

The Boeing Company
Santa Susana Field Laboratory
5800 Woolsey Canyon Road
Canoga Park, CA 91304-1148

October 27, 2008
In reply refer to SHEA-107909

Mr. Thomas Johnson
U.S. Department of Energy
Energy Technology Engineering Center
P.O. Box 10300
Canoga Park, CA 91309



Subject: Contract DE-AC03-99SF21530, Environmental Restoration and
Remediation of the former Energy Technology Engineering Center
(ETEC) Area IV Emergency Readiness Assurance Plan (ERAP), BD02-
399-05, CDR#013

Dear Mr. Johnson:

The Santa Susana Field Laboratory, Area IV Emergency Readiness Assurance Plan (ERAP) BD02-399-05 is enclosed. This report is submitted annually to comply with Department of Energy Contract DE-AC03-99SF21530, Attachment VIII, DOE 0151.1.

If you have any questions about this report, please contact me at (818) 466-8782.

Sincerely,

A handwritten signature in cursive script that reads "Ravnessh C. Amar".

Ravnessh Amar
Program Manager
DOE Site Closure

Enclosure as noted

cc: Patricia R. Berry, DOE, Oakland, CA



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SANTA SUSANA FIELD LABORATORY, AREA IV EMERGENCY READINESS ASSURANCE PLAN

Prepared by
R. Amar and E. Walsh

The Boeing Company

Contract DE-AC03-99SF21530

**THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY, AREA IV
EMERGENCY READINESS ASSURANCE PLAN
NOVEMBER 2008**

BACKGROUND INFORMATION

The Boeing Company operates the Santa Susana Field Laboratory, a portion of which is identified as Area IV. The buildings associated with DOE ETEC Closure Contract DE-AC03-99 SF21530 are located in Area IV. Other buildings not part of the DOE ETEC Closeout contract are also located in Area IV. This Emergency Readiness Assurance Plan report describes activities supporting all of Area IV.

EXECUTIVE SUMMARY

- A. Emergency preparedness and readiness at Santa Susana Field Laboratory (SSFL) is maintained at a level commensurate with the hazards. The Santa Susana Field Laboratory is operated by the Environment, Health and Safety (EHS) function within the Engineering, Operations and Technology (EO&T) organization of Boeing. The Disaster Preparedness Plan, prepared for the SSFL and West Hills facility, is the senior requirements document for the program. Senior management is committed to ensuring West Hills and SSFL emergency preparedness program objectives are met.
- B. A comprehensive drill-and-exercise program continues to be the focus of the EHS emergency management program. It provides for a drill/exercise design committee to be chaired by the Emergency Coordinator and includes training for controllers and evaluators. All emergency response organizations participate in exercises on a regular basis. These exercises are designed to test all West Hills and SSFL emergency response organizations that require the Incident Commander to prioritize response. During the first ten months of 2008, approximately 100 drills involving hazardous materials response, structure fire, brush fire, rescue, duress and intrusion were conducted at SSFL.
- C. Coordination between SSFL emergency planners and state and local government continues to be effective. This was demonstrated during the September 28, 2005 Topanga brush fire. While the fire burned approximately 75% of the brush on the SSFL site, relatively few structures (10) were damaged or destroyed. No structures were affected in Area IV. A Mutual Aid Agreement between Boeing and Ventura County Fire Department, signed in 1973, remains in effect.
- D. Resources are adequate to maintain a viable emergency preparedness program. Support in FY 2008 was approximately one FTE. The Program Manager has drawn on existing resources such as trained Fire Department personnel to assist with the emergency management program. Funding remains adequate in view of the low hazards associated with the SSFL.

PROGRAM DESCRIPTION

Emergency Readiness Assurance Plan Adequacy Description

Site-wide emergency planning is based on the two most credible, worst-case scenarios, a large earthquake on the San Andreas Fault or a wildland fire under firestorm conditions. Emergency plans for hazardous materials incidents are documented in the "Santa Susana Field Laboratory Hazardous Materials Response Business Plan and Inventory, (SSFL Spill Prevention and Response Plan)". The plan adequately describes an integrated emergency preparedness program.

Site Description and Mission

SSFL is located in southeastern Ventura County, near the crest of the Simi Hills at the western border of the San Fernando Valley. The 2,849-acre field lab is bordered by Bell Canyon on the south; the Santa Monica Mountains Conservancy's Sage Ranch Park and the Brandeis-Bardin Institute on the north; several ranches and two mobile home parks on the east; and Meier and Runkle Canyons on the west. The Field Lab was established after World War II as a site to test engines for missiles, spacecraft, and rockets. The last planned rocket engine test was completed in March, 2006, and the site is in the cleanup and shutdown phase. The U.S. Department of Energy's Energy Technology Engineering Center (ETEC) includes facilities, buildings, and structures located on approximately 90 acres of Boeing owned land in Area IV. ETEC was used to conduct energy testing and research, including nuclear energy research. Nuclear work has not been performed at the site since the late 1980's. Today, the primary mission at the Area IV DOE ETEC site is cleanup of residual low-level radiological and chemical contamination.

Emergency Plans and Status

The Master Emergency Plan (MEP) has been incorporated into the Disaster Preparedness Plan which was updated in 2008. The updated plan reflects the Lab's current organization as well as responsibilities and actions for the various emergency response organizations. A Boeing, West Hills Evacuation Plan was developed in April 1999 and distributed to all employees; in conjunction with this plan, a 30-minute training module was flowed from the executive staff down to each employee. In addition, Boeing has posted Emergency Instruction diagrams in each building at SSFL to provide instructions and show the location of each emergency assembly area. The "Santa Susana Field Laboratory Hazardous Materials Response Business Plan and Inventory, (SSFL Spill Prevention and Response Plan)" is revised annually and is typically submitted to regulatory agencies each November. Chemical Inventory updates are periodically prepared as required and submitted to Ventura County; the latest update was submitted in April, 2007.

Concept of Emergency Operations

Emergency preparedness planning is the responsibility of the Emergency Coordinator in Work Place Services. The Emergency Coordinator develops the Disaster Preparedness Plan and coordinates it with all Boeing departments. A PA system is used during emergencies for notification and evacuation. Additionally, managers are responsible for the safe evacuation of employees during an emergency. During an emergency, the manager must comply with instructions issued by Security & Fire Services personnel. These provisions are Boeing's first level of response to an emergency.

The structure of the emergency response organization and that of the normal Laboratory may differ depending on the severity of the emergency. During operational emergencies, the Manager of Security & Fire Services, or delegated authority, has overall responsibility for emergency response and policy. This individual assumes the role of Incident Commander. In the event of a major emergency such as an earthquake, the SSFL/West Hills Emergency Management Committee has the authority to assume overall command and control of emergency response activities. Boeing, West Hills' emergency

management organization is consistent with the Incident Command System (ICS) used by the state and local jurisdictions to manage emergencies. The on-site Boeing SSFL Fire Department provides fire protection and ambulance service.

Emergency Response Organization Components and Status

The Environment, Health and Safety function of Boeing, West Hills maintains a staff of qualified specialists (Environmental Protection, Industrial Hygiene, Health Services, Health Physics, Hazardous Waste Management, and Industrial Safety) to provide technical guidance and support in the safety and health field including emergency response.

Site security is provided by the on-site Security & Fire Protection department with law enforcement assistance, as required, from Ventura County Sheriff's Department. Site access control and property protection is provided by Security & Fire Protection. This group provides round-the-clock surveillance of Laboratory facilities and equipment and emergency support.

Number of Emergency Preparedness Program Personnel

There is one full time equivalent (FTE) for FY08 and beyond.

Future Activities (FY 09 - 11)

Drills and exercises to test plans and procedures will continue to be the focus of the Boeing SSFL emergency management plan. A multifunctional exercise will be conducted each year; the scenario will be developed by a team of individuals representing the emergency response organizations. Additionally, approximately 100 hazmat, fire, medical, and rescue drills will be conducted annually at SSFL.

Boeing's Emergency Management Committee will hold bi-annual meetings/training sessions in the Emergency Operations Center. At least one annual tabletop exercise will be conducted.

HAZARDS ASSESSMENT

Status and Completion Date

EETC will continue to implement site-specific schedules for completing hazard and safety analyses documents including Safety Analysis Reports (SARs), Preliminary Hazards Assessments (PHAs) or other similar documents using a graded approach.

Range of Potential Emergencies

The range of potential emergencies at EETC is described in the "EHS Disaster Preparedness Plan" and in the "Safety Analysis Document (SAD)" for selected buildings.

Emergency Classes and Action Levels Criteria

EETEC is now primarily involved in characterization and cleanup activities. In accordance with NFPA 1600 (Disaster Management), Emergency Action Levels (EALs) are not considered applicable to EETEC.

Worst Case Scenarios and Initiating Events

The worst case scenario would be an earthquake, as described in the document, California Department of Conservation, Division of Mines and Geology publication 60, Earthquake Planning Scenario for a Magnitude 8.3 Earthquake on the San Andreas Fault in Southern California, dated 1982.

A wildland fire under firestorm conditions is also a very serious scenario that could be initiated by an earthquake or non-earthquake event. This scenario was realized during the September 2005 Topanga brush fire.

EXTERNAL COORDINATION

Boeing maintains its own fire department at the SSFL location. The Boeing SSFL Fire Department consists of fire fighting equipment and fire trucks as well as trained fire fighting personnel.

Boeing participates with Ventura County, Los Angeles City, and the Los Angeles County Fire Departments for helicopter tanking exercises. One of the greatest hazards at SSFL is brush-covered hills. As such, it is important to be able to respond quickly to a brush fire. While the Boeing Fire Department does not have helicopters for fighting brush fires, the three surrounding county fire departments do. There is a heliport with fire hydrants at SSFL next to the Boeing SSFL Fire Department. Training exercises every year with these municipal fire departments benefit everyone. Boeing SSFL Fire Department fire fighters learn how to use the Boeing's fire trucks to load helicopters with water that may then be dropped on brush fires. This benefits the municipal fire departments and the surrounding communities. SSFL also benefits in the event that the brush fire is on or approaching our property.

External Participation in Training, Drills, and Exercises

Joint training exercises are performed each year with Ventura County, Los Angeles City, and Los Angeles County Fire Departments.

TRAINING

Training Plans and Goals for Current and Next FY

The Boeing, West Hills emergency preparedness training program is performance based and focuses on skills required to execute the Laboratory's emergency plans. The Emergency Coordinator and Training Manager develop an annual drill and exercise plan; preparation for drills and exercises includes required training and orientation. In compliance with OSHA specifications, Boeing policy requires all personnel to undergo basic introductory training and that managers ensure all appropriate additional training is identified, conducted, and documented.

A comprehensive drill-and-exercise program continues to be the focus of DES's emergency management program. It provides for a scenario development committee to be chaired by the Emergency Coordinator and includes training for controllers and evaluators.

Objectives of the Drill and Exercise Program for the Next Five Years

Drills and exercises to test plans and procedures will continue to be the focus of Boeing's emergency management program. A multifunctional exercise employing all emergency response organizations was conducted as a real time event due to the Topanga Brush Fire of 9/28/05 which burned a large portion of the brush at the SSFL Facility. Approximately 150 hazmat, fire, rescue, and medical drills will be conducted annually. An Emergency Evacuation Drill is scheduled for November 2008.

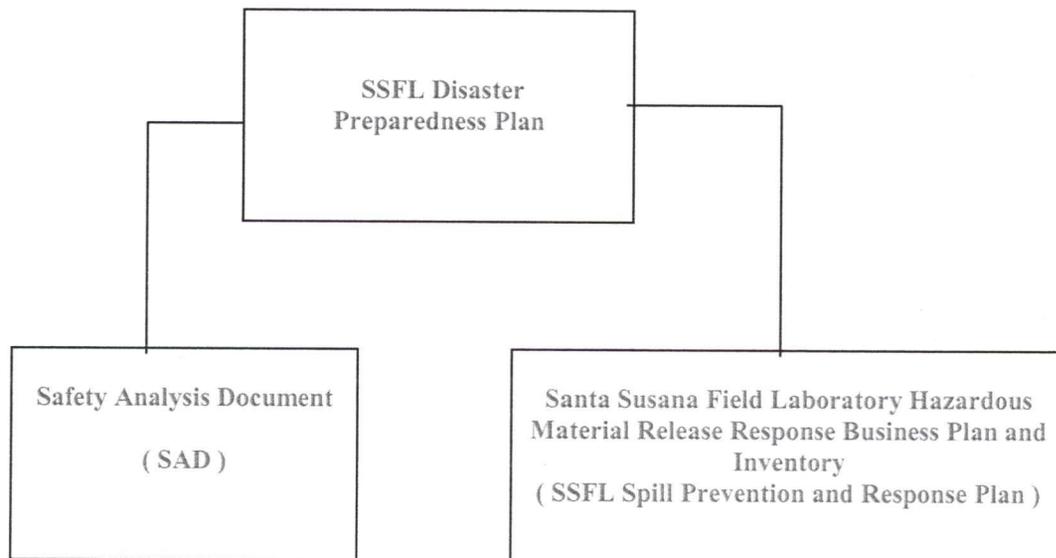
Appraisals

There were no external appraisals of the program during FY08.

Corrective Actions

As mentioned above, several process improvements have been or are being made to improve the training program. The 9/28/05 activation of the EOC, due to the Topanga Brush Fire, was very successful and the information in the Disaster Preparedness Plan was read and followed with good results.

DOCUMENT TREE



Resource Requirements

FY	FTE	Operating Expense (\$K) *	Comments
2006	1	137	
2007	1	142	
2008	1	147	
2009	1	152	

* These estimated dollars are not a direct charge to the DOE contract. Costs for these types of activities are part of the overhead allocation system of the Boeing Company; therefore the dollars reflected here are merely for informational purposes.

Other

Not applicable

Tabular Data:

Status of Emergency Plans

Facility	Most Recent Plan	Status
SSFL	1. Disaster Preparedness Plan; 2008	1. Is revised annually.
SSFL	2. Hazardous Materials Response Plan; 2008	2. Reviewed and updated in February 2008.
SSFL	3. Law Enforcement Response Plan, 2006	3. This plan has been cancelled.

Status of Hazards Assessments

Site	Completion date	Radiological	Initiating Event	Non-radiological	Initiating Event
ETEC – Various facilities and tasks.	Assessments for main tasks individually completed as needed				

External Coordination Efforts/Drills and Exercises

Site	Agreement with	Initiation Date	Expiration	Participation in Training; site visits or drills
SSFL	Ventura County Fire Protection District	Dec. 1973	None	Annual

Drills and Exercises

Participants	Full scale	Hazmat	Evacuation	Notification	Other
LA County Fire, Ventura County Fire, Boeing SSFL Fire Department, H&S, Environmental, Facilities, area personnel	9/28/05 Topanga Fire burns SSFL		SSFL Facility evacuated due to fire	Office of Emergency Services, DOE, NASA, DTSC, DHS, VCEHD, RWQCB	EHS, S&FS & WPS personnel remained on site to monitor and fight fire
Boeing, West Hills Security & Fire					100 drills on hazmat, fire, medical, rescue

Available Training Courses/Modules

ERO	EM Overview ECC Opns.	Information Flow	Crisis Management	Incident Command	Hazardous Material	Other
Incident Commanders				Annually	Annually	
Hazmat Responders				Annually	Annually	
Hazmat First Responder Awareness					Annually	
Building Emergency Teams		"Shelter in Place" - CBT 9CC4054				Emergency Evacuation

Scheduled and Conducted Appraisals**

Site	Assessor	Type	FY 2006	FY 2007	FY 2007	FY 2008	FY2009
SSFL	Redmon	Training	X	X	X	X	X

** Self-Assessment

Operating, Capital and Personnel Requirements Summary

	FY 06	FY 07	FY 08	FY09
Op. Budget (\$K) *	137	142	147	152
Cap. Budget	0	0	0	0
Personnel				
Federal	0	0	0	0
Contractor	14	14	14	14
Emergency	1	1	1	1
Professional	1	1	1	1

* These estimated dollars are not a direct charge to the DOE contract. Costs for these types of activities are part of the overhead allocation system of the Boeing Company; therefore the dollars reflected here are merely for informational purposes.