# MAY PHOLEGY

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

October 17, 2012

Ms. Jenny Marek U.S. Fish and Wildlife Service 2493 Portola Road, Suite B Ventura, CA 93003

Mr. Jeff Humble California Department of Fish and Game PO Box 1179 Ventura, CA 93002

Ms. Mary Meyer California Department of Fish and Game 226 West Ojai Avenue, Suite 101 PMB 501 Ojai, CA 93023

Subject:

EPA Radiological Study of the Santa Susana Field Laboratory Area IV and the

Northern Buffer Zone; *Quarterly Biological Monitoring Report #6* 

Dear Ms. Marek, Mr. Humble, and Ms. Meyer:

The United States Environmental Protection Agency (US EPA) is continuing its radiological study at Area IV and the Northern Buffer Zone of the Santa Susana Field Laboratory (SSFL) located in eastern Ventura County. EPA is conducting this project pursuant to federal legislative mandate HR2764, the Consolidated Appropriations Act of 2008, and the authority granted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Attached is EPA's Quarterly Biological Monitoring Report #6 dated February 7, 2012. The purpose of this report is to provide a quarterly monitoring update, which summarizes:

- Project Activities and Operations,
- Biological Surveys, Monitoring, and Impacts to Federally Listed Species, and their Critical Habitat, if applicable,
- Biological Surveys, Monitoring, and Impacts, to State listed species, and Species of Special Concern,
- Riparian Area impacts,
- Issues Encountered and Adaptive Management.

The attached report covers EPA project activities during the period from October 1<sup>st</sup> to December 31<sup>st</sup>, 2011. EPA intends to issue biological monitoring status reports to document our ongoing compliance with the Biological Opinion concerning the subject project issued by the U.S. Fish and Wildlife Service (USFWS) on May 25, 2010 and our compliance with the substantive technical requirements of the California Endangered Species Act, the California Department of Fish and Game Code Section 1602 (riparian protection), the Federal Migratory

Bird Treaty Act and the California Fish and Game Code Sections 3503 and 3503.5 (for protection of nesting birds).

Please give me a call at (415) 972-3167 if you have any questions regarding the information provided herein.

Sincerely,

Andrew Bain

Remedial Project Manager

SSFL Site

cc: Stephanie Jennings, Department of Energy

Rick Brausch, California Department of Toxic Substances Control

Attachment: Quarterly Biological Monitoring Report #6 dated February 7, 2012

### **QUARTERLY BIOLOGICAL MONITORING REPORT #6**

### RADIOLOGICAL STUDY OF THE SANTA SUSANA FIELD LABORATORY AREA IV AND NORTHERN BUFFER ZONE

### Prepared for:

### U.S. Environmental Protection Agency Region 9

75 Hawthorne Street San Francisco, CA 94105

Prepared by:

### HydroGeoLogic, Inc.

5800 Woolsey Canyon Road Building 204 Canoga Park, CA 93104

and

### **Envicom Corporation**

28328 Agoura Road Agoura Hills, CA 91301

SECTION		<u>PAGE</u>								
INTRODUCTION	INTRODUCTION 1									
PROJECT AC	TIVITIES AND OPERATIONS	1								
BIOLOGICAL	CLEARANCE SURVEYS, MONITORING, AND IMPACTS	2								
Biologi Cleara Sixth G Protect Sixth G	nce Survey Methodology cal Monitoring Methodology nce Survey and Monitoring Results for Federally Listed Species Quarterly Clearance Surveys and Monitoring Results for Non-Federally listed ted Biological Resources (excludes non-special status nesting birds) Quarterly Monitoring Results for Protected Nesting Birds Quarterly Clearance Surveys and Monitoring Results for Riparian Habitat	2 3 3 4 7 7								
ISSUES ENCOUNTERED AND ADAPTIVE MANAGEMENT										
TABLES Table 1 Table 2 Table 3 Table 4 Table 5	List of Federally Listed Resources and Critical/Suitable Habitat Observed in Survey Sections during the Sixth Quarterly Monitoring Period List of Federally Listed Resources Impacted during Sixth Quarterly Monitoring Period List of Non-federally Listed Resources Observed during the Sixth Quarterly Monitoring Period (grouped by area/subarea) List of Non-federally Listed Resources Impacted during the Sixth Quarterly Monitoring Period (excludes non-special status nesting birds) List of Activities Conducted within Riparian Habitat during the Sixth Quarter Monitoring Period	11 / 12 13								
APPENDICES	<u>à</u>									
Appendix 1 Appendix 2 Appendix 3	Figures and Photo Plates Sixth Quarterly Biological Clearance Survey Forms Sixth Quarterly Biological Monitoring Forms									

i

### INTRODUCTION

The U.S. Environmental Protection Agency (EPA) is conducting a radiological characterization of a portion of the Santa Susana Field Laboratory (SSFL), located in the Simi Hills of eastern Ventura County, California (**Figure 1**). The two areas at SSFL being characterized are Area IV, a 290-acre administrative section where the U.S. Department of Energy and its contractors once operated several nuclear reactors and associated fuel facilities and laboratories, and the Northern Buffer Zone (NBZ), a 182-acre area with no history of development that lies adjacent to Area IV. These two areas comprise the Area IV study area.

Several activities associated with the radiological study of the Area IV Study Area have the potential to impact federally listed species and their critical habitat, as well as biological resources protected under other Federal and State laws. These activities include vegetation cutting, gamma scanning, geophysical survey, surface and subsurface soil sampling, groundwater monitoring well sampling, surface water sampling, and sediment sampling. The scope of these project activities is described in further detail in the Biological Assessment (BA) prepared for EPA by HydroGeoLogic, Inc. (HGL), and Envicom Corporation on February 12, 2010. To minimize the impact to natural resources and riparian habitat within the study area, protection measures were developed and are being implemented as activities progress. These measures are detailed in Appendices E, G, and N of the Site Management Plan (dated September 24, 2010).

EPA is conducting this project pursuant to federal legislative mandate HR2764, the Consolidated Appropriations Act of 2008, and the authority granted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Formal consultation under Section 7 of the Endangered Species Act has been conducted with the U.S. Fish and Wildlife Service (USFWS), and a Biological Opinion was issued on May 25, 2010. The USFWS Biological Opinion identified Avoidance and Minimization Measures (AMMs) keyed to each of the proposed activities and Federally listed species with potential to occur within the Action Area. EPA has agreed to implement the various components of the Radiological Survey in compliance with the Biological Opinion and its requirements. Although not under discretionary approval, it is also EPA's goal to comply with the substantive technical requirements of State of California natural resource protection laws, such as the California Endangered Species Act and California Fish and Game Code Section 1602 for impacts to riparian resources. Additional applicable biological resource laws or regulations to which the project is adhering include the Federal Migratory Bird Treaty Act and California Fish and Game Code 3503 and 3503.5 (for protection of nesting birds).

The purpose of this report is to provide the sixth quarterly monitoring update, which summarizes 1) Project Activities and Operations, 2) Biological Surveys, Monitoring, and Impacts to Federally Listed Species and their Critical Habitat, if applicable, 3) Biological Surveys, Monitoring, and Impacts to Statelisted species and Species of Special Concern, 4) Riparian Area impacts, and 5) Issues Encountered and Adaptive Management. The report covers the period from October 1, 2011, to December 31, 2011.

### PROJECT ACTIVITIES AND OPERATIONS

The Area IV Study Area is subdivided into Subareas 3, 5A, 5B, 5C, 5D North, 5D South, 6, 7, 8 North, 8 South, NBZ-W, and NBZ-E (**Figure 2**). The subareas have been divided into 76 Survey Sections (SS) and 23 NBZ Priority Areas. The SSs include roads. To date, EPA has begun conducting all six of the primary project tasks: vegetation cutting, gamma scanning, geophysical surveying, surface and subsurface soil sampling, groundwater monitoring well sampling, and surface water and sediment sampling. The

following is a discussion of the project tasks and the locations in which they have been conducted as observed and monitored for this sixth quarterly report.

Vegetation within the study area is being cut or trimmed to allow access to vehicles and equipment, and to provide clearance for gamma scanning equipment at optimum levels of sensitivity. Vegetation cutting protocols are found in Appendix E of the Site Management Plan. Vegetation cutting was monitored during this quarterly monitoring period in Subareas 5A, 5B, 5C, 5D South, 6, 8 North, NBZ-W, and NBZ-E (**Figure 2**). Standard equipment used during vegetation cutting includes weed whackers, lopping shears, chainsaws, skid steer with mower and fork-lift attachments, chipper, and front-loading tractor for the safe removal of poison oak (*Toxicodendron diversilobum*) branches.

Gamma scanning is being accomplished using various scanning devices, depending on site conditions. Scanning equipment includes a JCB off-road forklift vehicle (an ERGS machine was formerly used, and the JCB is still referred to as the 'ERGS' in this report), a modified Canycom compact walk-behind rubber track-mounted gamma scanner (TMGS), mule-mounted gamma scanning devices (MMGS), a handcart scanner, and handheld scanners. Gamma scanning was monitored during this monitoring period in Subareas 5D South, 5D North, 7, 8 North, NBZ-W, and NBZ-E (**Figure 2**).

Geophysical surveys have been completed in all Subareas of the project area and were not observed to occur during this monitoring quarter.

Surface and subsurface soil sampling was conducted during this sixth quarterly period in Subareas 3, 5B, 5D-South, 6, 7, and 8-South. Previous biological clearance surveys had been performed on each of the affected survey sections and sensitive resources were clearly identified and flagged. As such, soil sampling activities were not monitored during this sixth quarterly monitoring period. Sampling equipment used for this task includes a mobile drilling/coring rig and hand tools. Support equipment for the soil sampling effort includes tables, chairs, and equipment boxes. The number of sampling points within each SS varies depending on the findings of the Historical Site Assessment (HSA) and the results of the gamma scanning surveys already conducted. The sampling procedure at each sample point involves retrieving a surface sample of approximately one gallon of soil from 0 to 6 inches below ground surface (bgs). A subsurface soil sample consisting of a core sample obtained from a depth of 10 feet bgs is collected at a subset of the surface sampling sites.

Monitoring well sampling was completed during the fourth quarterly monitoring period and therefore was not conducted during the sixth quarterly monitoring period.

### BIOLOGICAL CLEARANCE SURVEYS, MONITORING, AND IMPACTS

### **Clearance Survey Methodology**

Before project activities commenced, one of the USFWS-approved biologists from Envicom conducted clearance surveys to document the presence/absence and location of Federal and State special-status biological resources and riparian habitat within each of the subareas. The locations of the resources were marked in the field with conspicuous flagging and mapped using Global Positioning System (GPS) technology, and Geographic Information System (GIS) software. Mapped resources are shown on **Figures 3, 4, and 5**. Clearance survey monitoring forms (Appendix 2) were prepared for each clearance survey completed during this monitoring period to document the resources observed and to identify which AMMs included in the Biological Opinion are applicable to future activities occurring within the survey area.

### **Biological Monitoring Methodology**

One or more of the approved biological monitors from Envicom were present on a daily basis when work activities occurred. The monitors attend the safety meeting with crews and monitor project activities. During the reporting period (October 1 to December 31, 2011) the primary project tasks that were monitored included vegetation cutting and gamma scanning. Some soil sampling activities also occurred but were not monitored as they were located in survey sections where previous clearance surveys had identified and flagged sensitive resources. The biological monitor(s) worked alongside the field crews to point out the locations of special-status biological resources and assist the crews in avoiding impacts. Daily biological monitoring forms (Appendix 3) were prepared to document the activities monitored, any special-status biological resources encountered, and impacts resulting from project activities. Any further recommendations on reducing impacts to biological resources also were reported on this form. In compliance with the Biological Opinion, all project-related crews participated in an environmental education program administered by the USFWS-approved biologist to inform participants as to the sensitive biological resources within the project area and the AMMs to be employed.

### Clearance Survey and Monitoring Results for Federally Listed Species

Of the federally listed species in the Biological Opinion, only one (Braunton's milkvetch) has been positively identified in the study area, although suitable habitat for unidentified individuals that could, in fact, be listed were observed as well. **Table 1** summarizes the locations where these species have been detected during either clearance surveys or monitoring.

### Braunton's milkvetch (Astragalus brauntonii); Federally Endangered

During the monitoring period, project activities were conducted throughout a portion of the Designated Critical Habitat for Braunton's milkvetch in Subarea 5D South (SS-59). Activities within the milkvetch habitat consisted of vegetation clearance and gamma scanning involving the use of the TMGS. Vegetation clearance involved the use of a rotary mower attached to a skid steer tractor and weed whackers. These activities were monitored closely to avoid and reduce impacts to milkvetch plants, as documented in the Biological Monitoring Forms included in this report as Appendix 3. Monitoring activities included surveying the subareas where activities were to occur, and flagging individual plants or establishing a perimeter buffer area around groups of plants as shown in Appendix 1 (Plate 1A).

A total of three Braunton's milkvetch were impacted during the monitoring period. Impacts to individual Braunton's milkvetch are described in **Table 2**. These impacts were relatively minor, and did not result in the "take" of the plant. Stems of the three affected individuals were broken, but the plants were not uprooted or destroyed.

The survey section where these impacts occurred was SS-59, which is located within the Critical Habitat Unit 1d for Braunton's milkvetch. The primary constituent elements (PCEs) for Braunton's milkvetch (calcium carbonate soils derived from marine sediment, low proportion (<10%) of shrub cover directly around the plant, and chaparral and coastal sage scrub communities characterized by periodic disturbances that stimulate seed germination [e.g., fire, flooding, erosion] and reduce vegetative cover) have not been negatively impacted.

Dudleya species: Conejo dudleya (Dudleya abramsii subsp. parva [=D. parva]), Santa Monica Mountains live-forever (D. cymosa subsp. ovatifolia [inclusive of D. cymosa subsp. agourensis]), and marcescent dudleya (D. cymosa subsp. marcescens); all Federally Threatened

None of the Federally or State listed dudleya species have been encountered. Many flowering dudleya individuals were identified as *D. lanceolata* (no protection status), while some dudleya were unidentifiable because they were not flowering at the time of observation. All unidentifiable dudleya were flagged and protected during project activities. During this monitoring period, unidentifiable species were noted during vegetation cutting or gamma scanning activities in Subareas NBZ-E (P1D, P1E, P1F, P1I) and NBZ-W (P1A, P1B, P1C, P2K), as well as during gamma scanning activities in Subareas 5D South (SS-59) and 8 North (SS-43). No identified dudleya have been harmed during project activities.

## Vernal Pool Branchiopods: Riverside fairy shrimp (Streptocephalus woottoni), Federally Endangered, and vernal pool fairy shrimp (Branchinecta lynchi), Federally Threatened

Known occupied vernal pool habitat in SS-7 and atop sandstone outcrops in P1C and P3V were not encountered during project activities conducted during the sixth quarterly monitoring period.

### California red-legged frog (Rana draytonii); Federally Threatened

Project activities occurred in proximity to four areas identified in the Biological Assessment as potentially suitable habitat for the California red-legged frog. These habitat areas consist of outfall collection pools in Subareas 6 (SS-38) and 8 North (SS-46 and SS-43), as well as a riparian area in Subarea NBZ-E (within portions of P1G, P1H, P1J, P1Z, and P2R). A 300-foot buffer was mapped around each of these features using a GIS, and the biological monitor supervised all project activities within the upland buffer area. The buffer areas for the habitats in Subareas 6 and 8 North extend into NBZ-W and NBZ-E within survey sections P1A and P1D respectively. During the monitoring period, gamma scanning was conducted within SS-43 of Subarea 8 North; P1A of Subarea NBZ-W; and P1D, P1J and P2R of Subarea NBZ-E. Vegetation cutting was conducted in P1A of Subarea NBZ-W and equipment use was limited to hand tools within the buffer zone. Activities were not observed to occur within the critical habitat area during this monitoring period. No red-legged frogs were observed.

#### Least Bell's vireo (Vireo bellii pusillus); Federally Endangered

No monitored work activities were conducted within the Least Bell's Vireo (LBV) habitat areas in Subarea 5B (SS-12) and Subarea 6 (SS-26) during the monitoring period. No LBV have been observed in the project area during clearance surveys or monitoring. A focused survey to determine presence or absence of LBV was not conducted in SS-12 and SS-26 as no work was scheduled in these areas.

### California gnatcatcher (Polioptila californica californica); Federally Threatened

Monitored activities during the sixth quarter of the study included gamma scanning and/or vegetation cutting in Subarea 8 North (SS-43), 5D South (SS-59), and NBZ-W (P1A, P1B, P1C, P1I, and P2K), which are identified as providing potential California gnatcatcher habitat. No California gnatcatchers have been detected on site during the implementation of the EPA study.

### Sixth Quarterly Clearance Surveys and Monitoring Results for Non Federallylisted Protected Biological Resources (excludes non-special status nesting birds)

The Santa Susana tarplant is the only State-listed species observed during the clearance surveys and biological monitoring. However, other State-protected biological resources have been observed. The

locations of Santa Susana tarplant and other State-protected biological resources within the Action Area are illustrated on **Figures 3**, **4**, **and 5**. The following is a more detailed description of the observations and impacts associated with State-protected biological resources. A summary of the State-Sensitive resource observations listed by Survey Section is shown in **Table 3**.

### Santa Susana tarplant (Deinandra minthornii); State Rare, CNPS List 1B.2

This species is locally common in sections of Area IV with sandstone outcrops. These plants were flagged for identification during activities occurring within their vicinity (**Plate 1B**). No plants were impacted by project activities during the sixth quarterly monitoring period (**Table 4**).

### Malibu baccharis (Baccharis malibuensis); CNPS List 1B.1

Malibu baccharis was recorded in Subareas 5D South (SS-59) on the hilly terrain at the extreme southern end of the study area. Malibu baccharis exhibits a flexible growth form whereby it is not easily damaged by project equipment when properly marked. None of these plants were damaged or destroyed during vegetation cutting or gamma scanning activities conducted this quarter.

### Plummer's mariposa lily (Calochortus plummerae); CNPS List 1B.2

This species is found in suitable habitat throughout the project area. It was observed during project activities in 5D South, 7, NBZ-W, and NBZ-E (**Plate 1C**). One individual was severed at its base during vegetation cutting in Subarea 5D South (SS-59). All other specimens observed were protected from project activities.

### Slender mariposa lily (Calochortus clavatus var. gracilis); CNPS List 1B.2

Slender mariposa lily has not been identified to date within the project area. All *Calochortus clavatus* identified have been keyed to be the unprotected *Calochortus clavatus* var. *pallidus*. Nonetheless, all observed plants of this species were protected during vegetation cutting and gamma scanning during the sixth quarterly monitoring period.

### Non-flowering mariposa lilies (Calochortus sp.)

Non-flowering lilies in the genus *Calochortus* that could not be positively identified to the species were protected from project activities to ensure that special-status lilies were not impacted by the project. No potential special-status lilies were damaged or destroyed during the sixth quarterly monitoring period.

### Protected Native Trees (various species); Protected by Ventura County Ordinance

Native tree species that are protected by Ventura County Ordinance were observed in most areas where monitoring activities occurred. As part of the vegetation cutting in NBZ-E and NBZ-W Subareas, several trees including coast live oak (*Quercus agrifolia*), southern California black walnut (*Juglans californica*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and California bay (*Umbellularia californica*) were pruned in accordance with the Ventura County Trimming Ordinance.

### Coast horned lizard (Phrynosoma blainvillii); State Species of Special Concern

Suitable habitat for this species was identified in most of the undeveloped survey sections of the study area. Although there were no observations of coast horned lizard during the sixth quarterly monitoring period, a biological monitor was present during vegetation cutting activities in all suitable coast horned lizard habitat.

### Silvery legless lizard (Anniella pulchra pulchra); State Species of Special Concern

Suitable habitat was identified in many of the undeveloped survey sections of the study area. Although there were no observations of silvery legless lizards during the sixth quarterly monitoring period, a biological monitor was present during vegetation cutting activities in all suitable silvery legless lizard habitat.

### Coast patch-nosed snake (Salvadora hexalepis virgultea); State Species of Special Concern

Suitable habitat was identified in many of the undeveloped survey sections of the study area. Although there were no observations of coast patch-nosed snakes during the sixth quarterly monitoring period, a biological monitor was present during vegetation cutting activities in all suitable coast patch-nosed snake habitats. No coast patch-nosed snakes were observed during this quarterly monitoring period.

### Cooper's Hawk (Accipiter cooperii); State Watch List

There were no recorded observations of Cooper's hawks or their nests during this monitoring period.

### Golden eagle (Aquila chrysaetos); Fully Protected (Federal and State), State Watch List

A resident pair of golden eagles successfully raised two young from a nest site located on the SSFL property boundary in the NBZ-E in the spring of 2011. The eaglets fledged in June 2011 and were not observed roosting at the nest site during this monitoring period.

### Rufous hummingbird (Selasphorus rufus); Federal Bird Species of Conservation Concern

Rufous hummingbirds are primarily found in Ventura County during spring migration en route to nesting grounds in the northwestern U.S. and western Canada. None have been impacted by project activities.

### Allen's hummingbird (Selasphorus sasin); Federal Bird Species of Conservation Concern

Allen's hummingbirds nest in Ventura County and are common in the project area. No nests were found during the monitoring period and no Allen's hummingbirds were impacted by project activities.

### Loggerhead Shrike (Lanius ludovicianus); State Species of Special Concern

Loggerhead shrikes inhabit open country with short vegetation and breed in isolated trees or large shrubs. No observations of loggerhead shrikes or their nests were made during this sixth quarterly monitoring period.

### Nuttall's woodpecker (Picoides nuttallii); Federal Bird Species of Conservation Concern

Nuttall's woodpeckers nest in cavities and are commonly seen in woodland areas of the project area. No nests were observed or impacted by project activities during the sixth quarterly monitoring period.

### Oak titmouse (Baeolophus inornatus); Federal Bird Species of Conservation Concern

Oak titmice are common in oak woodland habitats in the study area. They nest in tree cavities and inhabit nearly every SS that contains mature coast live oaks. No nests were found or impacted by project activities during the monitoring period.

### White-tailed kite (Elanus leucurus); Fully Protected Species (State)

White-tailed kites are uncommon residents in open grasslands, valley oak savannas, marshes, and agricultural areas. These raptors hunt by hovering while searching for their prey, which generally consists of voles. No known nests of this species were documented during these observations or impacted by project activities during the sixth quarterly monitoring period.

### Yellow warbler (Dendroica petechia brewsteri); Federal Bird Species of Conservation Concern

In southern California, yellow warblers mainly nest in riparian woodlands after spending the winter in Mexico and other southern latitudes. No nests of this species were observed or impacted by project activities during the sixth quarterly monitoring period.

### Southern California rufous-crowned sparrow (Aimophila ruficeps canescens); State Watch List

Southern California rufous-crowned sparrows are year-round residents in the Simi Hills and Santa Susana Mountains, typically nesting at or near ground-level near rocky outcrops and associated low-growing shrubby and herbaceous cover. No observations of this species were made during the monitoring period and no nests of this species were found.

### San Diego desert woodrat (Neotoma lepida intermedia); State Species of Special Concern

Suitable habitat was identified in much of the study area, especially areas that contain shrubby vegetation and rocky outcrops. Individuals and nest structures of this species were not harmed by project activities.

### Sixth Quarterly Monitoring Results for Protected Nesting Birds

Native bird species nesting in the study area are protected under several different laws at the State and Federal level, depending on the species. These laws include the Federal Endangered Species Act, Federal Migratory Bird Treaty Act, Federal Bald and Golden Eagle Protection Act, California Endangered Species Act, and California Department of Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. At least 104 native bird species have been recorded in the study area since biological studies in support of the EPA Radiological Study began in 2010. Although biological monitors did survey the areas of work activity for bird nests and nesting behaviors, this sixth quarterly monitoring period is outside of the regulatory period for nesting birds and, furthermore, did not coincide with the nesting season for any of the protected bird species that may be present at the site. No nesting birds or occupied nests were observed during this monitoring period.

### Sixth Quarterly Clearance Surveys and Monitoring Results for Riparian Habitat

Riparian habitat areas were noted in monitoring areas of subarea NBZ-W (SS-P1A, SS-P1B, SS-P1C) as well as subarea NBZ-E (P1J, and SS-P2R), 5B (SS-1), and 7 (SS-39). These areas are ephemeral drainages. Recommendations were given to limit vegetation clearance and the use of the skid steer in these areas. Gamma scanning activities in these areas was performed by TMGS or MMGS (Plate 1D). Table 6 summarizes activities within the riparian habitat areas that occurred during the sixth quarterly reporting period.

### ISSUES ENCOUNTERED AND ADAPTIVE MANAGEMENT

To date there have been no issues with implementing the terms, conditions, avoidance and minimization measures and/or other protective measures required by USFWS in the Biological Opinion. However, beginning with the fourth quarterly monitoring period, as an adaptive management strategy, EPA

#### QUARTERLY BIOLOGICAL MONITORING REPORT

October 2011 – December 2011

implemented more robust measures to protect nesting birds than those referenced in AMM VC-1. Due to the significant potential impacts to nesting birds created by the vegetation clearing component of the project, EPA has determined that nesting bird surveys should be conducted no more than 3 to 5 days before vegetation cutting activities begin because birds can build nests and lay eggs in a few days if undisturbed by human activity (such as during a weekend break in project activity). Additionally, throughout the nesting season, biological monitors are now provided at least 24 to 48 hours notice to allow sufficient time to complete a thorough survey for nests before vegetation cutting or other activities are conducted. These additional conditions are considered to provide adequate protections for nesting birds. In addition to these enhanced monitoring protocols, this monitoring period did not coincide with the nesting season of any protected bird species that may use this habitat and no nesting birds were observed during this quarterly reporting period

EPA considers all other terms and conditions in the Biological Opinion to enhance the protection of Federally listed and State-Listed/Sensitive species to be adequate based on the project implementation to date.

October 2011 – December 2011

### **TABLES**

## Table 1 List of Federally Listed Resources and Critical/Suitable Habitat Observed in Survey Sections during the Sixth Quarterly Monitoring Period

Species/Resource	Survey Sections	Subareas
Braunton's milkvetch	SS-59	5D South
Braunton's milkvetch Critical Habitat Unit 1D	SS-59	5D South
Dudleya sp.	SS-43, SS-59, P1A, P1B, P1C, P1D, P1E, P1F, P1I, P2K	5D South, 8 North, NBZ-W, NBZ-E
Red-legged frog potentially suitable habitat	SS-1, P1A, P1B, P1C, P1E, P2R	5B, NBZ-E, NBZ-W
Coastal California Gnatcatcher potential habitat	SS-43, SS-59, P1A, P1B, P1C, P1I, P2K	5D South, 8 North, NBZ-W

October 2011 – December 2011

## Table 2 List of Federally Listed Resources Impacted During Sixth Quarterly Monitoring Period

Species/ Resource	Survey Section	Date Recorded	Associated project activity <sup>1</sup>	Impact	Description			
Braunton's milkvetch	SS-59	12/01/11	VC	3 plants damaged	Stems were broken on 3 plants, but the plants were not uprooted or destroyed.			
1 VC = Vegetatio	<sup>1</sup> VC = Vegetation Clearing							

Table 3
List of Non-federally Listed Resources Observed during the Sixth Quarterly Monitoring Period (grouped by area/subarea)

Species/Resource	Survey Section	Subarea
Santa Susana tarplant	SS-15, SS-39, SS-43, SS-59, P1A, P1B, P1C, P1D, P1E, P1F, P1I, P1J, P2K, P2R	5A, 5D South, 7, 8 North, NBZ-W, NBZ-E
Malibu baccharis	SS-59	5D South
	SS-59, P1C, P1D	
Plummer's mariposa lily	SS-39, SS-59, P1A, P1D, P1F, P1J, P2R	5D South, 7, NBZ-W, NBZ-E
Protected trees	SS-1, SS-15, SS-39, SS-43, SS-59, P1A, P1B, P1C, P1D, P1E, P1F, P1G, P1H, P1J, P2K, P2R, P3X	5A, 5B, 5D South, 7, 8 North, NBZ-W, NBZ-E
Riparian habitat	SS-1, P1A, P1B, P1C, P1F, P1J, P2R	5B, NBZ-W, NBZ-E

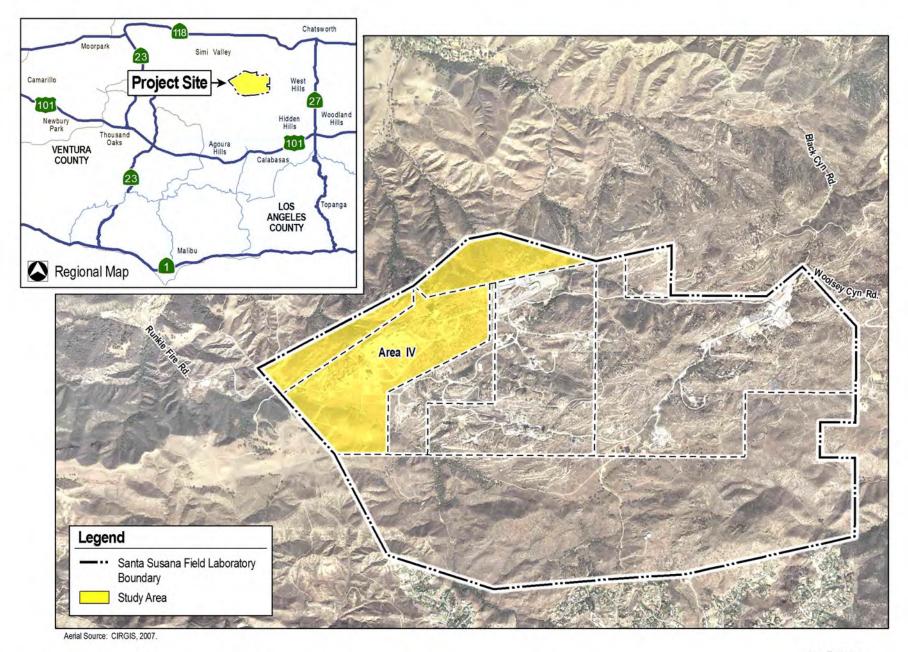
<u>Table 4</u>
List of Non-federally Listed Resources Impacted during the Sixth Quarterly Monitoring Period (excludes non-special status nesting birds)

Species/Resource	Survey Section	Date Recorded	Associated project activity <sup>1</sup>	Impact	Description
Plummer's mariposa lily	SS-59	12/01/11	VC	1 plant severed	One plant that had gone to seed was severed at its base.
Protected trees	P1A, P1B, P1D, P1E, P1F, P1G, P1H, P1I, P1J, P2K, P2R, P3X	–October - December	VC	Trimmed	Unknown number of mature trees trimmed per Ventura County trimming guidelines
<sup>1</sup> VC = Vegetation Clearing	•	•	•		

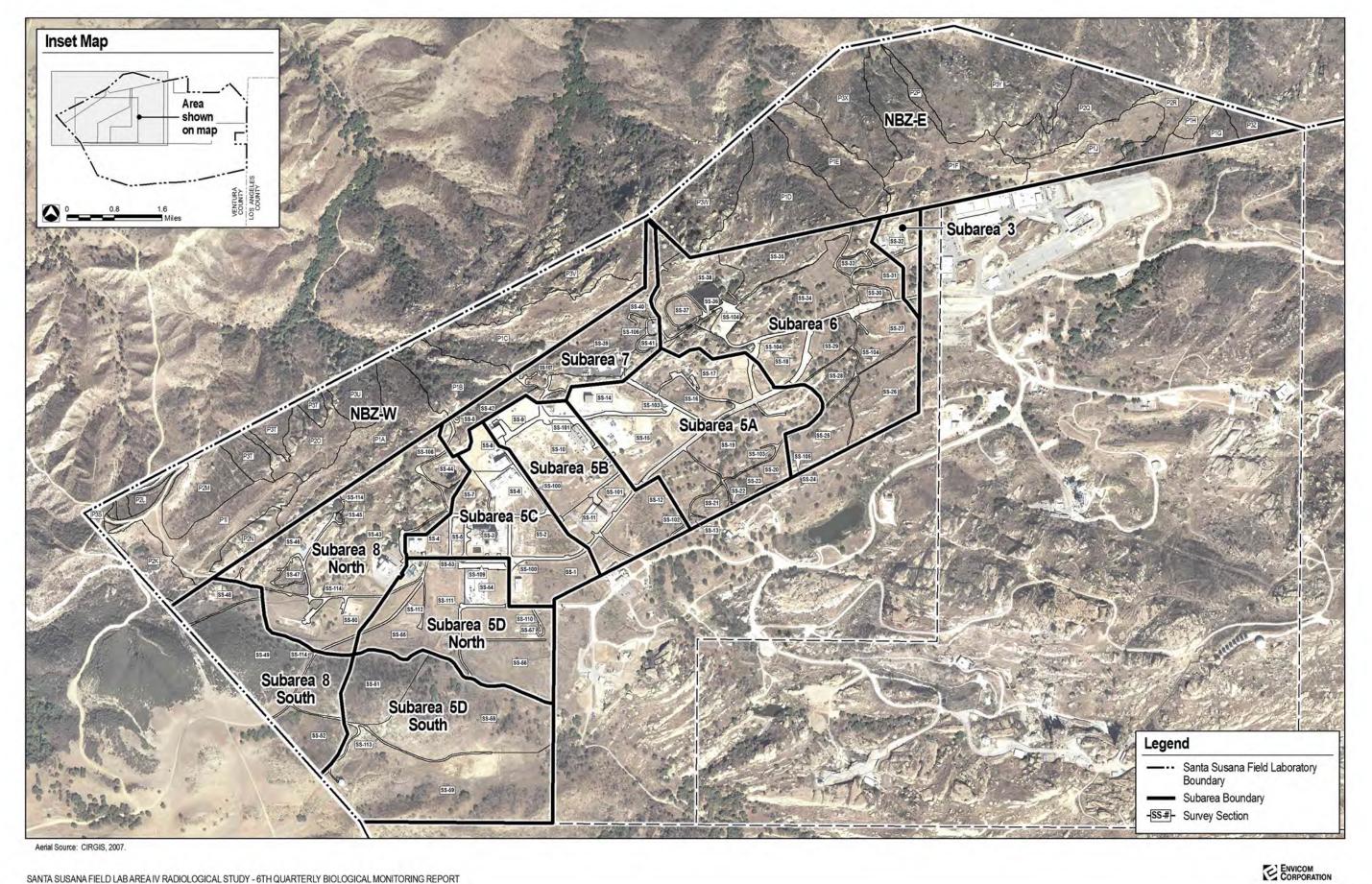
## Table 5 List of Activities Conducted within Riparian Habitat during the Sixth Quarterly Monitoring Period

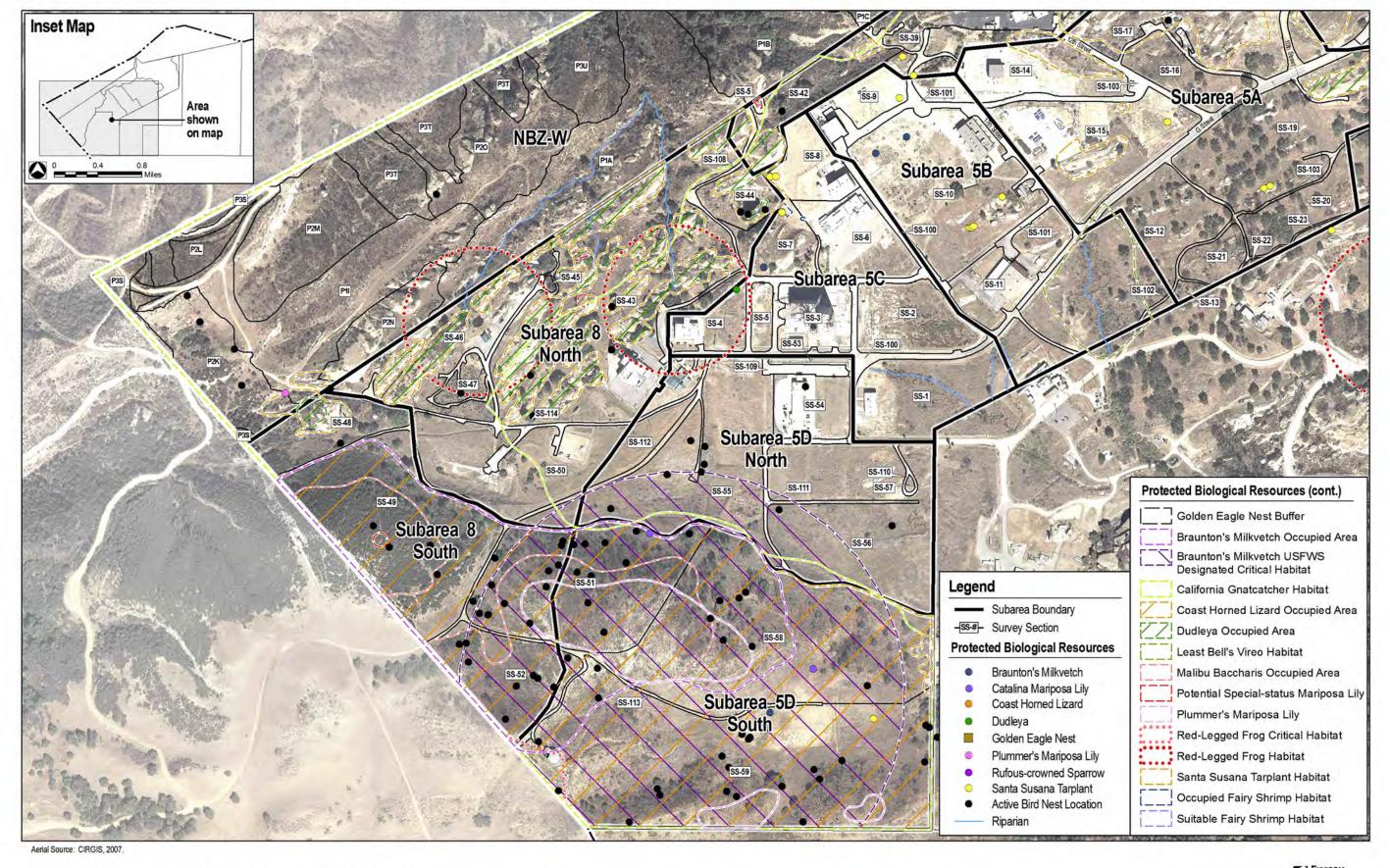
Location	Description	Description of Activities Performed*	Significant Impacts
P1A	Ephemeral drainages	VC, GS	Vegetation selectively trimmed; vegetation clearance and gamma scanning resulted in some siltation of dry creek bottoms after several crossings – soil will be removed following completion of activities in this area. Also, heavy build-up of loose soil near but outside of creek bottom. Impacts resulted in restrictions on use of skid steer in and near ephemeral drainages.
P1B	Ephemeral drainages	VC, GS	Vegetation selectively thinned; vegetation clearance and gamma scanning activities resulted in some siltation of dry creek bottoms after several crossings – soil will be removed following completion of activities in this area.
P1C	Ephemeral drainages	VC	Vegetation selectively thinned
P1I	Ephemeral drainages	VC	Vegetation selectively trimmed
*VC = Vegetat	ion Clearing, GS = Gamma Scanr	ning	

# APPENDIX 1 FIGURES AND PHOTO PLATES

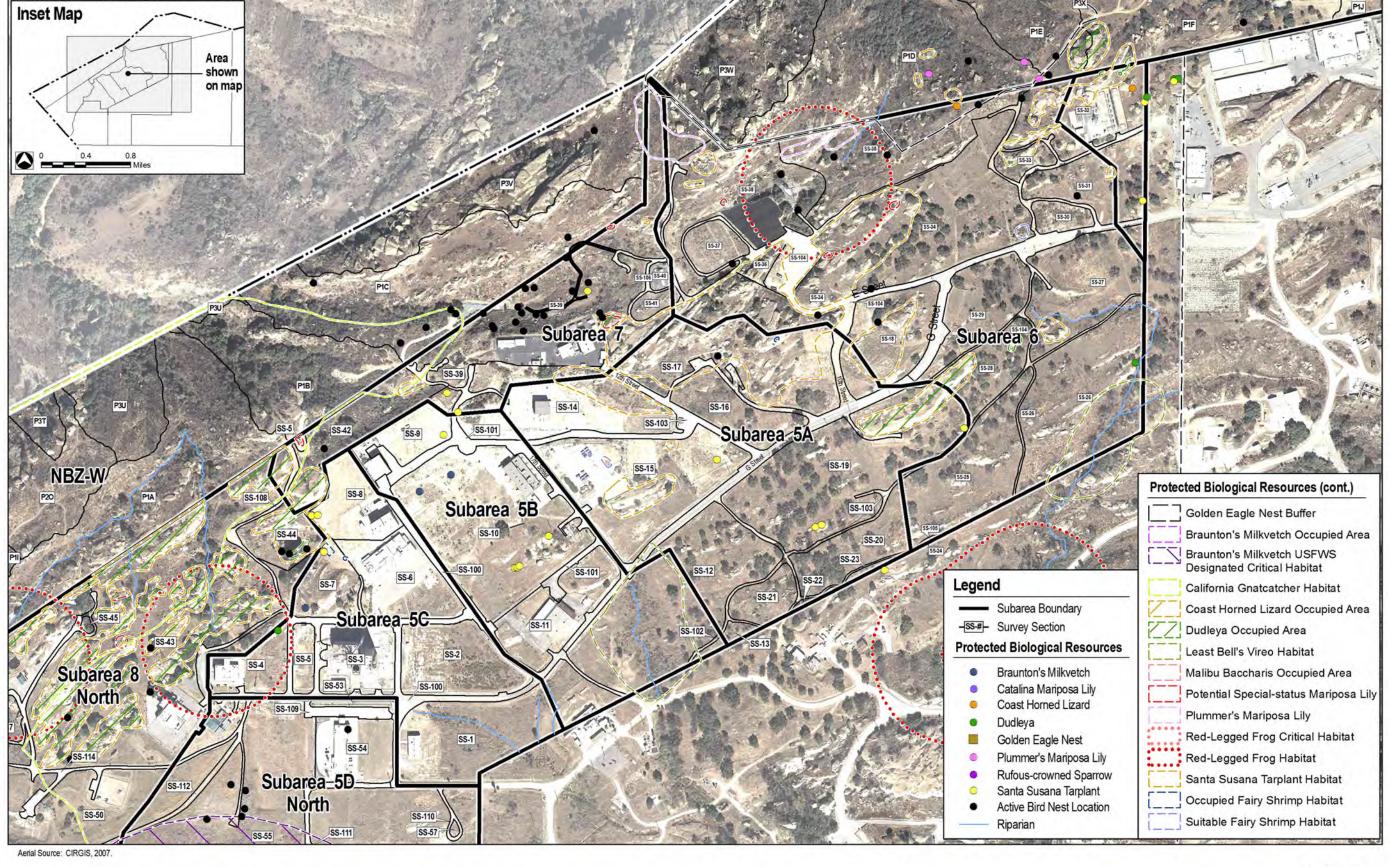








ENVICOM CORPORATION



ENVICOM CORPORATION





ENVICOM CORPORATION



Photo 1A - Braunton's milkvetch flagged for identification.



Photo 1B - Santa Susana tarplant flagged for identification.



Photo 1C - Plummer's Mariposa Lily.



Photo 1D - Gamma scanning in a riparian zone by MMGS.

## **APPENDIX 2**

## SIXTH QUARTERLY BIOLOGICAL CLEARANCE SURVEY FORMS

ined 11300d, Silvey look oss 112012,

Sheet	15	of	1	

Work Area:	NB2. F	P本G	10 raines	and SW.
				par train

### SURVEYS PERFORMED

ID	Survey Type	Biologist	Expiration
	Special Slatus Species	J. Anderson	War 1, 2212
<del></del>	and habitats		

ID	Protected Resources	Flagged (Y/N)	Applicable Avoidance and Minimization Measures
	Ripanum habitat	N	Conditions Annerdix N at 11GL-SAMP. 18
			Montor restricted all activities
	Soutable red-lessed for	s habit	at N GEN-11, UC-5, VC-6; 6-3-11
	(drainage and		of button around drainage Known
	Projected trees		Specific Co. V. P. Peter Co.
	Dudleya. sp.	4-6-	VC-9-16-5-2
	Soute Susara louding	+ Y	VC-10: 65- F: 65- 2:05-5
	Sutable habitattv Stat	ospecies	d Spevil Concern A Monthly NOS
	Not all flussed. Monit	for shun	d Special Concern A Munitur VS Co
CO	ES AND RECOMMENDATION	<u> 15:</u>	the state of the s
10	cionce survey covered in	from itle	+ draininge bottom, banks, and approx. 20
6/	afterior t uplant ha	5. fat	on each side of Oramozer Alla. S
bl	with it PIC- dea	red to	vi crews to orcess drainage trome
V-J-	otennetlant diarrage w	<u> </u>	an habitat and pools of water in
10	ck ravities (denveror	uno fin	m veccitifains a Avuid foot traffic
<i>31.</i> [	1 project och vibres	W. Fen	many roots, Head tooks only in
1,1	Mania Vabitait I	<u>Ovarna</u>	ge for ves donnance. No vehi
- 17	MO - MINULE UK :		
$\frac{2}{\sqrt{2}}$	entable voor-18000	ting ma	titat metuline entand dispossal had
<u> </u>	1000 010 month 700	-	and distance to make the AIR 2 of
1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /	SO, THEAT IL C STORM	$\frac{G}{f} = \frac{G}{2} + \frac{N}{2}$	wird destaurce to north of NBZet
- 15	100 Ce sur Herry Mora	<u>a Garga Gulania.</u> Libo — XIII.	we and who so I have no be to the
J.	Marie Company	<u> </u>	or went and where any histories. All
<u> </u>	Aside wood avery	Town Name and	Extracte of this area of Landers
< (	and the delates to be and a large to the first terms of the second of th	· 1	
41	accord = Swall cond by	e Subre	d & moduratent impacts (crow
1 ,	alling hour jours for	(es) 2	4 10
	ha Zak Wastenill	1. As 6 0 2.	work state adjoicent to avamage with
3iol	ogist Signature:	The state of the s	rock stab adjacent to dramage just to
- 7	7)	And the second second	Date: <u>/0.14.11</u>
	· · · · · · · · · · · · · · · · · · ·	4 742	

Santa Susana Field Laboratory Area IV And NBZ Radiological Study
US EPA Region 9

Protected trees in drainage (Quercus especial United all Unhellutana california,

### BIOLOGICAL RESOURCE CLEARANCE SURVEY FORM

Work Area: PH PIG				
	,, 01111111	PIH.	1 1 4	

### SURVEYS PERFORMED

ID	Survey Type		Survey Type Biologist	
	General Clo	earance	Carl Wishner	Feb 1, 2017
		· · · · · · · · · · · · · · · · · · ·		
	·	·		

### **SURVEY FINDINGS**

ID	<b>Protected Resources</b>	Flagged (Y/N)	Applicable Avoidance and Minimization Measures
	Santa Susua Torpland Dudleya SP	K	
	Dudlena SD	· N	
	(		
			11.1

THE COLUMN THE COLUMN THE ACTION OF THE COLUMN THE COLU
NOTES AND RECOMMENDATIONS:
Area PIH extremely steed on slopes leading into
Arabacca From the West. VIII Vally maccessible.
and late for regetation clearance or Gamma
en uning Technical climbing acar would be
required to Santa Surana tarplants and dudleya few
in number in holy to be affected.
Alexa PIG - well incised intermittent stream with vova
spanse riparian vegetation, most accessible from stair dell
and of Wells 13 road. No flow in channel, but some
standing water. Very large bouldors in northorly, downstream
Divison would make southing difficult. Upland areas
Wary steep access from about strain to wost. Some stopes
along thream inaccessible for veg cleaning or scanning. Upper
Distion to southeast flatter possibly accessible. Wo
The Hou To Sovineas Traffer Last of the file
squartive resources prosent at this time.
Biologist Signature: Cultural Date: 0 of 21,2011
Biologist Signature.
HGI, Field Supervisor Signature: All Mary And Date: 1997 HOIL
HGL Field Supervisor Signature: Date Date

Data	Oct 24, 2011	,
Daie:	001 201/0000	

Sheet	_ of	: _	

### BIOLOGICAL RESOURCE CLEARANCE SURVEY FORM

1.0				 	 	
		Work Area:	PLD			
•	 		KULL WESS	 		**

### **SURVEYS PERFORMED**

ID	Survey Type	Biologist	Expiration
	Charance special kequeste.	Carl Wishaca	Feb1,2012
	I mule route!		
	" red-lessed from habite		

### **SURVEY FINDINGS**

ID	Protected Resources	Flagged (Y/N)	Applicable Avoidance and Minimization Measures

NOTES AND RECOMMENDATIONS: At the request of Mr. Math Birney I examined the "Dossible Mule Foutz In Area PID leading from the currently accessible work area SRE into a primary drainage with two minor tributa is extremely steed through deuse chazarra Wonetheless. 000053 balternative access toute deemed requiring 1835 hrush cleaning was At Leah Speraisa's regrest I examined a voote for vehicular access by the veg crow, near the SRE wond, within "Red-legged from habitat. Uron that examination, I determined there are no red legged from in the area to be used, and authorized use of the area, ologist Signature: Can Charles Al Biologist Signature:\_ Date HGL Field Supervisor Signature:

## **APPENDIX 3**

## SIXTH QUARTERLY BIOLOGICAL MONITORING FORMS

**ENVICOM CORPORATION** 

03

Date: October

2011

Biologist: Jack Stone

### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1E	0715-1330	VC	Chipper, skid steer w/forks, chain saws, weed whackers
7.00				
-	7,			

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts	
P1E	Nesting bird habitat	VC-1	None	
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed	
	Coast horned lizard occupied habitat	Biological monitor	None	
		·		
· · · · · ·				

### **NOTES AND RECOMMENDATIONS**

Area access through Brandeis-Barden Campus at American Jewish University, Simi Valley.

P1E is near golden eagle nest that was active earlier this year.

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat.

Biologist Signature:	. •	Date:
HGL Field Supervisor Signature:		Date:

**ENVICOM CORPORATION** 

04

Date: October

2011

Biologist: Jack Stone

### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Üsed
NBZ- E	P3X	0715-1335	VC	Chipper, skid steer w/forks, chain saws and weed whackers.
			·	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P3X	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
			- None

### NOTES AND RECOMMENDATIONS

Area access through Brandeis-Barden Campus at American Jewish University, Simi Valley.

P3X is near golden eagle nest that was active earlier this year.

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

Date:	
05	Biologist: Jack
October	Stone
2011	

### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1F		VC	Chain saws, weed whackers, loppers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None

### NOTES AND RECOMMENDATIONS

Heavy precipitation all day today.

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

06

Date: October

2011

Biologist: Jack Stone

### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1F	0710-1000 1100-1400	VC	Chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None

### NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

**Date:** Oct 7, 2011

Biologist: Brady Daniels

### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ	Brandels	700	VC	Hand tools, chainsaw, weed eater, loppers
NBZ-E				

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
Brandell	Riparian oak woodland, creek channel, and native trees.	flagging and monitoring	Temporary noise disturbance. None
	dans .		
			,
	, in the second		

### NOTES AND RECOMMENDATIONS

Today was a half day planned HGL field meetings. Equipment and crew mobilized from the NBZ offsite through the Brandeis ranch easment. Vehicles were staged adjacent to an intermittent drainage, adequate parking was available staying outside of riparian features and out of live oak driplines. The proposed clear and grub area was inaaccessible for crews and equipment. It was decided to continue clearing further down the slope adjacent to an area of archeological significance. Archeologist and Native American Monitors cleared areas prior to coninunation of clear and grub efforts.

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

Biologist: Jack

Stone

Date:		·
October 2011		

#### **ACTIVITIES MONITORED**

	Survey - Section		Activities Monitored*	Equipment Used	
NBZ- E	P1F	0755-1100 1200-1500	VC	Chipper, skid steer w/forks, chain saws, weed whackers	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
-	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None
	in the second se		
···			· .
	· · · · · · · · · · · · · · · · · · ·	- And Andrews	

### NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

Date:	•
11	Biologist: Jack
October	Stone
2011	

## **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1F	0805-1100 1215-1500	VC	Chipper, skid steer w/forks, chain saws, weed whackers
	,			

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None

## NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

Date: Oct 12, 2011

Biologist: Brady Daniels

## **ACTIVITIES MONITORED**

Sub- area	Survey		Activities		
area	Section	Time	Monitored*		Equipment Used
		700	none	none	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
			,

#### NOTES AND RECOMMENDATIONS

Standby until it was determined that a second vegetation clearing crew would not front.	split off from the main work
Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

13

Date: October

2011

Biologist: Jack Stone

## **ACTIVITIES MONITORED**

Survey Section	Time	Activities Monitored*	Equipment Used	
P1F	0755-0945 1355-1500 VC		Chipper, chain saws, weed whackers, skid steer w/forks, skip loader	
		0755-0945	DIE 0755-0945 NG	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None

#### NOTES AND RECOMMENDATIONS

Biologist Signature:		Date:
HGL Field Supervisor Signature:	ı	Date:

**ENVICOM CORPORATION** 

**Date:** 10 /14/11

US EPA Region 9

Biologist: J. Anderson

# ACTIVITIES MONITORED

Sub- area	Survey Section	Time	Activities Monitored*		Equipment	Used	7101
1977-E		700-1100	VC.	100000	· Mariant	10010	5000
777.V~C	<u> </u>	1 2 3 0 - 7.0 0					

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

# MONITORING RESULTS

Survey Section	Profected Resources Encountered:	AMM's Implemented	Residual Impacts
The state of the s	Dinfected trees	Trunciad per Ma County	None thou
p4 6	Dane		

NOTES AND RECOMMENDATIONS
Collection of the Said when wanting of PTI-
South the second of the second
Biologist Signature: Date:
HGI. Field Supervisor Signature:  Date: /// //
HGL Field Supervisor Signature: Date: ///. //
And the state of t
Santa Susana Field Laboratory Area IV And NB7. Radiological Study  Page 1 of 1

**ENVICOM CORPORATION** 

17

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1J	0820-1100 1200-1500	VC	Chain saws, weed whackers, loppers
-				

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1J	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed  None  None
	Plummer's mariposa lily	VC-2	
	Santa Susana tarplant	VC-10	

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

18

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub-	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	PIJ	0755-1100 1210-1500	VC	Chain saws, weed whackers, loppers, chipper, skid steer
•				

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1J	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Santa Susana tarplant	VC-10	None
		:	

#### NOTES AND RECOMMENDATIONS

	•
Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

19

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	. Time	Activities Monitored*	Equipment Used
NBZ- E	P1D	0800-1100 1210-1500	VC	Chain saws

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1D	Nesting bird habitat	VC-1	None
·	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None
	Coast horned lizard occupied habitat	Biological monitor present	None

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	·	Date:
HGL Field Supervisor Signature:	· .	Date:

**ENVICOM CORPORATION** 

20

Date: October 2011

Biologist: Jack Stone

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P2R, P1G, H	0815-1100 1200-1500 VC	Chain saws, weed whackers	
	·		, ., .	

**ACTIVITIES MONITORED** 

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts	
P2R, P1G, H	Nesting bird habitat	VC-1	None	
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed	
	Coast horned lizard occupied habitat	Biological monitor present	None	
		·	:	

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:	_
HGL Field Supervisor Signature:	Date:	_

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

**ENVICOM CORPORATION** 

21

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1J P2R	0805-1100 1200-1500	VC	Chipper, skid steer, chain saws, weed whackers, skip loader, loppers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	'AMM's Implemented	Residual Impacts
P1J P2R	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Santa Susana tarplant	VC-10	None

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

26

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment: Used
NBZ- E	P1D	1205-1500	VC	Chain saws
			•	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey. Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1D	Nesting bird habitat	VC-1	None
	Plummer's mariposa lily	VC-2	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Coast horned lizard occupied habitat	Biological monitor present	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None
		4.70	

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:	
HGL Field Supervisor Signature:	Date:	

**ENVICOM CORPORATION** 

31

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1D	0820-0950	GS	TMGS
	P1I	1050-1125	GS	TMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey. Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1D	Nesting bird habitat	VC-1	None
66	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
"	Coast horned lizard occupied habitat	Biological monitor present	None
	Dudleya	VC-9	None
66	Santa Susana tarplant	VC-10	None
66	Plummer's mariposa lily	VC-2	None
P1I	Nesting bird habitat	VC-1	None
"	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
"	Coast horned lizard occupied habitat	Biological monitor present	None
"	San Diego desert woodrat occupied habitat	Biological monitor present	None
66	Dudleya	VC-9	None
66	Santa Susana tarplant	VC-10	None

#### NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

False indigo bush flagged as protected (host plant for California dogface butterfly Zerene eurydice).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

ENVICOM CORPORATION

12

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P1F	0805-1100 1200-1500	VC	Chipper, skid steer w/forks, chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survéy Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1F	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
	Plummer's mariposa lily	VC-2	None
	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None

## NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California specia	l concern species	(coast horned I	izard, coast	patch-nosed
snake and San Diego desert woodrat).				_

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

09

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*		quipment Used
NBZ- E	P1J	0825-1030	GS	ERGS 2	

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1J	Nesting bird habitat	GS-1	None
"	Protected trees	GS-1	None
""	Riparian habitat	App. N-5	None
"	Plummer's mariposa lily	G-1	None
. "	Santa Susana tarplant	G-5	None
	·		
• •			

#### NOTES AND RECOMMENDATIONS

P1J includes ephemeral riparian habitat with potential for federally listed as threatened California red-legged frog and also supports suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

28

Date: October

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- W	P1A	0805-1100 1210-1400	VC	Chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts	
P1A	Nesting bird habitat	VC-1	None	
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed	
	Plummer's mariposa lily	VC-2	None	
	Dudleya	VC-9	None	
	Santa Susana tarplant	VC-10	None	
ک	Coast horned lizard occupied habitat	Biological monitor present	None	
	Riparian habitat	App. N-3	None	
			,	

#### NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Shrubs along ephemeral riparian habitat left intact, only thinned enough so that GS activities can proceed.

	•		
Biologist Signature:		Date:	
HGL Field Supervisor Signature:	·	Date:	

**ENVICOM CORPORATION** 

01

Date: November

Biologist: Jack Stone

2011

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
. 7	SS-39	0840-1040	GS	MMGS
8N	SS-43	1050-1140	GS	HPGe
NBZ- E	P1D	1300-1330	GS	MMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts None	
SS-39	Nesting bird habitat	GS-1 ·		
. "	Protected trees	GS-1	None	
66	Plummer's mariposa lily	GS-1	None	
66	Santa Susana tarplant	GS-5	None	
SS-43	Nesting bird habitat	GS-1	None	
**	Protected trees	GS-1	None	
44	Dudleya	GS-1	None	
"	Santa Susana tarplant	GS-5	None	
P1D	Nesting bird habitat	GS-1	None	
"	Protected trees	GS-1	None	
66	Plummer's mariposa lily	GS-1	None	
"	Dudleya	GS-1	None	
66	Santa Susana tarplant	GS-5	None	

# NOTES AND RECOMMENDATIONS

All 3 areas support suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat). SS-43 contains both riparian habitat with potential for federally listed as threatened California red-legged frog and suitable habitat for also federally listed as threatened Coastal California gnatcatcher.

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

# Stoneswoogy & grail room

## BIOLOGICAL RESOURCE MONITORING FORM

**ENVICOM CORPORATION** 

Date: 11/2/11

US EPA Region 9

Biologist: J. Anderson

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities :	Equipment Used
MEST	1 PVA	<a17-230< th=""><th>VC</th><th>whicher changens have</th></a17-230<>	VC	whicher changens have
1707-A	1 1/2K	300-230	- XC-	Copy Marc Character to before

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM?'s Implemented	Residual Impacts
OLA 1405A	Protected trees	Vantura Co. triumis	Trimmod
	coestine only, elverberry	guidelines	
アカレ	Dintertell trees eldertien	( (	
DIA	Sa ba Sugar translant	116-10	llone
P212	Dudleng Sp. Linel	1/6-9	Non +
DIA	Sudable without habitat	VC-5	None.
	for rectisced frug		
CALPER	Somable habital for states	Monte present	1000
-	Special Spead Correr	<del>Carlo</del>	A desired Co
4K 1 PZK	Sentable complete Calif gratek	tet ther 6th-8	10 on @

MAJPER Sintable combat Calif gralekatther 6	er-8 None
NOTES AND RECOMMENDATIONS	1 Carat
A Avens of surable habitat for rocky	horned lizard
paleboneed snike, San Dies desc	int to adjust ?
the metrical harm prominers havened class	ing vegetation Claranic
Biologist Signature: HGL Field Supervisor Signature: (Legal Janie)	Date: 11   3   11   Date: 11   17   17
Santa Susana Field Laboratory Area IV And NBZ Radiological Study	Page 1 of 1

**ENVICOM CORPORATION** 

02

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub-area	Survey Section	Time	Activities Monitored*	Equipment/Used
NBZ- E	P1E	0815-1022	GS	MMGS
NBZ- W	P1A	1205-1500	VC	Chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1E	Nesting bird habitat	GS-1	None
"	Protected trees	GS-1	None
"	Dudleya	GS-1	None
"	Santa Susana tarplant	GS-5	None
P1A	Nesting bird habitat	VC-1	None
44	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
66	Coast horned lizard occupied habitat	Monitoring biologist present	None
"	Dudleya	VC-9	None
	Santa Susana tarplant	VC-10	None
"	Plummer's mariposa lily	VC-2	None

## NOTES AND RECOMMENDATIONS

Both areas include ephemeral riparian habitat with potential for federally listed as threatened California redlegged frog and support suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

03

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- W	P1A	0755-1100 1200-1305	VC	Chain saws, weed whackers, skip loader
"	P1I	1315-1500	VC	Chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1A	Nesting bird habitat	VC-1	None
"	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
"	Coast horned lizard confirmed occupied habitat	Monitoring biologist present	None
"	Plummer's mariposa lily	VC-2	None
<b>"</b>	Dudleya	VC-9	None
"	Santa Susana tarplant	VC-10	None
P1I	Nesting bird habitat	VC-1	None
46	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
"	Dudleya	VC-9	None
"	Santa Susana tarplant	VC-10	None
<b></b>	San Diego desert woodrat confirmed occupied habitat	Monitoring biologist present	None

#### NOTES AND RECOMMENDATIONS

P1A includes include ephemeral riparian habitat with potential for federally listed as threatened California red-legged frog and both areas P1A and P1I support suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

04

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- W	P1C	0855-1100	GS	TMGS & STGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1C	Nesting bird habitat	GS-1	None
"	Protected trees	GS-1	None
"	Riparian habitat	App. N-3	None
46	Dudleya	GS-1	None
ėc	Santa Susana tarplant	GS-5	None
66	Coast horned lizard confirmed occupied habitat	Monitoring biologist present	None

#### NOTES AND RECOMMENDATIONS

Area P1C includes ephemeral riparian drainages with potential for federally listed as threatened Red-legged frog habitat and supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

07

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ-	P2K	0800-1100 1200-1500	VC	Chain saws, weed whackers, chipper, skid steer w/forks

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P2K	Nesting bird habitat	VC-1	None
	Protected trees	Ventura County Trimming Guidelines	Trees trimmed

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

08

November Date:

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Control of the Control of the	Survey Section		Activities Monitored*	Equipment Used
NBZ- W	P1A	0900-1105	GS	MMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1A	Nesting bird habitat	GS-1	None
66	Protected trees	GS-1	None
66	Coast horned lizard confirmed occupied habitat	Biological monitor present	None
66	Plummer's mariposa lily	GS-1	None
66	Riparian habitat	App. N-5	None
<i>&gt;</i> "	Dudleya	GS-1	None
66	Santa Susana tarplant	GS-5	None

#### NOTES AND RECOMMENDATIONS

Area includes ephemeral riparian habitat with potential for federally listed as threatened California red-legged frog and supports suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

09

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- W	P1B	0800-1050	VC	Chain saws, weed whackers
"	P2K	1205-1500	VC	2 chippers, skid steer w/forks, chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1B	Nesting bird habitat	VC-1	None
46	Protected trees	Ventura County Trimming Guidelines	Trees trimmed
66	Coast horned lizard confirmed occupied habitat	Monitoring biologist present	None
66	Riparian habitat	App. N-5	None
"	Dudleya	VC-9	None
66	Santa Susana tarplant	VC-10	None

#### NOTES AND RECOMMENDATIONS

Area includes ephemeral riparian habitat with potential for federally listed as threatened California red-legged frog and supports suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat).

Biologist Signature:	Date:	
HGL Field Supervisor Signature:	Date:	

**ENVICOM CORPORATION** 

10

November Date:

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time			Equipment U	sed
NBZ- W	P1B	0815-0935	GS	MMGS		,

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### **MONITORING RESULTS**

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P1B	Nesting bird habitat	GS-1	None
66	Protected trees	GS-1	None
66	Riparian habitat	App. N-5	None
44	Coast horned lizard confirmed occupied habitat	Biological monitor present	None
66	Dudleya	GS-1	None
46	Santa Susana tarplant	GS-5	None

## NOTES AND RECOMMENDATIONS

Area includes ephemeral riparian habitat with potential for federally listed as threatened California red-legged frog and supports suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat).

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

11

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	TACHAILIES	P Equipment Used
NBZ- W	P2K	0830-1050	GS	TMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encou		emented Residual Impacts
P2K	Nesting bird habitat	GS-1	None
46	Protected trees	GS-1	None
46	Dudleya	GS-1	None
66	Santa Susana tarplant	GS-5	None

#### NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

14

Date: November

2011

Biologist: Jack Stone

## **ACTIVITIES MONITORED**

	- Survey Section		Activities Monitored*	Equipment Used
NB2	P2X	0930-1100 1210-1255	VC	Chipper, skid steer w/forks

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P2X			
·····		,	
		•	

## NOTES AND RECOMMENDATIONS

Biologist Signature:	·	Date:
HGL Field Supervisor Signature:		Date:

**ENVICOM CORPORATION** 

30

Date: November

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- W	P2K	0815-1200 1245-1330	GS	TMGS, STGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encou	ntered AMM's Imple	emented Residual Impacts
P2K.	Nesting bird habitat	GS-1	None
"	Protected trees	GS-1	None
66	Dudleya	GS-1	None
46	Santa Susana tarplant	GS-5	None

#### NOTES AND RECOMMENDATIONS

Area supports suitable habitat for California special concern species (coast horned lizard, coast patch-nosed snake and San Diego desert woodrat).

Yellow-rumped Warbler found on the ground under a trimmed shrub dead. No obvious signs of trauma, cause undetermined.

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

01

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

	Survey Section	Time	Activities Monitored*	Equipment Used
5C	SS-6	0750-1100 1200-1300	VC	Rotary mower on skid steer, chain saws, weed whackers
5DSouth	SS-59	1315-1500	VC	Rotary mower on skid steer (mulching cut brush piles), chain saws, weed whackers

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
SS-6	Nesting bird habitat	VC-1	None
SS-59	Protected trees	No trimming today	None
66	Nesting bird habitat	VC-1	None
"	Plummer's mariposa lily	VC-2	1 plant severed at ground level*
66	Coast horned lizard confirmed occupied habitat	Monitoring biologist present	None
66	Malibu baccharis	VC-2	None
66	Braunton's milk vetch	VC-3	3 broken stems**

#### NOTES AND RECOMMENDATIONS

Area SS-6 is a flat, previously graded area that includes no protected resources other than occasional nesting birds.

Area SS-59 supports suitable habitat for California special concern species (coast horned lizard, coast patchnosed snake and San Diego desert woodrat).

\*One Plummer's mariposa lily (CNPS listed as rare) that had already gone to seed was severed at it's base.

\*\*Three Braunton's milk vetch plants each had a broken stem but were not uprooted or destroyed.

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

02

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

	Survey Section	Time	Activities Monitored*	Equipment Üsed
5D South	SS-59	0805-1040	VC	Chain saws, weed whackers
5B	SS-1	1050-1335	VC	Weed whackers, chain saws, loppers
-5A	SS-15	1340-1500	VC	Weed whackers, chain saws, skid steer w/rotary mower for mulching cut brush piles

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
SS-59	Nesting bird habitat	VC-1	None
66	Protected trees	Tree not trimmed today	None
66	Coast horned lizard confirmed occupied habitat	Biological monitor present	None
66	Malibu baccharis	VC-2	None
66	Braunton's milk vetch	VC-3	None
"	Plummer's mariposa lily	VC-2	None
SS-1	Nesting bird habitat	VC-1	None
44	Protected trees	Trees not trimmed today	None
"	Riparian habitat	App. N-5	None
SS-15	Nesting bird habitat	VC-1	None
66	Protected trees	Trees not trimmed today	None
cc	Santa Susana tarplant	VC-10	None

#### NOTES AND RECOMMENDATIONS

Area SS-1 includes ephemeral riparian habitat with potential for federally listed as threatened California redlegged frog.

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

05

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
5A	SS-15	0805-0900	VC	Chain saws, weed whackers, loppers, skid steer w/rotary mower for mulching cut brush piles
6,5A	SS-34	0935-1010	VC	Chain saws, weed whackers, loppers, skid steer w/rotary mower for mulching cut brush piles
5C	SS-5	1015-1045	VC	Chain saws, weed whackers, loppers, skid steer w/rotary mower for mulching cut brush piles
"	SS-1	1205-1320	VC	Weed whackers, chain saws, loppers
8 North	SS-43	1325-1330	VC	Weedwhackers
6	SS-34	1335-1500	VC	Weed whackers, chain saws, loppers, skid steer w/rotary mower for mowing and mulching cut brush piles

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
Section	·	Aww.s.mpenenea	ks Kestutai impaets
		·	
	· · · · · · · · · · · · · · · · · · ·		<u> </u>
i		· · · · · · · · · · · · · · · · · · ·	

## NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date:

**ENVICOM CORPORATION** 

06

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
NBZ- E	P2R	0830-1015	GS	TMGS
5D South	SS-59	1110-1140 1145-1400	GS	TMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

#### MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
P2R	Nesting birds	GS-1	None
66	Protected trees	GS-1	None
"	Riparian habitat	App. N-5	None
SS-59	Nesting birds	GS-1	None
"	Protected trees	GS-1	None
66	Coast horned lizard confirmed occupied habitat	Monitoring biologist present	None
"	Plummer's mariposa lily	GS-1	None
"	Dudleya	GS-1	None
"	Santa Susana tarplant	GS-5	None
"	Malibu baccharis	GS-1	None
66	Braunton's milk vetch	GS-1	None

#### NOTES AND RECOMMENDATIONS

Area P2R includes ephemeral riparian drainages with potential for federally listed as threatened Red-legged frog habitat.

Biologist Signature:_			Date:	
-	·	-		

**ENVICOM CORPORATION** 

07

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

September 19 March 19	Survey Section		Activities Monitored*	Equipment Used
5D North	SS-43	0850-1000	GS	ERGS 2, MMGS (on Trojan horse), TMGS, STGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
SS-	Marginal nesting bird habitat*	GS-1	None

## NOTES AND RECOMMENDATIONS

\*This area is a graded, flat area that resembles a deteriorated parking lot.

Biologist Signature:	 Date:	
HGL Field Supervisor Signature:	 Date:	

**ENVICOM CORPORATION** 

08

Date: December

2011

Biologist: Jack Stone

#### **ACTIVITIES MONITORED**

Sub- area	Survey Section	Time	Activities Monitored*	Equipment Used
5D South	SS-59	0840-1130 1300-1435	GS	TMGS

<sup>\*</sup> VC = Vegetation Clearing, GS = Gamma Scanning, GP = Geophysical Survey, SS = Soil Sampling, MWS = Monitor Well Sampling, SWSS = Surface Water and Sediment Sampling

## MONITORING RESULTS

Survey Section	Protected Resources Encountered	AMM's Implemented	Residual Impacts
SS-59	Nesting bird habitat	GS-1	None
66	Protected trees	GS-1	None
66	Coast horned lizard confirmed occupied habitat	Biological monitor present	None
66	Malibu baccharis	GS-1	None
66	Braunton's milk vetch	GS-1	None
**	Plummer's mariposa lily	GS-1	None

## NOTES AND RECOMMENDATIONS

Biologist Signature:	Date:
HGL Field Supervisor Signature:	Date: