UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 3, 2000

TO: Santa Susana Field Laboratory Workgroup Members

RE: DRAFT Quarterly Report of Agency Activities for the Boeing/Rocketdyne Propulsion and Power Division, Santa Susana Field Laboratory (SSFL)

Enclosed, in draft, is the Third and Fourth Quarter (July 1, 1999 - December 31, 1999) Report of Agency Activities for the Boeing/Rocketdyne Propulsion and Power Division, SSFL, located in the Simi Valley Hills of Ventura County, California.

This report is being forwarded to you to give you the opportunity to correct significant omissions or mistakes. We intend to distribute the final version in mid May, therefore, any corrections should be brought to our attention **May 11, 2000.**

I would like to thank all of the agencies that provided information for the report.

If you have any questions, please contact me at (415) 744-2070. If you would like to propose changes, you can fax them to Amy Hong at (415) 263-3700 or email to her at hong_amy@bah.com.

Sincerely,

Tom Kelly

Tom Kelly
Project Manager

cc: Steve Lafflam, Boeing

SSFL Workgroup Members:

Mr. Gerard Abrams
California Department of Toxic Substances Control (Region 1)
10151 Croyden Way, Suite #3
Sacramento, CA 95827

Mr. Stanley Bauer
U.S. Army Corps of Engineers
CENWO-PM-HA (Bauer)
215 North 17th Street
Omaha, NE 68102-4978

Mr. Steve Cain, Ph.D.
California Department of Toxic Substances
External Affairs, Public Participation Specialist (Region 3)
1011 N. Grandview Avenue
Glendale, CA 91201

Mr. Dave Dassler
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922

Mr. Steve Dizio
Senior Toxicologist
California Department of Toxic Substances Control
Human & Ecologic Risk Division
Union Bldg., 301 Capital Mall, 3rd Floor
Sacramento, CA 95813

Mr. Allen Elliott
National Aeronautical & Space Administration
Marshall Space Flight Center
Mail Code: AD10
MSFC, AL 35812

Ms. Gwen Eng
U.S. Public Health Service
Agency for Toxic Substances and Disease Registry
75 Hawthorne Street, Suite 100 (HHS-1)
San Francisco, CA 94105

Dr. T.R. Hathaway
California Department of Toxic Substances Control
Human & Ecologic Risk Division
Union Bldg., 301 Capital Mall, 3rd Floor
Sacramento, CA 95813

Mr. Dan Hirsch
c/o Committee to Bridge the Gap
#2 - 1185 E. Cliff Drive
Santa Cruz, CA 95062

Ms. Inger Hodgson
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Avenue (AB57)
P.O. Box 7922
Canoga Park, CA 91309-7922

Mr. Steve Hsu
California Department of Health Services
Radiological Health Branch
P.O. Box 942732 (MS-178)
Sacramento, CA 94234-7320

Ms. Barbara Johnson
Santa Susana Hills H.O.A.
6714 Clear Springs Road
Susana Knolls, CA 93063

Mr. Thomas P. Kelly
U.S. Environmental Protection Agency (Region 9)
75 Hawthorne Street (WST-5)
San Francisco, CA 94105

Mr. Karl Krause
Ventura County Air Pollution Control District
669 County Square Drive, 2nd Floor
Ventura, CA 93003

Mr. Steve Lafflam
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Park (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922

Ms. Blythe Latimer
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Park (AB57)
P.O. Box 7922
Canoga Park, CA 91309-7922

Mr. Mike Lopez
U.S. Department of Energy
Oakland Operations Office
1301 Clay Street (N825)
Oakland, CA 94612

Mr. Roger Lupo
California Department of Health Services
Radiologic Health Branch
P.O. Box 942732 (MS-178)
Sacramento, CA 94234-7320

Mr. Mark Mowrey
Project Manager
U.S. Environmental Protection Agency
75 Hawthorne Street (WST-6)
San Francisco, CA 94105

Ms. Kim O'Rourke
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Park (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922

Mr. Sheldon Plotkin, Ph.D.
So. California Federation of Scientists
3318 Colbert Avenue
Los Angeles, CA 90066

Mr. Dan Radulescu
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Mr. Peter Raftery
Associate Engineering Geologist
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Prof. Jerome Raskin, Ph.D.
Rocketdyne Cleanup Coalition
18350 Los Alamos Street
Northridge, CA 91326

Mr. Phil Rutherford
The Boeing Company - Rocketdyne Propulsions and Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922

Ms. Vicky M. Semones
Community Involvement Coordinator
U.S. Environmental Protection Agency (Region 9)
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105

Mr. Gregg Dempsey
EPA RIENL
P.O. Box 98517
Las Vegas, NV 89193-8517

Ms. Donna Sutherland
U.S. Department of Energy
1301 Clay Street
Oakland, CA 94612-5208

Draft

BOEING/ROCKETDYNE
SANTA SUSANA FIELD LABORATORY (SSFL)

THIRD AND FOURTH QUARTER REPORT
CALENDAR YEAR 1999

JULY 1 TO DECEMBER 31, 1999

Prepared by: U.S. Environmental Protection Agency, Region 9
[Based on input from the Regulatory Agencies and comments from community representatives of the Workgroup]

MAY 2000

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I. BACKGROUND

As the chair of the Santa Susana Field Laboratory (SSFL) Workgroup, the U.S. Environmental Protection Agency (EPA) has initiated the preparation of quarterly reports in an effort to increase the effectiveness of communication to interested parties, including community members, elected officials and SSFL Workgroup members. This report covers the last two quarters of 1999 (July 1 to December 31, 1999), as well as background and historical information where necessary to allow for better understanding of recent activities. The report is broad in scope so that it covers Resource Conservation and Recovery Act (RCRA) corrective action activities, radiation cleanup activities, worker health activities, community health study activities, surface water issues, and SFFL Workgroup activities. For this report we solicited the input of regulatory agencies; we will continue to do so for future quarterly reports. EPA welcomes suggestions for improvement of these reports from any interested party.

The SSFL Workgroup was formed in 1989 at the request of community members and local elected officials. Workgroup members include regulatory agencies and five community representatives. EPA is the chair of the Workgroup. As stated in the original charter, the objectives of the SSFL Workgroup are to: 1) facilitate the exchange of information, 2) coordinate regulatory agencies' activities, and 3) allow the public an opportunity to receive information, ask questions, and express concerns to Rockwell (now Boeing) and the regulatory agencies. During the 10 years since its formation, the Workgroup has utilized various means to meet these objectives. This quarterly report is an attempt to improve communication of the status and progress of cleanup activities at the site.

II. EPA COORDINATION AND COMMUNICATION

A. With the Community

Background

EPA has chaired the SSFL Workgroup Meetings for the past ten years. Since 1995, the EPA Office of Community Involvement has facilitated these meetings, and has made many refinements to improve communications and information sharing among Workgroup members and the community-at-large.

Refer to the Quarterly Report for the Fourth Quarter, 1998 (October - December, 1998) for 1998 public involvement efforts by EPA.

Third and Fourth Quarter Activities

- Prepared Activity Report for the first and second quarter of 1999
- Continued weekly conference calls with community representatives of SSFL
- Held an SSFL Workgroup Meeting on September 29, 1999, to discuss a feasibility study/community health study, current and historic rocket engine testing, the sodium burn pit and air issues
- Met with community members, DOE, DHS and Rocketdyne on December 8, 1999, to discuss EPA's resurvey of Area IV to be completed by EPA's Radiation and Indoor Environments National Lab.

In preparation for the Workgroup Meeting, EPA arranged two conference calls where community representatives, agencies/departments on the Workgroup, and Rocketdyne discussed the agenda for the September 29, 1999, meeting. EPA also arranged one conference call in preparation of the January 19, 2000, meeting.

Future Plans

EPA planned (and held, by the time this report was written) a January 19, 2000, Workgroup Meeting. The next meeting was tentatively scheduled for April 19, 2000, but has been rescheduled to May 16, 2000.

B. With Regulatory Agencies

During the third and fourth quarter of 1999, EPA worked with several agencies as well as elected officials on the following topics:

- Area IV Resurvey Interagency Agreement with DOE
- Background data for the Area IV Resurvey with DOE, DHS, Rocketdyne, and community representatives
- Inputs to the RESRAD (radiation exposure) Model with DOE, DHS and Rocketdyne
- Initial Scoping Study by the Agency for Toxic Substances and Disease Registry (ATSDR); these discussion occasionally included ATSDR, DOE, NASA, USACE, and representatives of elected officials
- RCRA Facility Investigation with DTSC
- Sodium Burn Pit interim measure with DTSC
- Information to assist in the Superfund Site Assessment Re-evaluation of Area IV with DOE.

C. With Boeing/Rocketdyne

During the third and fourth quarters of 1999, EPA was in contact with Rocketdyne on several occasions, primarily to discuss:

- The workplan prepared by EPA's contractor, Tetra Tech EM, Inc., for radiologic surveys to verify DOE's Building Decontamination and Decommissioning work (Oversight Verification and Confirmation Radiological Survey Draft Workplan)
- Arrangements and logistics for Tetra Tech's survey
- The other meetings noted in previous sections.

III. RCRA - PERMITTED UNITS AND GROUNDWATER MONITORING (DTSC)

Background

The SSFL's RCRA permitted units include operating permits for the storage and treatment of sodium, a hazardous waste container storage area and eight groundwater treatment units. DTSC has also issued post-closure permits for nine surface impoundments (ponds). The post-closure permits are intended to ensure proper monitoring and maintenance at units where hazardous waste remained after closure of the units. Other units that have been clean closed (all contaminants removed) at the site include a surface impoundment and two container storage areas. The site also has an open burning/open detonation unit that is no longer operated.

Currently, groundwater monitoring and investigation is being conducted under the SSFL's May 11, 1995 (effective date) post-closure permits for Areas I, II, and III. The permits specify the contaminants that Boeing will monitor, the monitoring frequency, additional investigation needed and require treatment of contaminated groundwater by eight treatment plants. A more detailed discussion of the treatment system as well as the monitoring well locations and analytical results can be found in Boeing/Rocketdyne's Quarterly and Annual Groundwater Monitoring Reports. The Corrective Measures Study (part of the corrective action process) will evaluate alternatives and/or enhancements to the current groundwater remediation system and monitoring network.

Third and Fourth Quarter Activities

DTSC has no permitting activities to report.

IV. RCRA CORRECTIVE ACTION (DTSC)

Background

EPA completed an Interim Final RCRA Facility Assessment (RFA) (the first step in the RCRA corrective action process) for the SSFL in July 1991, and finalized it in May 1994. On August 1, 1992, DTSC was authorized to implement the federal RCRA program in lieu of the US EPA. On November 12, 1992, Rockwell entered into a Stipulated Enforcement Order with DTSC for RCRA corrective action activities at the entire SSFL site and has been the lead agency for corrective action at the SSFL since that time.

A RCRA Facility Investigation (RFI) is the second step in the corrective action process. DTSC approved the RFI Workplan on October 31, 1996. The next steps in the corrective action process will include an RFI Report (to identify contaminants in soils), a risk assessment (to determine the impacts of the site's contamination and set goals for remediation), a Corrective Measures Study (CMS) (to evaluate potential options to remediate contamination), a remedy selection process (including public notice of the proposed remedy), and finally Corrective Measure Implementation (CMI).

Third and Fourth Quarter Activities

Happy Valley Investigation Debris Removal - On January 5, 1999, DTSC approved an RFI Workplan addendum to excavate debris and buried (suspected) ordnance items in Happy Valley. UXB International began debris excavation, removal, and ordinance screening activities in January. Sixty four ordnance items, consisting mainly of 20mm and 30mm diameter projectiles, were detonated on September 23, 1999, using the Donovan Blast Chamber. The chamber is a self-contained unit designed to capture and control the shockwave, overpressure, and gases normally associated with the destruction of ordnance devices. The use of the Donovan Blast Chamber at the Boeing site was the first commercial application of this innovative technology.

Soil and debris excavation activities at the Happy Valley Area have been safely and successfully completed. This is a major milestone and a critical step toward clean up of the Happy Valley Area. Boeing must submit a report on the Happy Valley ordnance clearance for DTSC's review and approval before any additional investigative work for chemical hazardous constituents begins.

RFI Workplan Review - DTSC continued to visit sampling locations and review results of the RFI analytical data collected as part of the detailed site-wide RFI initiated in 1997. This includes review of all Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) identified in the 1996 RFI Work Plan, the 1994 RFA Report, and the 1997 EPA aerial photographic review. These meetings are part of an ongoing, comprehensive review process to assess historical chemical handling activities, evaluate soil and groundwater sampling results, and identify data gaps at SWMUs and AOCs which require additional sampling. To date, 782 soil vapor samples and 1,370 soil matrix samples have been collected, and 2,465 analyses have been completed. A

preliminary data report, summarizing the RFI data collected and validated through December 1998, will be prepared and released, with the sample location maps, to repositories during the first quarter of 2000.

V. INTERIM REMEDIAL MEASURES (IRMs) (DTSC)

Background

While comprehensive facility clean up is the long-term goal of the RCRA corrective action program, interim measures may be required by the implementing agency if proposed by a facility owner or operator to control releases and prevent the further spread of contamination while the final remedy is being selected.

DTSC received an Interim Measures Workplan for the Former Sodium Disposal Facility (FSDF) on September 8, 1997. DTSC provided its comments in a response dated October 10, 1998. Since that time, Boeing has revised and resubmitted the workplan twice, on July 31 and October 13, 1998. DTSC has provided two subsequent sets of comments, dated October 5 and 23, 1998.

Third and Fourth Quarter Activities

FSDF - A draft Interim Measures Workplan for clean up of contaminated soils at the FSDF was determined to be technically complete and was approved for public review by DTSC on July 16, 1999. Following review of comments received during a 45-day public comment period and public hearing held on July 28, 1999, DTSC prepared a Response to Comments document. The Response to Comments document was sent to all community members and agencies who submitted comments. DTSC approved the Interim Measures Workplan on December 14, 1999.

The proposed Interim Measures includes the removal and off-site disposal of approximately 3,200 cubic yards of soils contaminated with PCBs, dioxins, and mercury from the former impoundments and drainages below the impoundments. Soils will be transported in trucks to the Kettlemen Hills hazardous waste landfill in Kings County for disposal. Following excavation of soils, an engineered low-permeability clay backfill and vegetative cover will be installed to prevent infiltration of rain through the backfill into the underlying bedrock. The performance of the low-permeability clay backfill was evaluated using a numerical model developed by Cornell University. The backfill cover will be engineered with a 10% grade to promote rainwater runoff and prevent the ponding of water over the impoundment. A v-ditch will be constructed to divert run-on rainwater. A component of the interim measures will be the installation of soil moisture probes and pan lysimeters in the low-permeability backfill cover to monitor its performance and gather information to be used in designing a final remedy for the FSDF. Two groundwater systems at the FSDF will continue to extract and treat the contaminated groundwater plume.

Monitoring for any changes in groundwater quality from the 14 groundwater monitoring wells located in and around the FSDF will continue.

VI. SURFACE WATER AND STORM WATER DISCHARGES (LARWQCB)

Background

The Los Angeles Regional Water Quality Control Board (LARWQCB) oversees surface water discharges from the SSFL. The LARWQCB's last involvement with the SSFL Workgroup was a special topic meeting on December 9, 1997. At this meeting they explained their surface water discharge permitting process and the monitoring requirements at the site.

On June 29, 1998, the LARWQCB issued its revised Waste Discharge Requirements (WDRs) for the SSFL. The WDRs: (1) set limits for toxic constituents and toxicity for wastewater and storm water, (2) authorize the discharge of up to 2.2 million gallons per day of wastewater from the SSFL's water reclamation system, which includes five ponds, and (3) requires sampling of storm water discharge from seven locations (an eighth location is monitored only for perchlorate). Attachments 1 and 2 show the discharge locations for the SSFL.

Third and Fourth Quarter Activities

There were no off-site discharges from the Boeing-Rocketdyne Santa Susana facility during the July-December 1999 period.

VII. AREA IV RESURVEY FOR RADIATION (EPA/DOE)

Background

At the request of community members and elected officials in 1990, EPA became involved in the investigation of radioactive soil contamination at the Boeing North American, Rocketdyne Division (Rocketdyne) SSFL. In response to a July 10, 1996, letter from the community members on the SSFL Workgroup, EPA agreed in a letter dated November 8, 1996, to further increase its involvement in the radiation cleanup at the site. Specifically, EPA agreed to oversee the Area IV Radiation Survey and the Radiation Decontamination and Decommissioning Program. Because EPA's authority over radioactive contamination under the RCRA is limited, EPA's involvement is with the consent of Rocketdyne, DOE, and DHS. DOE and DHS have primary regulatory responsibility over cleanup of radioactive contamination. However, EPA has commented on and will continue to comment on and participate in the investigation and cleanup of radioactively contaminated buildings and radioactively contaminated media (soil,

groundwater, and air). EPA's involvement in no way limits or restricts the regulatory authority of DOE or DHS.

In late 1999, EPA agreed in principle with DOE on a schedule for an EPA radiation re-survey of Area IV to verify that the site can be released for unrestricted use[1]. This resurvey would be conducted by EPA's Radiation and Indoor Environments National Laboratory in Las Vegas, Nevada. While EPA will partially fund the work, funding will come primarily from DOE. The survey will cover the majority of Area IV, except the locations that DOE and Rocketdyne are actively cleaning up through their Building Decontamination and Decommissioning Program (portions of which are overseen by DHS).

In a June 10, 1999, meeting, DOE agreed to consider the feasibility of further cleanup below the 15 millirem per year level, based on the results of the EPA survey. This agreement does not ensure that the cleanup level will be lower than the level already approved by DOE and DHS, but it is the understanding that EPA had hoped to reach with DOE.

Third and Fourth Quarter

DOE and EPA agreed to the scope of work in the third quarter and provided a copy to Joe Lyou, an SSFL Workgroup community representative. Although EPA had expected to complete an Interagency Agreement shortly after agreeing to a scope of work with DOE, estimating the cost of the survey has proved to be more difficult than anticipated. This difficulty has caused EPA to withdraw the proposed timeline for the EPA radiation survey of Boeing-Rocketdyne Area IV (Attachment 4 in the First and Second Quarter Report for 1999). EPA will provide a revised schedule as soon as possible.

On December 8, 1999, EPA held a meeting with DOE, DHS, Rocketdyne, the Workgroup's community representatives, and a few other community members. The purpose of the meeting was to agree on a background level for each radionuclide of concern at the site. Although this primary goal was not met, the group did have a successful discussion of the Area IV study in general. Dan Hirsch, a SSFL Workgroup community representative, asked that EPA bring a statistician to the next meeting to improve the group's understanding of statistical comparisons between potentially affected areas and background areas. Additional meetings will be scheduled to continue these and other discussions about the Area IV Survey.

VIII. RADIATION DECONTAMINATION AND DECOMMISSIONING PROGRAM (EPA, DOE AND DHS)

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[1] EPA had previously criticized a similar Rocketdyne effort (Area IV Radiological Characterization Study, August 15, 1996) in a letter dated April 8, 1997 and asked Rocketdyne to complete a new survey in a letter dated July 11, 1997. DOE then proposed that EPA conduct its own survey.

A. EPA

In a March 31, 1999 letter, EPA distributed a draft workplan for radiologic surveys of Boeing buildings to the Workgroup and the information repositories for the site. The letter also invited public comment. In an April 22, 1999 letter, EPA requested additional documentation on decontamination and decommissioning work completed at the Energy Technology and Engineering Center (ETEC) for the buildings that EPA planned to survey. DOE provided some of the requested information in a June 17, 1999 letter to EPA.

Third and Fourth Quarter Activities

On September 10, 1999, EPA met with Boeing, DOE and DHS to discuss EPA's comments on Boeing and DOE's decontamination and decommissioning work. Boeing responded to EPA's comments in an October 21, 1999, letter.

EPA finalized the workplan (Oversight Verification and Confirmation Radiologic Survey Work Plan) for radiologic surveys of Boeing's buildings on December 29, 1999. EPA also responded on December 29, 1999 to comments on the draft workplan provided by Joe Lyou in a September 28, 1999, letter. Although EPA had intended to survey five buildings (12, 13, 28, 29 and 363), Buildings 23, 28, and the roof of building 363 had already been demolished. EPA provided notice to its mailing list of an opportunity to observe the surveys by EPA's contractors, scheduled for January 10-12, 2000.

B. DOE

Background

The Building D&D Program, which has not changed since December 1998, is summarized in a table prepared by DOE (see "ETEC Facility Release Status" attached). This table is further summarized by the four items below:

* Released by DOE, NRC and/or DHS: 18 buildings and areas
*Awaiting verification surveys and/or release by DOE and/or DHS: 5 buildings and areas.
* D&D in progress: one building
* D&D process not yet begun: two buildings

It is anticipated that all but three of the buildings will be released by DOE and DHS by the end of year 2000. The remaining three buildings are not expected to be released until 2001, 2005 & 2006.

Third and Fourth Quarter Activities

No activity reported.

C. DHS

Background

DHS (Radiologic Health Branch) licenses the possession, use, transfer and disposal of certain radioactive materials. California is an Agreement State (since 1962), meaning DHS acts in lieu of the Nuclear Regulatory Commission in the State of California for these materials. While historic Rocketdyne operations conducted for DOE and its predecessor agencies, the Atomic Energy Commission and the Energy Research and Development Agency, did not require a license (from DHS or NRC), Rocketdyne also conducted its own nuclear research. For non-DOE facilities, DHS is the regulatory agency charged with oversight of the decontamination and decommissioning process. Also, any licensed building or area that is not cleaned up to the satisfaction of DHS is subject to the decommissioning requirements of DHS. While DOE can release a building to Rocketdyne, DHS may also require further cleanup before the building or area is released by DHS. DOE has requested the concurrence of DHS on the release of former DOE nuclear facilities.

In addition to the ETEC Buildings and Areas summarized in the Table comprising Attachment #1, there are two other facilities that have undergone decontamination and decommissioning, namely: Facility 011, the Radiation Instrumentation Calibration Facility which was released by DHS in 1998, and the 17th Street Drainage Area which is scheduled to be surveyed by the Radiologic Health Branch in October 1999.

Third and Fourth Quarter Activities

Since the last report, RHB has participated in the surveys of the trailers at Shandon School and Profile Structures, Inc., in Shandon and Santa Fe Springs, respectively. Survey results indicated that the radiation levels of the trailers are similar to background levels and that there is no contamination exceeding the limits acceptable for unrestricted use. RHB personnel are scheduled to participate in the soil sampling by DOE/Boeing at Shandon School on March 28, 2000, to observe the sampling activities and collect split samples.

IX. HEALTH AND ECOLOGICAL RISK ASSESSMENT (DTSC)

Third and Fourth Quarter Activities

No activity reported.

X. WORKER HEALTH STUDY (DHS)

Background

EPA previously summarized the results of the Worker Health Study in the First and Second Quarter Report of Agency Activity for the Boeing/Rocketdyne Propulsion and Power Division, Santa Susana Field Laboratory, dated September 18, 1999. For copies of the Worker Health Study, the DHS Worker Health Study Summary or the Advisory Panel statement, please call the California Department of Health Services (Occupational Health Branch) at (800) 970-6680.

XI. COMMUNITY HEALTH STUDY (ATSDR)

Background

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency that helps protect people from toxic substances at hazardous waste sites. ATSDR does not have regulatory authority to order other agencies or organizations to accept and follow our recommendations.

Third and Fourth Quarter Activities

In August 1999, at the request of Senators Dianne Feinstein and Barbara Boxer and Congressman Elton Gallegly, ATSDR agreed to evaluate the Santa Susana Field Laboratory (SSFL) for possible threats to public health from operations at the SSFL. On December 3, 1999, a "Draft Preliminary Site Evaluation Report" was released to the public. Copies of the report are available at your local libraries or can be accessed directly over the internet at: www.atsdr.cdc.gov

In the "Draft Preliminary Site Evaluation Report" ATSDR collected community health concerns and evaluated available health studies and environmental data and information. Based on the available information, *SSFL is not an apparent public health hazard to the surrounding communities because people have not been, and are currently not being exposed to chemicals and radionuclides from the site at levels that are likely to result in adverse health effects.*

ATSDR acknowledges that this report is a preliminary assessment of the potential for human exposure and public health hazard posed by the SSFL. This assessment identified several areas where additional information is necessary for a more complete evaluation of community health concerns. On the basis of our preliminary conclusions, the following recommendations were made:

- *A more in-depth evaluation of exposure pathways that addresses past, current, and future exposure to chemicals and radionuclides from the SSFL should be conducted to improve*

the assessment of potential offsite exposures and public health implications associated with this site. Such an assessment must be facilitated through community outreach and participation and must include health education activities. We further recommend that this assessment address the following related issues:

- *II More in-depth evaluation of airborne chemical releases from SSFL operations, including air dispersion modeling of past accidents and disposal activities, and compilation and use of a consistent, site-specific meteorological data set to improve the assessment of past exposures to these substances.*

- *II Development of a regional hydrogeological flow model and additional monitoring at down-gradient springs or seeps in Simi Valley and Santa Susana Knolls to evaluate the potential for deep fracture flow and potential future exposure. Also, even though it may not be related to SSFL, additional source characterization of the perchlorate detection in Simi Valley should be conducted.*

- *II Additional radiological characterization of Area IV with more sensitive instrumentation and appropriate grid spacing to assure a lower detection limit.*

2. *A re-analysis of the cancer registry data including additional years of newly available cancer data and updated demographic information should be conducted to see if the apparent increase in the incidence rates of bladder and lung cancers persist. A more in-depth evaluation of cancer data should be conducted that addresses environmental exposures from the SSFL, possible confounding exposures from other nearby contaminant release sources, and residential histories.*

Several of these recommended actions are underway or in various planning stages. ATSDR is currently summarizing the status of these recommended actions. As soon as this summary is complete, ATSDR will present a plan of all proposed public health actions for discussion by the SSFL community.

XII. AMBIENT AIR EMISSIONS (Ventura County APCD)

Background

The Ventura County Air Pollution Control District (VCAPCD) is responsible for regulating routine and predictable emissions of air contaminants into the ambient air from the Boeing facilities at the Santa Susana Field Laboratory. The VCAPCD has no authority to regulate accidental releases of air contaminants into the ambient air.

There are two VCAPCD programs that apply to the Boeing facilities: the VCAPCD permit program and the VCAPCD air toxics "Hot Spots" program. Under the permit program, Boeing

currently holds five operating permits for:

- The rocket engine testing operations
- The energy technologies operations
- Maintenance facilities
- A gasoline storage tank
- The air emissions from the groundwater cleanup operations.

The permits list air contaminant emitting equipment and processes for each operation, the regulations applicable to each operation, and the appropriate recordkeeping and reporting requirements.

In addition to the VCAPCD permit program, Boeing is also subject to the Title V Federal operating permit program. The Title V Federal operating permit program is a Federal program required by Title V of the Federal Clean Air Act, added to the act by the 1990 amendments. The VCAPCD is the permitting agency for the Federal program in Ventura County.

Under the air toxics "Hot Spots" program, Boeing is required to review and, if necessary, update its emissions inventory of routine and predictable emissions of toxic air contaminants every four years. The VCAPCD is responsible for overseeing the inventory process and determining whether or not Boeing must update its emissions inventory or prepare a formal health risk assessment based on the updated inventory data. If a health risk assessment indicated that a significant health risk was being created by routine and predictable emissions, Boeing would be required to notify those at risk and to prepare a risk reduction plan.

Boeing was required to review its toxic air contaminant emissions inventory for the calendar year 1997. VCAPCD staff performed a screening level analysis of the information submitted and determined that Boeing was not required to prepare a formal health risk assessment. Boeing will next be subject to the air toxics "Hot Spots" program for its calendar year 2001 inventory.

The VCAPCD has no regulations that apply to radionuclide emissions and has no authority to enforce the regulations that have been adopted by EPA that apply to radionuclide emissions. Routine and predictable radionuclide emissions are reported, however, as part of the air toxics "Hot Spots" emission inventory.

Third and Fourth Quarter Activities

VCAPCD staff have proposed to add two conditions to the rocket engine testing operations permit. One condition would limit the propellants permitted to be used in association with rocket engine testing operations. This condition will declare that no solid rocket engine propellants may be used at the facility. It will also limit hydrazine propellants to monomethyl hydrazine. The

second condition will more clearly define what "rocket engine testing" means for the purposes of the permit. These conditions will be added to the permit when it is next issued.

No inspections of the Boeing facilities were conducted in the third or fourth quarters. On January 18, 2000, VCAPCD staff conducted an inspection that covered the permit for the maintenance facilities and the permit for the rocket engine testing operations. No air pollution problems were found during the inspection.

During the third and fourth quarters, VCAPCD staff continued to evaluate a permit modification application that would allow Boeing to conduct testing on hydrogen fuel tanks and flare the hydrogen after the tests are completed. An Authority to Construct was issued for the project on January 18, 2000. In addition, a permit modification application to allow methanol to be tested as a rocket fuel was approved on July 15, 1999. These applications are modifications to the rocket engine testing operations permit.

On September 15, 1999, VCAPCD staff approved permit modification applications to add portable diesel engines used for maintenance operations at SSFL to the existing permit for the maintenance facilities. These engines, used to generate electricity or as air compressors, have been in use at SSFL for some time.

Boeing submitted an application for a Title V Federal operating permit to the VCAPCD on January 3, 1997. The application was found complete on May 20, 1997. Issuance of this permit continues to be delayed by VCAPCD because inconsistencies exist between the version of the regulations applicable to Boeing adopted by the VCAPCD Board and the version of the regulations that appear in the official State Implementation Plan approved by EPA. These inconsistencies should be resolved in the next few months.

XIII. Other Issues

- On August 5, 1999, EPA responded to a May 27, 1999, letter from State Assembly member Sheila James Kuehl regarding Rocketdyne's participation on the SSFL Workgroup. The letter referenced a May 27, 1999, conference call in which "EPA agreed, along with the community members, the California Department of Health Services (Radiologic Health Branch) and the California Department of Toxic Substances Control, that Rocketdyne should sit in the audience during the upcoming meeting." EPA also stated that it ". . . values Rocketdyne's participation in the Workgroup meetings. . . they are an important information resource. . . [and] an important stakeholder in the site's cleanup."

- In October 22, 1999, and December 21, 1999 letters to Mr. Dan Blesky of the City of Simi Valley, EPA provided preliminary and validated perchlorate results from an artesian

well located at 1672 Casarin Street in Simi Valley.

- On October 29, 1999, EPA forwarded the decommissioning report for Building 55 to Dan Hirsch.

XIV. ADDITIONAL INFORMATION

A. INFORMATION REPOSITORIES

Materials referenced in this report and this report itself, can be found at the information repositories for this site, as listed below:

California State University, Northridge
Urban Archives Center
Oviatt Library, Room 4
18111 Nordhoff
Northridge, CA 91330
Attention: Mr. Robert Marshall
Phone: 818-677-2285

Hours of Operation:
M-TH: 7:45am - 11:00pm
F: 7:45am - 5:00pm
SAT: 9:00am - 5:00pm
SUN: 10:00am - 10:00pm

Los Angeles Public Library - Platt Branch
23600 Victory Boulevard
Woodland Hills, CA 91367
Attention: Ms. Janet Metzler
Phone: 818-340-9386

Hours of Operation:
M: 12:30pm - 8:00pm
TU: 10:00am - 5:30pm
W: 12:30pm - 8:00pm
TH: 12:30pm - 5:30pm
F: 12:30pm - 5:30pm
SAT: 10:00am - 5:30pm
SUN: Closed

Simi Valley Library
2969 Tapo Canyon Road
Simi Valley, CA 93063
Attention: Ms. Ellen Allen
Phone: 805-526-1735

Hours of Operation:
M-TH: 11:00am - 9:00pm
F: 1:00pm - 5:00pm
SAT: 10:00am - 5:00pm
SUN: 1:00pm - 5:00pm

XIV. ADDITIONAL INFORMATION (continued)

B. CONTACTS

EPA has developed the following Contact List for the principal agencies, community representatives and the facility for the Boeing/Rocketdyne Propulsion and Power, Santa Susana Field Laboratory Workgroup.

B1. AGENCY CONTACTS

Agency for Toxic Substances and Disease Registry

Ms. Gwen Eng
75 Hawthorne Street
Suite 100 (HHS-1)
San Francisco, CA 94105

Telephone: 415-744-2193
Fax: 415-744-1797

California Department of Health Services (DHS)

Mr. Steve Hsu
Radiologic Health Branch
P.O. Box 942732, MS-178
Sacramento, CA 94234-7320

Telephone: 916-322-4797
Fax: 916-324-3610

Mr. Roger Lupo
Radiologic Health Branch
P.O. Box 942732, MS-178
Sacramento, CA 94234-7320

Telephone: 916-324-3731
Fax: 916-341-7213

California Department of Toxic Substances Control (DTSC)

Mr. Gerard Abrams
Engineering Geologist
10151 Croyden Way, Suite #3 (Region1)
Sacramento, CA 95827

Telephone: 916-255-3600
Fax: 916-255-3595

Mr. Steve Cain, PhD
Public Participation
1011 N. Grandview Avenue (Region 3)
Glendale, CA 91201

Telephone: 818-551-2909
Fax: 818-551-2841

B1. AGENCY CONTACTS (continued)

Mr. Steve Dizio
Human & Ecologic Risk Division
Union Bldg., 301 Capital Mall, 3rd Floor
Sacramento, CA 95813
Telephone: 916-327-2517
Fax: 916-327-2509

Dr. T.R. Hathaway
Human & Ecologic Risk Division
Union Bldg., 301 Capital Mall, 3rd Floor
Sacramento, CA 95813
Telephone: 916-323-3755
Fax: 916-327-2509

Los Angeles Regional Water Quality Control Board (LARWQCB)

Mr. Dan Radulescu
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Telephone: 213-576-6668
Fax: 213-576-6640

Mr. Peter Raftery
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Telephone: 213-576-6796
Fax: 213-576-6717

U.S. Army Corps of Engineers

Mr. Stanley Bauer
CENWO-PM-HA (Bauer)
215 North 17th Street
Omaha, NE 68102-4978
Telephone: 402-221-7831
Fax: 402-221-7838

U.S. Department of Energy (DOE)

Mr. Mike Lopez
Oakland Operations Office
1301 Clay Street, N825
Oakland, CA 94612
Telephone: 510-637-1633
Fax: 510-637-2031

Ms. Donna Sutherland
1301 Clay Street
Oakland, CA 94612-5208
Telephone: 510-637-1563
Fax: 510-637-2031

B1. AGENCY CONTACTS (continued)

U.S. Environmental Protection Agency (EPA)

Mr. Larry Bowerman, Chief
Waste Management Division
Office of RCRA Corrective Action
75 Hawthorne Street (WST-5)
San Francisco, CA 94105
Telephone: 415-744-2051
Fax: 415-744-1044

Mr. Thomas P. Kelly, Project Manager
Waste Management Division
75 Hawthorne Street (WST-5)
San Francisco, CA 94105
Telephone: 415-744-2070
Fax: 415-744-1044

Mr. Mark Mowrey
Waste Management Division
U.S. Environmental Protection Agency
75 Hawthorne Street (WST-6)
San Francisco, CA 94105
Telephone: 415-744-2061
Fax: 415-744-1044

Ms. Vicky M. Semones
Community Involvement Office
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105
Telephone: 415-744-2184
Fax: 415-744-1796

Ventura County Air Pollution Control District

Mr. Karl Krause
669 County Square Drive, Second Floor
Ventura, CA 93003
Telephone: 805-645-1420
Fax: 805-645-1444

B2. COMMUNITY REPRESENTATIVES

Mr. Dan Hirsch
(c/o *Committee to Bridge the Gap)*
#2 - 1185 E. Cliff Drive
Santa Cruz, CA 95062

Telephone: 831-462-6136
Fax: 831-462-6605

Ms. Barbara Johnson
Santa Susanna H.O.A.
6714 Clear Springs Road
Susana Knolls, CA 93063

Telephone: 805-581-4311
Fax: 805-582-0927

Mr. Sheldon Plotkin, PhD
S. Cal. Federation of Scientists
3318 Colbert Avenue
Los Angeles, CA 90066

Telephone: 310-390-0306
Fax: 310-390-3898

Prof. Jerome Raskin, PhD
Rocketdyne Cleanup Coalition
18350 Los Alametos Street
Northridge, CA 91326

Telephone: 818-363-3809
Fax: 818-363-3809 (call first)

B3. FACILITY CONTACTS

Mr. Dave Dassler
The Boeing Company
Rocketdyne Propulsions and Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922

Telephone: 818-586-4069
Fax: 818-586-5889

Ms. Inger Hodgson
The Boeing Company
Rocketdyne Propulsions & Power
6633 Canoga Avenue (AB57)
P.O. Box 7922
Canoga Park, CA 91309-7922

Telephone: 818-586-6742
Fax: 818-586-1100

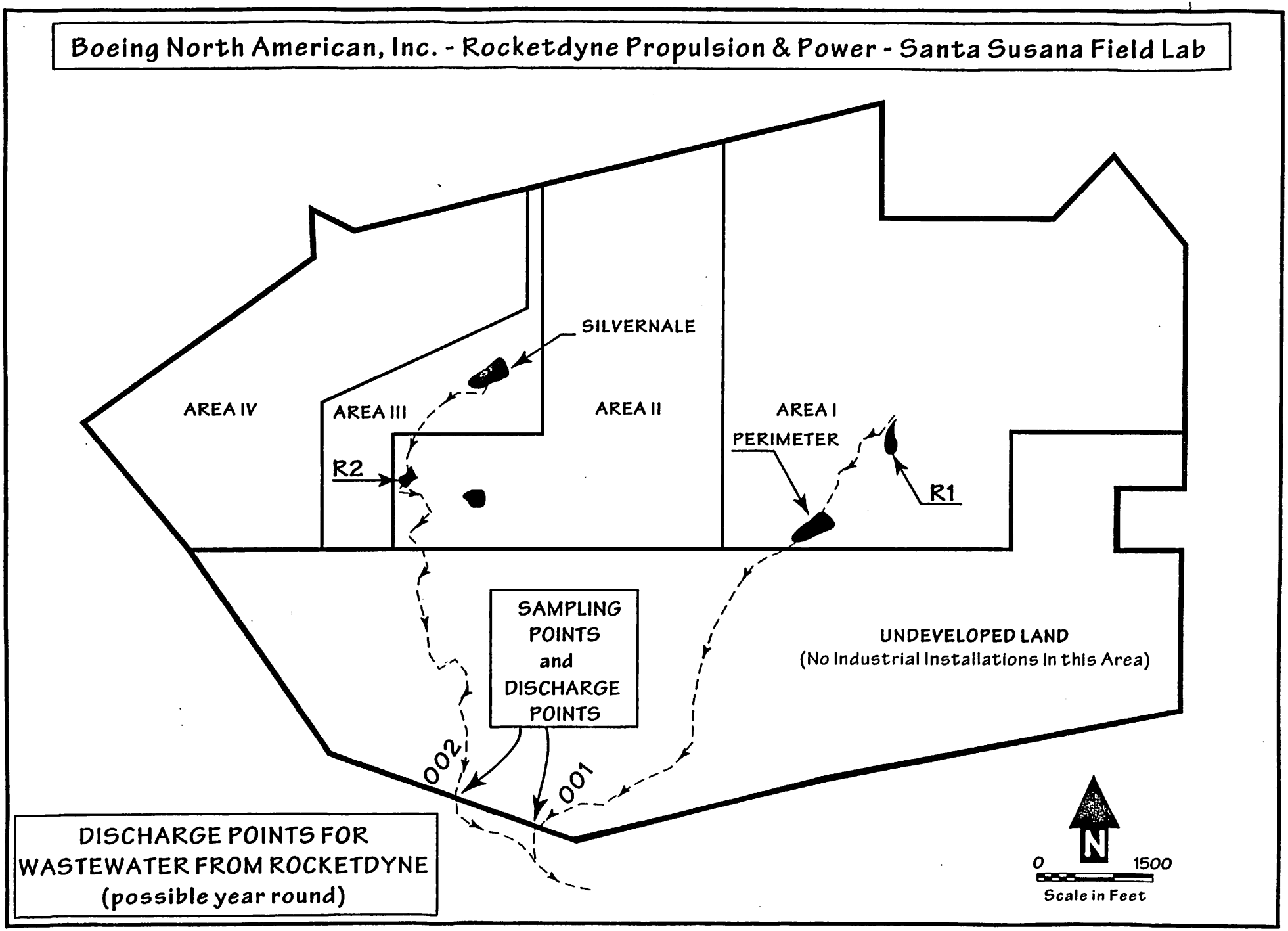
B3. FACILITY CONTACTS (continued)

Mr. Steve Lafflam
The Boeing Company
Rocketdyne Propulsions & Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922
Telephone: 818-586-2577
Fax: 818-586-9825

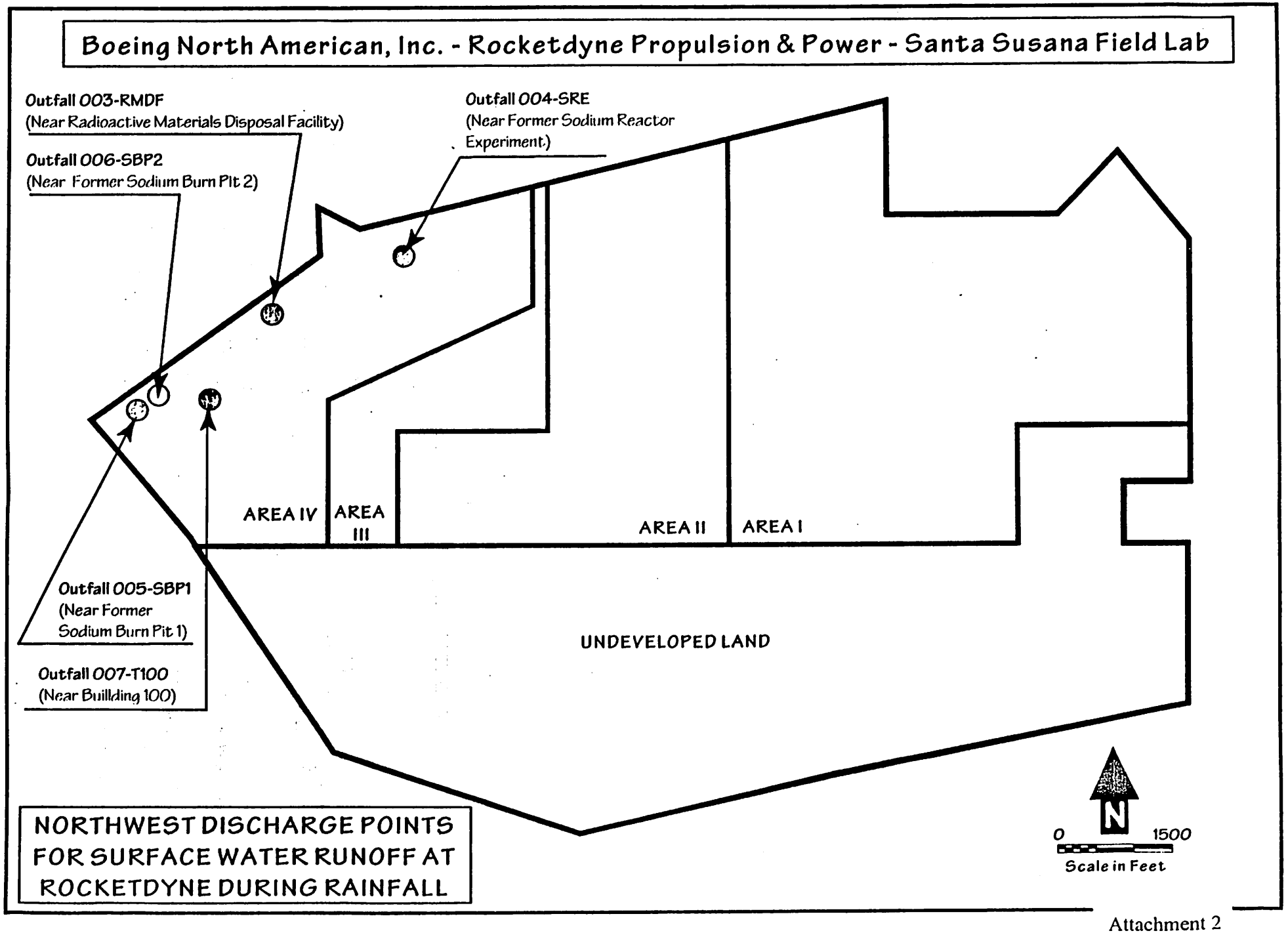
Ms. Blythe Latimer
The Boeing Company
Rocketdyne Propulsions & Power
6633 Canoga Avenue (AB57)
P.O. Box 7922
Canoga Park, CA 91309-7922
Telephone: 818-586-6901
Fax: 818-586-1100

Ms. Kim O'Rourke
The Boeing Company
Rocketdyne Propulsions & Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922
Telephone: 818-586-2578
Fax: 818-586-9825

Mr. Phil Rutherford
The Boeing Company
Rocketdyne Propulsions & Power
6633 Canoga Avenue (T487)
P.O. Box 7922
Canoga Park, CA 91309-7922
Telephone: 818-586-6140
Fax: 818-586-5194



Attachment 1



Attachment 2

Santa Susana Field Laboratory - Radiological Facility Status

FACILITY NUMBER	FACILITY TITLE	ROCKETDYNE OPERATIONS	VERIFICATION SURVEYS	EPA INSPECTION	OWNER	RELEASED BY	RELEASE DATE	BUILDING DEMOLITION DATE
OCY	Old Conservation Yard	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	Rocketdyne	DHS	1995	Land Only
RMHF	Radioactive Materials Handling Facility	Operational	-	ECD 2005	DOE	-	ECD 2006	ECD 2006
003	Engineering Test Building	D&D and survey complete	ANL	EPA Area IV Survey	DOE	DOE	1985	1999
005	Uranium Carbide Fuel Facility	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	Rocketdyne	DHS	1995	1996
009	Organic Moderated Reactor, Sodium Graphite Reactor	D&D and survey complete	DHS	Not available for survey	Rocketdyne	DHS	1999	Not Planned
011	Radiation Instrument Calibration Laboratory	Survey complete	DHS	Available for survey	Rocketdyne	DHS	1998	Not Planned
010	SNAP-8 Experimental Reactor	D&D and survey complete	ANL	EPA Area IV Survey	DOE	DOE	1982	1983
012	SNAP Critical Facility	D&D and survey complete	ORISE, DHS	Jan 2000	DOE	DOE, DHS	1997	ECD 2001
17th St.	17th St. Drainage Area	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	Rocketdyne	Pending	ECD 2000	Land Only
019	Flight System Critical Assembly	D&D and survey complete	ORISE, DHS	ECD Summer 2000	DOE	Pending	ECD 2000	Not Planned
020	Hot Lab Bldg.	D&D and survey complete	DHS	-	DOE	DHS (concrete)	1997-99	1997-99
020	Hot Lab Land	Survey complete	ORISE, DHS	EPA Area IV Survey	DOE	Pending	ECD 2000	Land Only
023	Corrosion Test Loop	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	DOE	DOE, DHS	1997	1999
024	SNAP Environmental Test Facility	Operational	-	ECD 2004	DOE	-	ECD 2005	ECD 2005
026	Shield Test Irradiation Reactor	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	DOE	DOE, DHS	1997	1998

Attachment 3

Revision Date: 5/2/00
Print Date: 5/2/00

Santa Susana Field Laboratory - Radiological Facility Status

FACILITY NUMBER	FACILITY TITLE	ROCKETDYNE OPERATIONS	VERIFICATION SURVEYS	EPA INSPECTION	OWNER	RELEASED BY	RELEASE DATE	BUILDING DEMOLITION DATE
029	Radiation Measurement Facility	D&D and survey complete	ORISE, DHS	Jan 2000	DOE	DOE, DHS	1997	ECD 2000-2001
030	van de Graaf Accelerator	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	DOE	DOE, DHS	1997	1999
055	Nuclear Materials Development Facility	D&D and survey complete	ORAU	ECD Summer 2000	Rocketdyne	NRC	1987	Not Planned
059	SNAP Ground Prototype Test Building	Phase I D&D and survey complete	ORISE, DHS	ECD Summer 2000	DOE	Phase I pending	ECD 2000	ECD 2001
059	059 Land	-	-	EPA Area IV Survey	DOE	-	ECD 2002	Land Only
064	Fuel Storage Facility	D&D and survey complete	ORISE, DHS	-	DOE	DOE, DHS	1996	1997
064SY	064 Side Yard and land	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	DOE	Pending	ECD 2000	Land Only
073	Kinetic Experiment Water Boiler	D&D and survey complete	ANL	EPA Area IV Survey	ERDA	ERDA	1976	1976
093	L-85 Reactor	D&D and survey complete	ORAU	EPA Area IV Survey	Rocketdyne	NRC	1987	1995
100	Fast Critical Experiment Laboratory	D&D and survey complete	NRC	ECD Summer 2000	Rocketdyne	NRC	1980	Not Planned
143	Sodium Reactor Experiment	D&D and survey complete	ANL	EPA Area IV Survey	Rocketdyne	DOE	1985	1999
353	R&D Laboratory	D&D and survey complete	ORISE, DHS	Jan 2000	Rocketdyne	DHS	1998	ECD 2000
373	SNAP Critical Facility	D&D and survey complete	DHS (document review only)	EPA Area IV Survey	Rocketdyne	DHS	1995	1996-99
654	Interim Storage Facility	D&D and survey complete	ORISE, DHS	EPA Area IV Survey	DOE	Pending	ECD 2000	Land Only
886	Sodium Disposal Facility	Rad. D&D and survey complete	DHS	EPA Area IV Survey	Rocketdyne	DHS	1998 (Land)	1991(Bldg)

Revision Date: 5/2/00
Print Date: 5/2/00