There are no schools or planned schools within one-quarter mile. The nearest school is one mile away. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

d) Be located on a site that 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?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: There are no hazardous materials sites at the project location. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

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?

Explanation: There is no public airport within two miles of the project site. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

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?

Explanation: There is no private airstrip in the project vicinity. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Explanation: The project would not interfere with an emergency response plan. The project is designed to control avalanche danger so U.S. Highway 395 can remain open more frequently than the current situation, with less risk to Caltrans personnel. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/20/06).

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?

Explanation: Propane and oxygen would be removed from the tank farms annually during the fire season (from late spring through mid-October) to avoid the possibility that the gas tanks would contribute to a wildland fire. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/20/06).

VIII. HYDROLOGY AND WATER QUALITY —

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: Best management practices would be followed during construction in accordance with the Caltrans storm water permit so there are no storm water releases into water bodies during construction. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

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Explanation: The project would not affect groundwater supplies or groundwater recharge. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Explanation: The project would not affect a stream or river or affect drainage. Best management practices would be followed during construction in accordance with the Caltrans storm water permit so there is minimal erosion during construction. (Order No. 99-06-DWQ, NPDES No. CAS000003.)

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Explanation: The project (avalanche exploders, propane and oxygen gas lines, and tank farms) on rocky soil would not alter existing drainage (personal communication from Caltrans hydrologist Andrew Brandt).

e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project is remote and would not affect a storm water drainage system. No polluted runoff is expected from the project. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

f) Otherwise substantially degrade water quality?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project would not degrade water quality. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Explanation: The project does not involve constructing housing. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/21/06).

- h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

Explanation: The project would not impede flood flows. Floods are not expected in the area. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

- i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Explanation: The project does not involve construction that would affect flooding. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

- j) Result in inundation by a seiche, tsunami, or mudflow?

Explanation: The project would not result in inundation by a seiche, tsunami, or mudflow. (E-mail from Caltrans storm water coordinator, Dan Holland, 11/22/06).

IX. LAND USE AND PLANNING — Would the project:

- a) Physically divide an established community?

Explanation: There are no communities in the project area. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project does not conflict with any applicable land use plan, policy, or regulation. Although the project is in a scenic area, the project would have minimal effects on the visual character of the site due to the small footprint of the project features (256 square feet) for each of the two tank platforms, (25 square feet) exploder mounts, and about 15-foot-high exploders), inaccessible areas where the avalanche exploders would be installed, and structures painted to blend in with the surrounding scenery. (E-mail from Caltrans maintenance engineering staff, Jeff Helmbolt, 11/21/06).

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Explanation: The project does not conflict with any applicable habitat conservation plan or natural community conservation plan. (Caltrans Natural Environment Study. January 2007).

X. MINERAL RESOURCES — Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Explanation: There are no known mineral resources in the project area and the project would not result in a loss of availability of minerals. (August 1991, Bureau of Land Management Bishop Resource Management Plan and Environmental Impact Statement).

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Explanation: There are no known locally important mineral resources in the project area and the project would not result in a loss of availability of minerals. (August 1991, Bureau of Land Management Bishop Resource Management Plan and Environmental Impact Statement).

XI. NOISE — Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Explanation: There will be no noise or vibration impacts due to the project, as there will be no change over existing conditions under CEQA. The noise from the exploders will be no different from the use of dynamite which is the current practice. There will be no temporary or periodic increase in ambient levels.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Explanation: The avalanche exploders would not result in significant groundborne vibration and groundborne noise levels because there would be an insulating blanket of snow to receive the shockwaves from the exploders.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Explanation: The project would not result in a permanent, continuous increase in the noise level over existing noise levels.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Explanation: The project would result in a substantial temporary or periodic increase in ambient noise levels. The exploders would be detonated a maximum of 30 times during a winter, but would more likely be exploded less than 10 times. The exploder noise would be muffled by the presence of snow, as well as possibly windy conditions and snowfall. (E-mail from Caltrans design engineer, Brian Wesling, 11/28/06).

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 expose people residing or working in the project area to excessive noise levels?

Explanation: There is no public airport within two miles of the project site. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Explanation: There is no private airstrip in the project vicinity. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

XII. POPULATION AND HOUSING — Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project would not induce population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Explanation: There is no housing in the project area. The project would not affect housing. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Explanation: The project would not displace people. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

XIII. PUBLIC SERVICES —

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project would not result in adverse impacts to governmental facilities. The project would improve fire and police access by controlling avalanches and allowing the highway to be open longer than the current situation. (U.S. Geological Survey Lee Vining quadrangle map and 6/12/06 site visit).

XIV. RECREATION —

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Explanation: The project would not increase the use of recreational facilities.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Explanation: The project does not include recreational facilities or require the construction of recreational facilities that might have an adverse physical effect on the environment.

XV. TRANSPORTATION/TRAFFIC — Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Explanation: Due to the nature of the project, the project would not increase traffic volumes.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Explanation: The project would not increase traffic.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project would not affect air traffic.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project would not increase hazards. The project should decrease the hazard of natural avalanches along U.S. Highway 395.

e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Explanation: The project would only affect emergency access when U.S. Highway 395 is closed for avalanche control. The project would improve emergency access (lessen the risk of natural avalanches) after avalanche control has taken place.

f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project would not affect parking capacity.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project would not affect alternative transportation.

XVI. UTILITY AND SERVICE SYSTEMS — Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Explanation: The project does not involve the production of wastewater.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Explanation: The project does not involve the construction of new water or wastewater treatment facilities.

- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Explanation: The project would not require the construction of new storm water drainage facilities.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Explanation: The project would not require water.

- e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Explanation: The project would not produce wastewater.

- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Explanation: The construction contractor would remove any solid waste from the area. The project is not expected to produce much solid waste.

- g) Comply with federal, state, and local statutes and regulations related to solid waste?

Explanation: The construction contractor would comply with federal, state, and local statutes and regulations related to solid waste.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE —

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Explanation: As shown throughout this Initial Study, the proposed project would not have any significant impacts.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Explanation: This is the only known project in the area. Therefore, it is not likely that there would be cumulatively considerable impacts from the project.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Explanation: The project would not have substantial adverse effects on human beings. People would not be in the project area when avalanche exploders are detonated.

Additional Explanations

I. Aesthetics Item a:

Affected Environment

The project takes place within the Mono Basin National Scenic Area, and in a section of U.S. Highway 395 that is designated a State Scenic Highway.

Impacts

According to the Visual Impact Assessment for the Lee Vining Hill Avalanche Control System Project, the project would have little visual impact. The small scale of the GazEx system, the expanse of the Mono Basin Scenic Area, and the distance from the highway and visitor areas reduces the likelihood that most people would notice the project. The steep slope adjacent to U.S. Highway 395 makes it unlikely that motorists would see these exploders in avalanche chutes above them. In the winter, the exploders are designed to extend above the snow, however, from the U.S. Forest Service Visitors' Center (one of the designated scenic viewpoints for the Mono Basin National Scenic Area plan), Lee Vining, Mono Lake, or from a distance, any exploder that may be visible would probably look like a rock or a tree from that distance.

Avoidance, Minimization, and/or Mitigation Measures

All exposed surfaces of the installed components would be painted a neutral non-reflective color (such as mesquite green) to blend in with the surrounding landscape. (Caltrans Visual Impact Assessment, October 2006).

IV. Biological Resources Item a:

Affected Environment

U.S. Fish and Wildlife Service consultation provided four potential endangered, threatened, proposed, and candidate species which may be present in the project area. (Caltrans Natural Environment Study, January 2007). They are Sierra Nevada bighorn sheep (*Ovis canadensis californiana*), endangered; Yosemite toad (*Bufo canorus*), candidate; bald eagle (*Haliaeetus leucocephalus*), threatened; and Pacific fisher (*Martes pennanti*), candidate. A California Natural Diversity Database search identified no other species likely to be affected by the project.

Impacts

According to the Natural Environment Study prepared by Caltrans, the project area does not have sufficient trees for nesting/perching for bald eagles and no ponds, vegetation, or wet meadows suitable for the Yosemite toad. Pacific fisher is found in more forested areas.

The range for the Sierra Nevada bighorn sheep, a state and federal endangered species, includes an area approximately 1/2 mile to the west of the project area. The California Department of Fish and Game, U.S Forest Service, and U.S. Fish and Wildlife Service biologists were consulted regarding possible effects of noise from the GazEx explosions to bighorn sheep. The agency biologists concurred that there was not likely to be an effect due to the project. Bighorn sheep are present on wind-blown ridges west of the project area during the winter. The GazEx exploders are on the east side of the Lee Vining Hill ridge, reducing the likelihood that sound would travel over the ridge to the west. In addition, prevailing winds blow from west to east carrying project noise away from the bighorn sheep range.

Avoidance, Minimization, and/or Mitigation Measures

The exploder detonation information would be shared with the Department of Fish and Game so they can study any response of the bighorn sheep to the avalanche exploder detonations.

Appendix A Project Schematic

Appendix B Comments and Responses

The Mitigated Negative Declaration was circulated for public review and comment between May 1, 2007 and May 31, 2007. The document was sent to public agencies, the Mono County Board of Supervisors, businesses in the area, the Mono Lake Committee and interested members of the public. Public notices were published in the Inyo Register and Mammoth Times twice during the public review period. The document was available for review at the Lee Vining library and the Caltrans District office in Bishop. No comments were received.



ARNOLD SCHWARZENEGGER
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT
DIRECTOR

June 1, 2007

Tom Dayak
California Department of Transportation, District 9
500 S. Main Street
Bishop, CA 93514-3423

Subject: Lee Vining Avalanche Control System
SCH#: 2007052008

Dear Tom Dayak:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on May 31, 2007, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

A handwritten signature in cursive script that reads "Terry Roberts".

Terry Roberts
Director, State Clearinghouse

STATE CLEARINGHOUSE
Document Details Report
State Clearinghouse Data Base

SCH# 2007052008
Project Title Lee Vining Avalanche Control System
Lead Agency Caltrans #9

Type MN Mitigated Negative Declaration
Description D
The California Department of Transportation (Caltrans) proposes to install an avalanche control system (Gaz-Ex) in the hills above US Highway 395 near Lee Vining. The project would improve safety for the traveling public and for Caltrans maintenance personnel.

Lead Agency Contact

Name Tom Dayak
Agency California Department of Transportation, District 9
Phone (760) 872-0690 **Fax**
email
Address 500 S. Main Street
City Bishop **State** CA **Zip** 93514-3423

Project Location

County Mono
City
Region
Cross Streets US 395
Parcel No. 02-109-001
Township 1N **Range** **Section** 7 **Base** Mt. Dana

Proximity to:

Highways SR 120W
Airports
Railways
Waterways Mono Lake
Schools Lee Vining
Land Use Inyo National Forest, Resource Management

Project Issues Aesthetic/Visual; Biological Resources; Noise

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 6 (Inyo & Mono Region); Department of Forestry and Fire Protection; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Regional Water Quality Control Bd., Region 6 (Victorville); Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 05/01/2007 **Start of Review** 05/01/2007 **End of Review** 05/31/2007
