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## **INYO COUNTY PLANNING DEPARTMENT**

### **APPENDIX G**

#### **Environmental Checklist Form**

#### **EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance issues.

## **INYO COUNTY PLANNING DEPARTMENT**

### **Environmental Checklist Form**

1. Project title: Conditional Use Permit No. 2007-03/Coso Operating Company LLC (Water Extraction, Transport, and Delivery System).
2. Lead agency name and address: Inyo County Planning Department, P.O. Drawer L,  
Independence, CA 93526.
3. Contact person and phone number: Jan Larsen, Senior Planner (760) 878-0263.
4. Project location: Coso Hay Ranch in Rose Valley to the Injection Wells at the Coso Geothermal Field located on the China Lake Naval Air Weapons Station, Rose Valley, Inyo County (Sections 25, 26, 35 and 36, T21S, R37E; Sections 31, 32, 33, and 34, T21S, R38E; and, Sections 1, 2, and 3, T22S, R38E, immediately east of U.S. Highway 395; APNs 037-040-23, 03, and 24 [private lands]; 037-070-08, 037-027-01, 02 [BLM lands], and, 037-032-01 [China Lake Naval Air Weapons Station lands]).
5. Project sponsor's name and address: Chris Ellis, Site Manager  
Coso Operating Company LLC  
2 Gill Station Road, Coso Junction  
Little Lake, CA 93542
6. General Plan designation: Rural Protection (RP), 1 dwelling unit per 40 acres, 40-acre minimum parcel size (5.36 acres – private lands); State and Federal Lands (SFL) (32.24 acres – Bureau of Land Management); and, State and Federal Lands (SFL) (16.18 acres – China Lake Naval Air Weapons Station).
7. Zoning: Open Space, 40-acre minimum parcel size (OS-40).

## 8. Description of project:

**Project Overview:** Coso Operating Company on behalf of Coso Hay Ranch LLC (“Coso”) has applied for a Conductional Use Permit (CUP) for a 30-year period to pump up to 4,893 acre feet per year of water from the wells at the Coso Hay Ranch and transport the water from the ranch via a 9-mile pipeline for reinjection into the Coso Geothermal Field (Figure 1 Regional Vicinity Map and Figure 2 Local Vicinity Map). The water will be used to sustain the steam production of the geothermal field. The proposed project includes the installation of pumps and well improvements at Coso Ranch, addition of an electrical power substation, water storage tanks, and construction of a 9 mile pipeline with associated pumps to the geothermal field.

**Project Objective:** In spite of the fluid reinjection program at the Coso Geothermal field for approximately its 20 years of operation, there is an abundance of natural heat in the field that is not being optimally used. This situation is the result in the shortage of fluid that has caused pressure declines in the field. The objective of the proposed project is to provide additional fluid to reinject into the geothermal resource to produce additional steam to sustain the generation of electricity without using fossil fuels and the associated generation of greenhouse gases.

**Project Description** The proposed project includes pumping of water from the Coso Hay Ranch in Rose Valley to provide fluid to the geothermal field in the China Lake Naval Air Weapons Center (CLNAWS). Water will be withdrawn from two existing wells at the Coso Hay Ranch property at an average rate of 3,000 gallons per minute (gpm), or approximately 4,800 acre-feet per year (each well will have a down-hole shaft-driven pump with a capacity of 2,000 gpm, and will be pumped for 18 hours per day). Power for the proposed project is proposed to be supplied by a new 3 mega watt (MW) substation to be constructed by Southern California Edison (SCE) adjacent to the pumping equipment on the Hay Ranch property (the existing dilapidated mobile home and equipment shed will be removed). There will also be a prefabricated 16’ x 10’ mechanical-electrical equipment building constructed near the pumping equipment. The substation will have security lighting of a low intensity and low sodium type, which will be photo sensor controlled. Maintenance lighting will have high pressure sodium lights controlled by a manual switch which is left in the “off” position except for emergency night maintenance or operations. Landscaping and an automatic irrigation system around the substation will be installed by a certified licensed landscape architect and will be designed to filter views from nearby residences and commercial areas. An 8-foot high chain link/barbed wire fence will enclose the facility.

A pipeline is proposed to be constructed from the Northern Hay Ranch past the Southern Hay Ranch well to a 250,000-gallon collection tank. The Southern well will be tied into this pipeline. The applicant anticipates burying this pipeline to minimize visual impacts. The collection tank will sit on sand bedding. The collection tank may be bypassed in the early stages of the project to enable delivery of water prior to completion of tank construction. The collection tank will provide the suction supply to a booster pump station, consisting of two or three vertical turbine pumps. These pumps will discharge through the main pipeline to a high point surge tank, and re-connect to the main pipeline. The 250,000-gallon collection tank will also help eliminate swings in pressure.

The main pipeline from the Hay Ranch to the geothermal facility will be approximately 9 miles long and consist of a 20” diameter steel pipe. The length of the line from the pumping station to the high point tank is approximately 7 miles. The high point tank is a 1,500,000 gallon tank, which will sit on sand bedding. The tank will be equipped with instrumentation to indicate level, and provide pump

trips in the event of a high level. This tank will store enough water for continued injection during the 6 hours per day that the pumps are shut down at the Hay Ranch.

In general, the pipeline follows the path of existing roads and associated rights of ways, to minimize impacts to the land. There is a short cutoff in Section 33, R38E, T21S, in order to shorten the overall length of the pipeline. However, the alternate plan is to follow the main road for the entire length of the pipeline between the extraction wells and the high point tank.

The project area consists mostly of a narrow 50-foot wide corridor. The corridor extends from the North well east of U.S. 395 and north of Coso Junction on the privately owned Hay Ranch, enters public land, then crosses over into the China Lake Naval Air Weapons Station (CLNAWS) boundary to the 88-1 Well site. Approximately 5 acres of the project property are privately held and consist of fallowed agricultural lands located in the northwest section of the property. Undeveloped BLM lands surround the 9 linear-mile pipeline for approximately 32 acres, with the balance of approximately 16 acres of the project located on CLNAWS lands east of Coso Junction.

The undeveloped BLM lands are designated State and Federal Lands (SFL), and zoned Open Space, 40-acre minimum (OS-40). The private Hay Ranch property is developed with a dilapidated mobile home and outbuildings, and the developed North and South water wells. This property is designated as Rural Protection (RP) and zoned OS-40. The community of Dunmavin is located approximately one-half mile to the northwest, and the Coso Junction rest stop, gas station/mini-mart are located approximately 2 miles south of the Hay Ranch.

The propose pipeline will be buried for most of its length. However, terrain or other environmental considerations may dictate that portions of the line be above ground. This will be detailed in the final design.

This project is **not** exempt from the requirements of Inyo County Ordinance No. 1004, which added Section 18.77 to the Inyo County Code, (Regulation of Water Transfer, Sale, or Transport from Inyo County) and Water Code Section 1810 et seq. Section 18.77.000 (H.) Groundwater Transfers, states: "A transfer or transport of groundwater from a groundwater basin located in whole or in part within Inyo County to an area outside of the groundwater basin...[has] the potential to adversely affect the economy and environment of Inyo County". The project consists of pumping groundwater from wells in the Rose Valley Basin and transporting it via pipeline to the Coso injection system which is located on the margin of the Rose Valley and Coso basins. Rose Valley is named as a groundwater basin within Inyo County. The project is also **not** exempt pursuant to the provisions of Inyo County Code Section 18.77.010 (B.) "Exemptions," because it does not involve purchase or acquisition of water by the Los Angeles Department of Water and Power, is not an emergency transfer of water, is not the transfer of water in the form of manufactured goods, and is not a transfer of water over which the County lacks jurisdiction to regulate.

**9. Surrounding land uses and setting:** Briefly describe the project's surroundings:

Approximately 5 acres of the project property is privately held and consists of currently-fallowed agricultural lands located in the northwest section of the property. Undeveloped BLM lands surround the 9 linear-mile pipeline for approximately 32 acres, with the balance of approximately 16 acres of the project located on CLNAWS lands east of Coso Junction.

Land uses and zoning surrounding the site reflects the following:

The propose project site is surrounded on the north, south, and east by undeveloped BLM lands, designated State and Federal Lands (SFL), and zoned Open Space, 40-acre minimum (OS-40). The private Hay Ranch property is developed with a dilapidated mobile home and outbuildings, and the developed North and South water wells. This property is designated as Rural Protection (RP) and zoned OS-40. The project area consists mostly of a narrow 50-foot wide corridor that is approximately 9 miles long. The corridor extends from the North well east of U.S. 395 and north of Coso Junction on the privately owned Hay Ranch, enters public land, then crosses over into the CLNAWS boundary to the BLM North Injection Well #88-1 (see attached Regional Vicinity and Local Vicinity Maps).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): Inyo County Water Department (compliance with Inyo County Code Section 18.77, Regulation of Water Transfers); Inyo County Environmental Health Services Department (construction of monitoring wells); Inyo County Public Works Department (building and grading permits; pipeline along Gill Station Road); U.S. Navy, China Lake Naval Air Weapons Station (permits and right-of-ways for pipeline and high-point water tank); BLM – Ridgecrest (NEPA compliance [EA] and right-of-way for pipeline on public managed lands).

**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.

<input checked="" type="checkbox"/> Aesthetics Resources	<input checked="" type="checkbox"/> Agriculture	<input type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology /Soils
<input type="checkbox"/> Hazards & Hazardous Materials	<input checked="" type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

**DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

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



	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?

*The project consists of a 9 linear-mile buried water pipeline which will begin at the North water well, and run past the South water well, on a fallowed alfalfa field (Hay Ranch) in Rose Valley. The pipeline then continues south and southeast mainly along existing roadways across Bureau of Land Management (BLM) lands and finally to the China Lake Naval Air Weapons Station (CLNAWS) property where the water will be discharged into an injection well at the Coso Geothermal Field. The project also includes two large water tanks, an electric substation and an equipment building. These facilities could have a significant impact on local scenic vistas. However, as mitigation, only about 500 feet of the pipeline will be above ground, where the line cannot be buried. The existing mobile home and outbuildings on the Hay Ranch will be removed and a ¼-acre site will be used for a small electric substation and equipment building, which will be screened with irrigated landscaping designed by a professional landscape architect. The facility will be painted in soft non-reflective "desert sand" tones and hues, as will all exposed pipeline and both of the large water tanks. The grounds will be designed so that they are aesthetically neutral and so the substation appears to be naturally incorporated into the rural setting to the greatest extent possible. These will be conditions of approval for the project and reduce the potential adverse impacts to a level of less than significant.*

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

*U.S. Highway 395 is designated a Scenic Byway from Little Lake in Inyo County, north to the Nevada state line. Therefore, there are significant visual resources in the area of the proposed development, such as vegetation, lava flows, and the towering peaks of the eastern Sierra Nevada crest. There are no trees, rock outcroppings, or historic buildings that will be impacted by this proposed project. The community of Dunsmuir across U.S. Highway 395 from the Hay Ranch wells and pump station consists of a few dilapidated structures, with many of the buildings in complete disrepair. The pipeline will be mostly buried, with the disturbed corridor immediately reclaimed with native vegetation. The minimum distance of exposed pipeline, and the two large water tanks, will be painted in soft, non-reflective desert-tone tans and sand colors. The substation and equipment building will also be painted in similar hues, and will be landscaped with native shrubs and trees so it blends in with the surroundings to the greatest extent possible. These mitigation measures will reduce the impact to scenic resources to a less than significant level.*

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

*The only change to the visual character of the area will be the replacement of a dilapidated mobile home and other outbuildings with a ¼-acre electric substation. As a condition of approval of the Conditional Use Permit, the substation will be screened with irrigated native shrubs and trees, will have no reflective surfaces, and will be painted in desert tones. The pipeline will be buried for all except approximately 500 feet of its 9 linear-mile corridor, with the corridor re-vegetated with native plants as soon as the pipeline is buried. Implementation of these mitigation measures will reduce impacts to the visual character of the area to less than significant.*

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

*Lighting will be required for security and nighttime emergency maintenance only. Normal security lighting will be of a low sodium pink/ yellow/ orange hue, and will be on motion sensors. The emergency lighting will be high sodium lights that*

are turned on and off with a manual switch when required for nighttime maintenance. All lights shall have baffles and be shielded downward or toward temporary maintenance areas only. Light shall not spill onto nearby properties or roadways, or into the nighttime sky at any time. These mitigation measures will reduce potential adverse impacts to a less than significant level.

**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:

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?

*No. Inyo County has not been mapped for Prime Farmland, Unique Farmland or Farmland of Statewide Importance as shown on the California Resources Agency Farmland Mapping and Monitoring Program maps as shown on their website at [www.conservation.ca.gov/DLRP/fmmp/](http://www.conservation.ca.gov/DLRP/fmmp/). The Hay Ranch site is not currently in agricultural use, and has been in a fallowed state for over 15 years. However, the property could be considered Prime Farmland because it could meet the productivity criteria of greater than 7 tons/acre of alfalfa, with sufficient water available for irrigation. However, due to the cost of electricity to lift groundwater 600 feet is, at this time, economically infeasible, and resulted in the fallowing of the property. The project will disturb approximately 5 acres of the approximately 300 acres available for alfalfa production, so any impact to potentially Prime Farmland can be mitigated by restricting the acreage used for this project to the proposed 5 acres. The balance of the pipeline corridor and water tank sites are in non-agricultural use.*

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

*No. The property is designated Rural Protection (RP) in the 2001 General Plan, and zoned Open Space (OS-40), so there is no conflict with the General Plan and zoning as regards agriculture. Inyo County does not currently subscribe to Williamson Act contracts. Except for the approximately 5 acres of total Hay Ranch use for the pipeline and related facilities, including the ¼-acre substation site, the 9-mile pipeline corridor is not in any type of agricultural use.*

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?

*No. Except for the 5 acres of total disturbance for wells, pumps, tanks, and related facilities, including the ¼-acre substation site on the Hay Ranch, the 9-mile pipeline corridor is not in any type of agricultural use.*

**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?

*Portions of Inyo County, including the project property, are currently in a non-attainment area for PM<sub>10</sub> (particulate matter, 10 microns or less in diameter). This project could result in increases of fugitive dust and combustive emissions during construction, and vehicle emissions from trucks and employee traffic traveling into and out of the facility. Therefore, as a condition of approval, standard dust control measures shall be implemented, such as watering disturbed construction areas or application of nontoxic soil stabilizers, sweeping paved areas, covering vehicles used for hauling dirt or debris, limiting speed limits to 25 miles per hour on unimproved roads within the construction zone, and halting dust-generating*

activities if wind gusts exceed 25 mph. Other construction measures as required by the Great Basin Unified Air Pollution Control District (GBUAPCD) shall be implemented to their satisfaction. During construction and operation, the applicant shall assure that all trucks and motorized equipment are fitted with standard emission control devices, and that all trucks are well maintained and in good working order at all times. Truck and other equipment motors and engines shall be turned off when not in operation to reduce vehicle emissions. Implementation of these standard air quality measures will assure that potential impacts are less than significant.

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

*There could be temporary fugitive dust and combustive emissions during construction. Standard dust control and emissions control measures above (III. [a]) will assure that the impacts are less than significant.*

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)?

*Portions of Inyo County are in a non-attainment area for PM<sub>10</sub> pollutants. However, if standard dust and emissions control measures as outlined in III. (a.) above are implemented, any potential impacts will be kept at a less than significant level.*

d) Expose sensitive receptors to substantial pollutant concentrations?

*There are no sensitive receptors in the immediate area.*

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

*The area is sparsely populated and there are few businesses near the project corridor and the Hay Ranch site. Any air emissions or odors from the construction activities shall be controlled with standard emission control devices placed on all vehicles and motorized equipment to the satisfaction of the GBUAPCD and the Inyo County Environmental Health Services Department. Therefore, potential adverse impacts are considered less than significant.*

**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?

*A biological survey was conducted by UltraSystems, Irvine, CA, in May 2004 and in January 2005. The March 2005 report (available upon request) includes a literature and database search, and a detailed site evaluation performed by vehicle and on foot in May, 2004 along the 50-foot wide pipeline corridor. Approximately 5 acres of plant communities and wildlife habitat will be permanently affected, with approximately 54 acres of plant communities and habitat temporarily affected. In addition, a 20-acre area surrounding the ¼-acre substation site and connection transmission line right-of-way was surveyed for habitat and potential for special status species occurrence. Mohave ground squirrel, and desert tortoise, and five sensitive vegetation species were identified as possibly occurring, or could occur, on the site. No listed, proposed listed or candidate plant or wildlife species were observed during surveys conducted for these species. However, both tortoise and Mohave ground squirrel burrows were noted.*

*Mitigation for both the desert tortoise and the Mohave ground squirrel are covered in the Mitigation Plan (available upon request) that was developed for the initial development of the Coso Known Geothermal Area in 1980, which covered approximately 2,100 acres, including the disturbance area of this project (Final Environmental Impact Statement, BLM,*

September, 1980). This Mitigation Plan remains in full force and effect, and all provisions of that plan are included by reference herein.

The one identified potentially viable tortoise burrow will be flagged for protection during construction, and a tortoise exclusion fence will be installed around the project construction area, which includes storage and stockpile areas. Prior to construction, clearance surveys will be conducted, and all tortoises will be relocated outside the fence or removed out of harm's way. Pre-construction surveys will be conducted within 48 hours of construction between mid-November and mid-February. All potential tortoise burrows in the construction zone shall be excavated by an approved biologist, and an environmental monitor shall be present during all earth-disturbing construction activities. Construction personnel shall look for tortoise under vehicles and equipment prior to being moved, with any found animals removed/relocated by an approved biologist. Trash and food items will be contained in closed containers and regularly removed to reduce the occurrence of common predators; pets will be prohibited from the construction site. Site personnel shall be trained in the identification, biology, behavior, local distribution, impact of human activities, legal protections and penalties, impact avoidance methods, and reporting requirements.

Prior to construction, surveys will be conducted over the pipeline route to locate any ground nesting birds. If nests are located within the 50-foot buffer, the nest will be flagged and no construction shall occur until monitoring indicates that the young have fledged and the nest is no longer active.

The top 8 inches of removed soil will be inspected for noxious weeds, salvaged and stockpiled, to be used as final cover over the pipeline and other disturbed areas. Vehicle speeds shall be limited to 25 miles per hour on unimproved roads through known habitat, and driving off established roads will be prohibited unless required by construction activities, or emergency operations and maintenance.

If any sensitive plants, animals, or habitats are discovered on the project property during construction or operations, the applicant shall immediately notify the Inyo County Planning Department, California Department of Fish and Game, and the U.S. Fish and Wildlife Service and implement measures to protect these resources to the satisfaction of the regulatory agencies. With these mitigation measures implemented, any impact to sensitive species will be reduced to a less than significant level.

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

No. There are no riparian habitats or other sensitive natural communities identified on the project property or along the 9 linear-mile pipeline corridor. There could be potential impact to the several local springs and the outflow from Little Lake if pumping lowers the groundwater table and the Lake level in excess of the predicted trigger points over the 20- year project time period. However, with mitigation in place to monitor pumping and groundwater triggers (see Section VIII., Hydrology and Water Quality, below), the impact to local springs and the Little Lake outflow area is considered less than significant.

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?

There are no protected wetlands as defined by Section 404 on the project property. Impacts to local springs and the Little Lake outflow will be less than significant due to implementation measures that will trigger reduced pumping if impacts are attributable to project pumping (see Section VIII., Hydrology and Water Quality, below).

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No. The project will permanently disturb approximately 5 acres for the substation, pump station and water tanks, and temporarily disturb approximately 54 acres along the 9-mile pipeline corridor. The disturbed pipeline corridor shall be re-vegetated with native soil and stockpiled plant medium, and seeded with native seeds at a rate of 25 lbs. per acre. Re-vegetation will occur immediately upon burial of the pipeline; therefore, any impact to migrating wildlife species will be less than significant. If it is discovered that the project will substantially interfere with the movement of any native wildlife species or impede the use of native wildlife nursery sites, the applicant shall immediately implement mitigation measures to the satisfaction of California Department of Fish and Game (CDFG), the U.S. Fish and Wildlife Service, or other wildlife regulatory agencies. These mitigation measures will be conditions of approval during any construction or other habitat disturbance activities for the life of the project, and will reduce any potential impacts to a less than significant level.

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

The project area is within the California Desert Conservation Area Plan (CDCA Plan) approved in 1980 and last amended in 1993. The Plan designates energy production and utility corridors as a guide to consolidate compatible rights-of-way and to avoid sensitive resources wherever possible. The majority of the pipeline to be located on public land is within the designated corridor and complies with the requirements of this Plan.

The project is also within the known ranges of the desert tortoise and the Mohave ground squirrel. Mitigation for both of these species are covered in the Mitigation Plan that was developed for the initial development of the Coso Known Geothermal Area in 1980, which covered approximately 2,100 acres, including the disturbance area of this project (Final Environmental Impact Statement, Bureau of Land Management, September, 1980). This Mitigation Plan remains in full force and effect, and all provisions of that plan are included by reference herein. Other appropriate mitigation measures will be conditions of approval for Conditional Use Permit No. 2007-03/Coso Operating Company LLC (see IV[(a.) above), and will reduce potential impacts to a less than significant level.

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?

Portions of the project site are within the proposed West Mojave Conservation Plan area. However, mitigation measures outlined above (Section IV(a.) Biological Resources), will reduce potential conflicts with the West Mojave Plan (habitat conservation plan) to a less than significant level.

**V. CULTURAL RESOURCES:** Would the project:      
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Significant cultural sites were identified during an extensive survey of the project area, and reported by Dr. Mark Becker, ASM Affiliates, Inc., January 2005. Six sites, four of which had been previously recorded, and two new sites, were identified. Two sites were previously subjected to limited test excavations and were recommended as eligible for listing with the National Register of Historic Places (NRHP). Subsequently, they were listed as contributing properties of the Sugarloaf Archaeological District. One site on BLM land was considered as potentially eligible, with three other sites listed as 'indeterminate'. One historical site was also located and identified. Seven isolates, six of which are on public lands, were also identified, but none qualified for listing.

In order to mitigate for potential impacts to cultural resources, all sites found within the "area of potential effect" (APE) shall be avoided during construction and operation. The pipeline alignment was shifted to avoid known sites, and shall be further re-aligned should subsurface excavation result in discovery of additional resources. A 98-foot buffer around the four larger sites, and a 33-foot buffer around the two smaller ones shall be observed. A Native American cultural monitor shall be on site, prior to, and during grading and trenching of all avoidance areas, along with temporary placement of orange environmental fencing to protect the sites. If additional cultural resources are unearthed or otherwise discovered, all activities within a 100-foot radius will be suspended immediately and a professional archaeologist, who is an accredited member approved by the University of California at Riverside's Eastern Information Center, or other accredited institution, shall be called to the site. Representatives of the Lone Pine Paiute-Shoshone Tribe, as approved by the California Native

American Heritage Commission, shall be called to the project site prior to and during any ground-disturbing activities, and shall be called to the site for evaluation and disposition of any resource(s) discovered. If human remains are unearthed or otherwise discovered, all activities shall be suspended immediately. The County Coroner, a professional archaeologist and a designated Native American tribal representative (“Most Likely Descendant”, as designated by the California Native American Heritage Commission), shall be called to the site. An evaluation of the resource and determination of how to treat, or dispose of with appropriate dignity, the human remains and any associated grave goods shall be concluded prior to continuation of construction or operations activities. In order to minimize impacts to current Native American populations, traffic within a reasonable distance of any religious activity shall be halted or kept to a minimum during ceremonial and religious observances. A qualified Native American observer may also be present during construction.

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

Significant cultural sites were identified during an extensive survey of the project area, and reported by Dr. Mark Becker, ASM Affiliates, Inc., January 2005. Six sites, four of which had been previously recorded, and two new sites, were identified. Two sites were previously subjected to limited test excavations and were recommended as eligible for listing with the National Register of Historic Places (NRHP). Subsequently, they were listed as contributing properties of the Sugarloaf Archaeological District. One site on BLM land was considered as potentially eligible, with three other sites listed as ‘indeterminate’. One historical site was also located and identified. Seven isolates, six of which are on public lands, were also identified, but none qualified for listing. No “archaeological” resources that could be eligible for listing in the National Register of Historic Places were identified on the project site.

In order to mitigate for potential impacts to cultural resources, all sites found within the “area of potential effect” (APE) shall be avoided during construction and operation. The pipeline alignment was shifted to avoid known sites, and shall be further re-aligned should subsurface excavation result in discovery of additional resources. A 98-foot buffer around the four larger sites, and a 33-foot buffer around the two smaller ones shall be observed. A Native American cultural monitor shall be on site, prior to, and during grading and trenching of all avoidance areas, along with temporary placement of orange environmental fencing to protect the sites. If additional cultural resources are unearthed or otherwise discovered, all activities within a 100-foot radius will be suspended immediately and a professional archaeologist, who is an accredited member approved by the University of California at Riverside’s Eastern Information Center, or other accredited institution, shall be called to the site. Representatives of the Lone Pine Paiute-Shoshone Tribe, as approved by the California Native American Heritage Commission, shall be called to the project site prior to and during any ground-disturbing activities, and shall be called to the site for evaluation and disposition of any resource(s) discovered. If human remains are unearthed or otherwise discovered, all activities shall be suspended immediately. The County Coroner, a professional archaeologist and a designated Native American tribal representative (“Most Likely Descendant”, as designated by the California Native American Heritage Commission), shall be called to the site. An evaluation of the resource and determination of how to treat, or dispose of with appropriate dignity, the human remains and any associated grave goods shall be concluded prior to continuation of construction or operations activities. In order to minimize impacts to current Native American populations, traffic within a reasonable distance of any religious activity shall be halted or kept to a minimum during ceremonial and religious observances. A qualified observer may also be present during construction.

Local Tribal groups have expressed concern regarding the proposed project’s effect on the Coso Hot Springs. The geothermal development on the CLNAWS has been under a Memorandum of Agreement among the Navy, California Native American Heritage Commission, and State Historic Preservation Officer, which, among other elements, allows for the monitoring of the hot springs. A similar Memorandum of Agreement among the Bureau of Land Management, State Historic Preservation Officer and Native American Heritage Commission is being developed to address the proposed project. The implementation of the monitoring program and actions if impacts are found would reduce any impact to less than significant levels.

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

There are no paleontological resources identified or expected to exist on the project site.

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

No human remains have been discovered, nor are any expected to exist on the project site. If human remains are unearthed or otherwise discovered, all activities will be suspended immediately. The County Coroner, a professional archaeologist and a designated Native American tribal representative ("Most Likely Descendant", as designated by the California Native American Heritage Commission) shall be called to the site. An evaluation of the resource and determination of how to treat, or dispose of with appropriate dignity, the human remains and any associated grave goods, shall be concluded prior to continuation of construction or operations activities. These measures will reduce any potentially significant impact to less than significant.

**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.

The project property is located outside any identified Alquist-Priolo Earthquake Fault Zone maps. There is no other substantial evidence of a known fault on the Hay Ranch property or along the 50-foot wide, 9 linear-mile pipeline corridor. There is a fault that crosses U.S. Highway 395 just south of Little Lake (Little Lake 7.5 Minute Quadrangle). However, this is over 5 miles south of the Hay Ranch facility and the pipeline corridor. Therefore, this impact is considered less than significant.

ii) Strong seismic ground shaking?

Although most areas of the Owens Valley can be subject to ground shaking, the project property is located outside any identified fault zone. However, all buildings and structures expected to be utilized by workers shall be constructed pursuant to the requirements of the Uniform Building Code Level IV as it relates to earthquake hazard. Thus this impact is considered less than significant.

iii) Seismic-related ground failure, including liquefaction?

No. Soils are alluvial in nature and not immediately adjacent to, nor influenced by, water bodies. The Hay Ranch project site is approximately 5 miles south of the Haiwee Dam located on the south side of the reservoir, which is at an elevation of 3,760 above mean sea level (msl) feet. The Hay Ranch is down slope of this body of water, at elevation 3,437 feet above msl. Hydrogeological studies indicate there is a bulge in the groundwater that seeps from Haiwee; however, the ground water table at the North and South wells is over 150 feet deep. Therefore, there is little risk of liquefaction.

iv) Landslides?

No. The Hay Ranch and the pipeline corridor are on relatively flat ground. Although the Hay Ranch and portions of the pipeline corridor are within 2 miles of alluvial fans formed as a result of landslides and overland flow from the adjacent Sierra Nevada range, there is no indication of historical landslides at or near the project site. Therefore, this is a less than significant impact.

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

The project area consists of approximately 9 miles of pipeline, a ¼-acre substation, construction of a 250,000-gallon and a 1.5 million-gallon water tank, an electrical equipment building, and various service roads and corridors. In addition, grading, foundation work, installation of drainage structures and surfacing activities will result in temporary disturbance of approximately 54 acres of the native vegetation and soils, and result in potential soil erosion/deposition impacts.

In order to mitigate the potentially significant impacts of soil erosion, the limits of the construction right-of-ways shall be flagged in advance of construction activities, with all construction documents clearly stipulating that all construction activities must be confined within such flagged areas. Pipeline alignments shall follow existing roads where possible. In

areas of steep terrain, construction of right-of-ways shall be perpendicular to the contours to minimize grading. The top 8 inches of topsoil and vegetation shall be removed from construction sites, inspected for noxious weeds, and stockpiled in a manner to minimize erosion or degradation of the plant medium and seeds. Upon completion of the right-of-ways and other project facilities, finish grading will be completed, and application of erosion protection shall be put in place. After the inspected topsoil is reapplied, a standard native plants re-vegetation seed mixture will be applied at the rate of 25 pounds per acre. Straw will be applied as topping or mulch to minimize potential erosion to the reclaimed area. At the site of the pump station at the Hay Ranch, final grading and compaction will be completed to 90% relative compaction to a depth of two feet, and drainage will be directed to natural drainage swales via swales and ditches lined with energy dissipaters such as rock rip-rap to minimize erosion. At the high point tank site on the China Lake Naval Air Weapons Station (CLNAWS) property, approximately 3/4 –acre will be disturbed. An erosion control plan shall be prepared and implemented to the satisfaction of the CLNAWS to mitigate for any potential impact to CLNAWS property. All fill slopes shall receive erosion protection by redistribution of topsoil and application of a standard desert seed mixture at the rate of 25 pounds per acre. Buried pipeline shall have a minimum depth of cover of 3 feet, and shall be protected against exterior corrosion by tape wrapping and installation of cathodic protection anodes. The buried pipeline shall be placed in an envelope of sand bedding to minimize damage from backfill operations. With these mitigation measures as conditions of approval, impacts related to soil erosion or loss of topsoil are less than significant.

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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

*No. Review of the well drillers' logs show that the soils are stable alluvial materials expected from alluvial fan and stream deposits. The generally coarse-grained, small clay content nature of the deposits indicate a tendency for consolidation, and any resulting subsidence from groundwater pumping would be low. The stable nature of the soils also indicate that they are not prone to landslides, lateral spreading, or collapse (Terrain, Inc. report available upon request). The groundwater table is over 100 feet below ground surface, so the potential for liquefaction is also low.*

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?

*No. The soils on the project site are not expansive.*

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

*No. Soils on the project site consist of permeable alluvium and are thus adequate for supporting septic tanks (domestic waste). However, there will be no sanitary facilities provided at the Hay Ranch or along the pipeline corridor, because staff will only be assigned as needed for short-term maintenance work. During construction, portable sanitary facilities will be provided by a commercial operator and emptied/removed on a normal schedule.*

**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?

*Truck traffic during construction and normal maintenance could lead to spillage of diesel fuel, or other vehicle liquids. Also, hazardous materials required for the operation and maintenance of the substation and pipeline facility, such as oils, lubricants, paints, etc. could be upset or otherwise released into the environment. However, these materials shall be utilized and stored in compliance with the requirements of the Inyo County Environmental Health Services Department and Inyo County Building and Safety Department. The substation will be surrounded by a locked 8-foot chain link and razor wire fencing, and will be posted to keep out intruders. Signage will be placed at the facility for notification in case of emergency or other hazardous accident related to the substation. The water tanks will be completely sealed and do not pose a risk of accident to workers or intruders. Therefore this impact is considered less than significant.*

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?

*The construction area for the substation and the pipeline corridor are in open space territory with few other roads or structures to hamper truck traffic. Therefore, the probability of upset and release of hazardous materials into the environment due to collision or other accident conditions is minimized. Therefore, this impact is less than significant.*

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

*The project site is not within one-quarter mile of an existing or proposed school. All construction and maintenance trucks and other motorized equipment will be required to be equipped with standard emissions control devices on their engines and exhaust systems, and shall be in good working order at all times to eliminate the release of hazardous engine fluids or gasses.*

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

*The project site is not listed as a hazardous materials site.*

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?

*The project is not located within an airport land use plan. The area of the substation and pipeline corridor is in a sparsely populated area and is not a hazard for people residing or working in this area.*

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?

*The project is not within the vicinity of an active private airstrip.*

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

*The project will not interfere with any Inyo County Standardized Emergency Management Systems Response Plan or other emergency response or evacuation plans. The design and maintenance of the entry to, and exit from, the Hay Ranch property will be along existing roadways, and shall be in compliance with the standards as set forth by the Inyo County Public Works Department, Olancha Community Services District (fire and emergency response), Inyo County Sheriff's Office, California Highway Patrol, Cal Trans, and other emergency response agencies. The dilapidated mobile home and other outbuildings will be removed and replaced with the substation, pump station, and water tank. Due to the open space character of the surroundings, sufficient access and turnaround area is available at the Hay Ranch facility and all along the pipeline corridor. Therefore, this impact is less than significant.*

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?

Although there are some identified Very High Fire Hazard Severity Zones west of U.S. Highway 395 and south of the community of Dunsmovin, the site of the Hay Ranch facility and the pipeline corridor is not identified as a high fire hazard area. Workers could be exposed to hazards related to operation and maintenance of the electrical substation; however, all workers will be trained professionals and will take all standard precautions related to work in and near electricity.

With construction and operations truck traffic and employee vehicles entering and exiting the Hay Ranch and pipeline site on a regular basis, sparks and leaks of flammable fluids from vehicles and equipment, as well as lightning strikes and other natural causes, could pose a threat of wildland fire. Although this is a State Responsibility Area for fire protection (California Department of Forestry [CDF]), the site is also served by the local Olancha volunteer fire department (under the aegis of the Olancha Community Services District (CSD). Also, the Hay Ranch area is fallow agricultural lands that support very little flammable vegetation or other combustible materials (the mobile home and out buildings will be removed). The pipeline corridor will follow existing roads that also support very small amounts of flammable vegetation.

Building specifications, entry/exit, maintenance of defensible space measures, signing, water supply reserves, and other requirements pursuant to Public Resources Code, Section 4290, shall also be met to the satisfaction of the Inyo County Fire Marshall and the Olancha (CSD) Fire Chief. The applicant shall provide, and require the use of, personal safety equipment that shall be mobilized during emergencies at the substation. The project site is located in a sparsely populated area so the threat to surrounding residences and businesses is minimal. Therefore this impact is considered less than significant.

**VIII. HYDROLOGY AND WATER QUALITY:** Would the project:

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

No. Although water from the North and South wells on the Hay Ranch exceeds drinking water standards for Total Dissolved Solids (TDS) and sulfate concentrations, the water quality is acceptable for injection into the geothermal system. There will be no waste discharge except for normal evaporation from the power plant cooling operations.

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 which would not support existing land uses or planned uses for which permits have been granted)?

Analysis using a simple two-dimensional analytical groundwater flow equation (Theis equation) suggests that this project will result in a relatively low draw down in the Rose Valley Basin. Numerical modeling suggests that over a 20 year period, water level drawdown immediately adjacent to the Hay Ranch wells will be from 68 to 72 feet, with decreasing amounts of decline moving radially away from the wells.

Current modeling suggests that over the 20-year life of the project, a 2.4' drawdown could occur in the Little Lake area. However, due to large uncertainties and non-availability of data for this region, this figure is most likely high based on observed responses to historical use of the Hay Ranch wells. Historical pumping rates at the Hay Ranch during several years of operation are similar to the anticipated pumping rates for this project. During that period, Little Lake was unaffected by the pumping of the Hay Ranch wells. Further, annual fluctuations in water level have exceeded 4' in the Little Lake area well at various times in the past ten years (Bauer's Thesis, April, 2002 titled "The Hydrogeology of Rose Valley and Little Lake Ranch"). In addition, the City of Los Angeles, Department of Water and Power (LADWP) may consider recapture of approximately 900 acre feet of seepage from Haiwee Reservoir. Further analysis of the potential impact, as well as cumulative impacts, will be developed during the preparation of the EIR. The EIR will also include a detailed monitoring plan with mechanism to assess any impacts to Little Lake and develop triggers to reduce or curtail pumping if significant impacts are detected.

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 which would result in substantial erosion or siltation on- or off-site?

*There will be approximately 5 acres of permanent disturbance to vegetation and soils, and approximately 54 acres of temporary disturbance where soil erosion could occur. However, with implementation of the mitigation as outlined in Section VI. Geology and Soils above, this impact is reduced to a less than significant level. No drainage patterns will be affected by the development of the substation on the site of the mobile home, nor placement of pipeline (mostly buried) for the 9-mile corridor from the Hay Ranch to the Coso Geothermal Project. All disturbed ground along the pipeline corridor will be reclaimed and planted with native seed immediately after burial is completed.*

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 which would result in flooding on or off-site?

*No. There will be only a slight increase in the amount of impermeable surfaces as a result of this project. The dilapidated mobile home and outbuildings will be removed, and an electric substation developed on the site. The addition of a small electrical building, and the 250,000-gallon water tank will not add substantially to increased storm water runoff. An erosion control plan shall be prepared and implemented to the satisfaction of the China Lake Naval Air Weapons Station (CLNAWS) prior to implementation of grading and drainage work on the project site located within the CLNAWS.*

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

*No. Due to the large size of the Hay Ranch property (>300 acres) and the 50-foot wide pipeline corridor that follows existing roads on a sparsely developed BLM and CLNAWS properties for most of the 9 mile corridor, storm water will be captured on site, or will run off into existing natural drainages that are adequate for this project. There will be no polluted runoff associated with this project.*

f) Otherwise substantially degrade water quality?

*No. The water pumped from the Hay Ranch wells is of adequate quality for injection into the Coso Geothermal Field. Although the water quality exceeds drinking water standards for TDS and sulfate concentrations, this water is not toxic and will not degrade water quality.*

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?

*There will be no housing on the project site, since the existing dilapidated mobile home will be removed from the Hay Ranch property. The structures and facilities are not within a 100-year flood hazard area as delineated on the Federal Emergency Management Agency (FEMA) Map No. 060073 1925 B, dated 9/4/85.*

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

*Haiwee Creek runs south along the east side of U.S. Highway 395, portions of which are identified as a Zone A Flood Zone. However, none of the proposed structures for this project are within this 100-year flood hazard area as mapped on a federal Flood Hazard Boundary map or the FEMA Flood Insurance Rate Map No. 060073 1925B dated 9/4/85. Therefore, this impact is less than significant*

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?

If Haiwee Creek experienced flooding greater than the predicted 100-year event as mapped on the FEMA map, portions of the Hay Ranch property could experience minor flooding. However, the probability of this magnitude of storm event occurring is so remote as to be a less than significant impact. There will be no inhabited structures or residences on the Hay Ranch site, nor along the 9-mile pipeline corridor.

The Hay Ranch wells are at an elevation of 3,437 above mean sea level above (msl) and the south spillway at the Haiwee Reservoir is at an elevation of 3,760 above msl. The reservoir holds approximately 28,000 acre-feet of water. The dam is located approximately 4 miles north of the Hay Ranch and the terrain from the dam to the Hay Ranch is a relatively broad open plain. If the dam suffered catastrophic failure, floodwaters would inundate the substation and the nearby pipeline corridor, and damage structures as far away as Coso Junction. Therefore, the substation and portions of the pipeline corridor could suffer major flood damage. The substation would immediately become inoperable and pose no threat to workers or nearby residences or businesses. In addition, no element of this project would lead to the greater probability of a catastrophic failure of Haiwee Dam, and, the probability of a catastrophic failure is so remote as to be considered a less than significant impact.

j) Inundation by seiche, tsunami, or mudflow?

No. The Hay Ranch project site is approximately 4 miles south of Haiwee Reservoir. Since seiche events are a function of an oscillation of a water body due to wind or earthquake, water could spill over the top of the dam on the south end of the reservoir. However, the probability of inundation by a seiche event that may occur on Haiwee Reservoir is so remote and unlikely, that the potential impact is considered less than significant. The project site is several hundred miles east of the Pacific Ocean at an elevation of 3,437 feet above msl, so there is no threat of tsunami. The site is on relatively level ground, approximately 2 miles from any potential source area for mudflow, so it is not likely that there will be an impact from any mudflow hazard. Therefore, these impacts are considered less than significant.

**IX. LAND USE AND PLANNING:** Would the project:

a) Physically divide an established community?

No. There is no established community at the Hay Ranch project site, or along the 9-mile pipeline corridor. This is a very sparsely populated area located approximately 1/2 mile south of the rural community of Dunsmuir, whose population is estimated at 10 residents. The pipeline corridor proceeds to Gill Station Road at Coso Junction, which has approximately 40 permanent residents. None of the structures or pipeline corridor will physically divide these communities.

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?

No. The land use designation for the private Hay Ranch property is Rural Protection (RP), 1 dwelling unit per 40 acres, 40-acre minimum parcel size (approximately 5 acres); State and Federal Lands (SFL) for Bureau of Land Management lands (approximately 32 acres); and, State and Federal Lands (SFL) for China Lake Naval Air Weapons Station lands (approximately 16 acres). The zoning for all properties is Open Space, 40-acre minimum parcel size (OS-40). The general purpose of these designations and zone district is the maintenance of open spaces and natural resources. There will be minimum permanent disturbance (approximately 5 acres), with the balance of the disturbed acreage reclaimed and re-seeded in native vegetation. Therefore, this project is compatible with the Inyo County General Plan and the Inyo County Zoning Ordinance. The project does not conflict with any land use policy that has been adopted for the purpose of avoiding or mitigating an environmental effect.

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

The project site is inside of the proposed West Mojave Plan Area. However, mitigation for the Mohave ground squirrel and the desert tortoise was outlined in the Mitigation Plan of the Final Environmental Impact Statement for the Coso Known Geothermal Area, dated September 1980 (see attached), which encompassed 2,100 acres including the disturbed

area of this project. This Mitigation Plan remains in full force and effect and all provisions of that plan are included by reference herein. Therefore, this is a less than significant impact.

**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?

*No. No mineral resources have been identified on this site.*

- 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?

*No. No locally important mineral resources have been identified for this site.*

**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?

*Pursuant to the Noise Element of the 2001 General Plan, the normally acceptable ambient noise levels in a residential area are 0 to 60 decibels (dB). Conditionally acceptable levels of noise up to 70 dB are allowed during construction after all noise reduction features and equipment have been identified and all systems implemented. Truck traffic can create noise levels up to 88 dB over limited time periods as they enter or exit the property. Truck motors shall be turned off when conducting business at the facilities. All trucks and equipment shall be required to be equipped with standard noise abatement mechanisms, and be in proper working order at all times. The community of Dunmovin is approximately 1/2 mile to the north of the Hay Ranch property, which supports approximately 10 permanent residents. After construction of the facilities, the only noise will be from trucks and equipment during infrequent maintenance operations, which will occur during normal daytime working hours, except during emergencies. Neither the substation operation nor the water well pumps create noise levels that can be heard beyond the property boundaries of the Hay Ranch site. Therefore, any potential noise impact will be less than significant.*

- b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

*Ground-borne vibration from truck traffic will be less than significant due to the limited time period that trucks will be creating potential vibrations (entering and exiting the property). Plant operations at the substation or water wells will not create ground-borne vibrations.*

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

*There will be no substantial permanent increase in ambient noise levels in the project vicinity. Truck traffic, as trucks enter and exit the property for routine operations and maintenance, will temporarily increase ambient noise levels. The nearest community is Dunmovin, approximately 1/2-mile to the north, with approximately 10 permanent residents. Other residences at Coso Junction, in the mobile home park, are located at a distance of over five miles from the Hay Ranch project site in this remote rural area. Therefore, this impact will be less than significant.*

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

*Truck traffic entering and exiting the property for normal operations and maintenance will temporarily increase ambient noise levels. However, all trucks and equipment shall be required to be equipped with standard noise abatement*

*mechanisms, and be in proper working order at all times to reduce ambient noise levels. Therefore, this impact is less than significant.*

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?

*There is no airport, or airport land use plan within two miles of the Hay Ranch property or the 9 linear-mile pipeline corridor.*

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?

*The project corridor is not within the vicinity of a private airstrip.*

**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)?

*No. The project will not induce substantial population growth. With injection of water into the existing geothermal wells, the Coso Operating Company will be able to continue generating electricity profitably and therefore be able to maintain the existing workforce. Additional employees will not be needed in order to maintain the existing operations levels.*

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

*No occupied housing will be displaced by this project. The dilapidated mobile home on the Hay Ranch site will be removed and be replaced with a small electric substation. No replacement housing will be needed or built.*

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

*No people will be displaced as a result of this project. The dilapidated mobile home on the Hay Ranch site has not been occupied for several years.*

**XIII. PUBLIC SERVICES:** Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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:

*No. All of the employees required for the normal operation of the injection wells are currently employed by Coso Operating Company LLC. Therefore, there will be no need for additional public facilities.*

Fire protection?

*Olancha CSD; California Department of Forestry*

Police protection?

*Inyo County Sheriff*

Schools? <i>Olancha Elementary and Southern Inyo Unified School District.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks? <i>Inyo County Parks &amp; Recreation Department.</i>	<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"/>

**XIV. RECREATION:** Would the project:

a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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*No. Coso Operating Company LLC, currently employs all the employees required for the normal operation of the injection wells. Therefore, there will be no need for additional recreational facilities.*

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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*No. The project does not include nor require new or expanded recreational facilities because all of the workers needed for the injection wells are already employed by Coso Operating Company LLC.*

**XV. TRANSPORTATION/TRAFFIC --** Would the project:

a) Cause an increase in traffic which 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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*The only increase in traffic in this rural location will be during construction of the substation and other facilities on the Hay Ranch site, and installation of pipe along the 9-mile pipeline corridor. This impact will be temporary, and will not result in a substantial increase in vehicle trips or volume. After construction, the only traffic will be for normal operations and maintenance, with a minimum of daily trips required. Therefore, this is a less than significant impact.*

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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*No. This project will not reduce the level of service on U.S. Highway 395 or Gill Station Road. Inyo County does not have a congestion management plan or agency.*

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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*No. There are no airport facilities in the immediate area, so air traffic patterns will not change.*

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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*No. Construction trucks will enter the project site from along U.S. Highway 395 and from Gill Station Road. The intersection of Gill Station Road and U.S. Highway 395 is controlled with turn pockets, acceleration-deceleration lanes, and a stop sign. Other entrance/exit locations onto U.S. Highway 395 are not controlled, but the limited amount of traffic required for normal operations and maintenance of this project reduces any potential impact to less than significant.*

e) Result in inadequate emergency access?

*No. Due to the rural and sparsely settled nature of the project area, there is sufficient room for emergency access and turnarounds for emergency vehicles at the Hay Ranch site and all along the 9-mile pipeline corridor.*

f) Result in inadequate parking capacity?

*No. Due to the rural and sparsely settled nature of the project area, there is sufficient employee parking at all locations along the pipeline corridor.*

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

*No. This project will not conflict with alternative transportation programs.*

**XVI. UTILITIES AND SERVICE SYSTEMS --**

Would the project:

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

*No. The project will not create any wastewater with the exception of normal water evaporation from the cooling facilities at the electric generation site several miles from the injection wells at the terminus of the pipeline corridor.*

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?

*No. The project will not create any wastewater with the exception of normal water evaporation from the cooling facilities at the electric generation site several miles from the injection wells at the terminus of the pipeline corridor.*

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?

*The applicant's Drainage and Grading Plan for the substation, water tanks, and pipeline corridor shall include on-site storm water catch basins, and drainage systems exiting into existing gullies and washes that are capable of containing and treating storm water runoff created from a 100-year storm event. The project area is sparsely populated with few structures and is open and flat, allowing for maximum on-site detention of storm water. The applicant shall be required to obtain a Stormwater Pollution Prevention Permit and a National Pollution Discharge Elimination System permit pursuant to the requirements of Lahontan Regional Water Quality Control Board (RWQCB). Therefore, construction and operation of the facilities will not cause a significant adverse environmental effect.*

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

*No new or expanded entitlements are needed which might lead to a significant impact on the environment. The project has the potential to draw down the groundwater levels in the Rose Valley area, which is recharged from precipitation and snowmelt that falls on the Sierra Nevada mountains to the west (see VIII. Hydrology and Water Quality, above). There may also be some recharge via deeper alluvial or bedrock flow after infiltrating along the mountain flanks or mountain canyons. Groundwater also enters the northern Rose Valley from the Haiwee Reservoir. Depth to water at the North Hay Ranch well is approximately 193 feet, and 182 feet at the South well. Outflow from the groundwater system is from evaporation and surface flow at Little Lake to the south, and groundwater underflow to the Indian Wells Valley farther south.*

A groundwater model was run which showed that by the end of the 20-year operations period a drawdown of 72 feet at the North well and a 68-foot drawdown at the South well would occur. Groundwater discharge at Little Lake showed a decline of 1,132 acre-feet per year (afy) or a 2.4-foot water level decline, by the end of the 20-year pumping period. These groundwater level declines and outflow from Little Lake could impact potential future development of water wells in the Rose Valley area.

In order to mitigate any potential impacts, a monitoring program shall be implemented to verify the actual effect on water levels attributable to the pumping and transfer of groundwater at the two Hay Ranch wells (see VIII. above). Three new monitoring wells are proposed to be installed: two located approximately 0.5 and 1.0 mile from the Hay Ranch wells, and the other located in the Little Lake area. Monitoring will be initiated several months prior to the start of project pumping, with data checked and recorded at 8 different locations on a quarterly basis (Groundwater Modeling Report, Chapter 4.5, available upon request). Comparisons will be evaluated between the actual data and the drawdowns predicted by the model. If at any time, drawdown exceeds 5 feet to 36 feet based on location of the well being monitored, or 1.2 feet at the Little Lake monitoring well, causes for the excessive drawdown shall be explored<sup>7</sup> to see if this drawdown is attributable to project pumping. Data collection at the monitoring wells will be increased to monthly, and continue until deviations subside. If detrimental effects of the drawdown are confirmed, water pumping rates shall be decreased in 100 gallon per minute (gpm) increments, and operation maintained at each reduced increment over a time period mutually agreed to by Coso Operating Company LLC (Hay Ranch) and the Inyo County Water Department (any use of groundwater by future development will be accounted for in the analysis of drawdown). Monthly groundwater level checks will continue over the 12-month period following any decrease in pumping rate, in order to determine the effect of the mitigation step.

This project is **not** exempt from the requirements of Inyo County Ordinance No. 1004, which added Section 18.77 to the Inyo County Code, (Regulation of Water Transfer, Sale, or Transport from Inyo County) and Water Code Section 1810 et seq. Section 18.77.000 (H.) Groundwater Transfers, states: "A transfer or transport of groundwater from a groundwater basin located in whole or in part within Inyo County to an area outside of the groundwater basin...[has] the potential to adversely affect the economy and environment of Inyo County." The project consists of pumping groundwater from wells in the Rose Valley Basin and transporting it via pipeline to the Coso injection system, which is located on the margin of the Rose Valley and Coso Basins. Rose Valley is named as a groundwater basin within Inyo County. The project is also **not** exempt pursuant to the provisions of Inyo County Code Section 18.77.010 (B.) "Exemptions," because it does not involve purchase or acquisition of water by the Los Angeles Department of Water and Power, is not an emergency transfer of water, is not the transfer of water in the form of manufactured goods, and is not a transfer of water over which the County lacks jurisdiction to regulate. Therefore, as required by Inyo County Code Section 18.77, the applicant must obtain a Conditional Use Permit. With mitigation measures outlined above as conditions of approval for implementation and operation of this project, any impact to water supply is less than significant.

e) Result in a determination by the wastewater treatment provider which 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?

*No wastewater will be created by this project except for normal evaporation of water from the cooling facilities at the electric generation site located several miles from the injection wells at the terminus of the pipeline corridor.*

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

*Construction solid waste will be transported to the Lone Pine Landfill and fees paid as required. All employee-generated solid waste will be removed from the project site on a daily basis. There will be little or no solid waste created after commencement of operations and during routine maintenance activities. There is sufficient capacity at the landfill facility to accommodate all the project's solid waste disposal needs. Therefore, this impact is less than significant.*

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

Yes. See XVI (f.) above.

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE:**

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?

*The project site is within identified Mohave ground squirrel and desert tortoise habitat areas. In addition, the above-referenced biological review (see IV. Biological Resources) determined that five sensitive vegetation species were identified as possibly occurring, or could occur, on the site. Mitigation for the ground squirrel and tortoise is covered in the Mitigation Plan of the Final Environmental Impact Statement of 1980. Those mitigation measures are still in full force and effect and are included by reference herein. Several significant cultural sites were identified along the pipeline corridor, but are not eligible for listing with the National Register of Historic Places. All sites will be avoided during construction, and the pipeline alignment will be shifted if resources are located during burial of the pipeline. All standard notification measures will be taken if resources, including human remains, are discovered, and all activities within a 100-foot radius will be suspended until a qualified representative can determine the disposition of the resources. A Lone Pine Paiute-Shoshone tribal representative will be called to the project site prior to any earth-disturbing activities, and will assist in the determination of Most Likely Descendent, and disposition of any discovered resources. These mitigation measures will reduce any potential impacts to biological or cultural resources to a less than significant level.*

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)?

*Additional truck traffic during construction on U.S. Highway 395 and Gill Station Road, potential soil erosion along the pipeline corridor prior to stabilization by reclamation and re-seeding, and potential drawdown of water wells or water levels in Little Lake could have incremental effects on existing conditions or on future development proposals. However, with implementation of the mitigation measures outlined above, potential cumulative impacts are reduced to a less than significant level. Groundwater Pumping at the Coso Hay Ranch plus other potential City of Los Angeles Department of Water and Power pumping or dam repair in the area may create a cumulative considerable impact. This potential will be addressed in the EIR.*

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

*No. No impact to humans will occur as a result of this project.*