

IG-98-024

**AUDIT
REPORT**

**COST SHARING FOR
SANTA SUSANA FIELD LABORATORY CLEANUP
ACTIVITIES**

AUGUST 18, 1998



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ACRONYMS

CAS	Cost Accounting Standards
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COE	U.S. Army Corps of Engineers
DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management Command
DoD	Department of Defense
EPA	Environmental Protection Agency
FAR	Federal Acquisition Regulation
G&A	General and Administrative
MSFC	Marshall Space Flight Center
NASA	National Aeronautics and Space Administration
NPG	NASA Procedures and Guidelines
OIG	Office of Inspector General
RCRA	Resource Conservation and Recovery Act
SSFL	Santa Susana Field Laboratory
TCE	Trichloroethylene
USAF	United States Air Force

W

August 18, 1998

TO: J/Associate Administrator for Management Systems and Facilities
DA01/Acting Director, Marshall Space Flight Center

FROM: W/Deputy Assistant Inspector General for Auditing

SUBJECT: Final Report on the Audit of Cost Sharing for Santa Susana Field Laboratory
Cleanup Activities, Assignment No. A-HA-97-044, Report Number IG-98-024

The subject final report is provided for your use. Please refer to the executive summary for the overall audit results. Your comments on the draft report were responsive to the recommendations, and we consider them closed for reporting purposes. However, we expect the Marshall Space Flight Center to track its corrective actions until they are fully implemented.

If you have questions concerning the report, please contact Mr. Chester A. Sipssock, Program Director for Environmental and Safety Management Audits, at (216)-433-8960, or Mr. Rick Angle, Auditor-in-Charge, at (256)-544-0070. We appreciate the courtesies extended to the audit staff. See Appendix 5 for the report distribution.

{Original signed by}

Lee T. Ball

Enclosure

cc:

B/Chief Financial Officer

G/General Counsel

JM/Director, Management Assessment Division

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	3
OBJECTIVES, SCOPE, AND METHODOLOGY	5
FINDINGS AND RECOMMENDATIONS	7
REMEDIATION COSTS NEED TO BE SHARED	7
PREVENTIVE COSTS NEED TO BE PROPERLY ALLOCATED	19
EXHIBIT 1 - MAP OF THE SSFL	23
EXHIBIT 2 - MAP OF THE SSFL SHOWING LOCATION OF..... CONTAMINATION	24
EXHIBIT 3 - MAP OF THE SSFL, CANOGA PARK, AND DE SOTO	25
FACILITIES IN RELATIONSHIP TO THE CITY OF LOS ANGELES	
APPENDIX 1 - BACKGROUND	26
APPENDIX 2 - OIG COMPUTATION OF FUTURE REMEDIATION COSTS.....	30
APPENDIX 3 - OIG COMPUTATION OF FUTURE PREVENTIVE COSTS.....	32
APPENDIX 4 - COMMENTS FROM ASSOCIATE ADMINISTRATOR FOR	33
MANAGEMENT SYSTEMS AND FACILITIES DATED JULY 1, 1998	
APPENDIX 5 - REPORT DISTRIBUTION	37

COST SHARING FOR SSFL CLEANUP ACTIVITIES

EXECUTIVE SUMMARY

INTRODUCTION

The Rocketdyne Division operates the Santa Susana Field Laboratory (SSFL) in Ventura County, California, to test rocket engines. Of the SSFL's 2,700 acres, NASA-owned facilities and land comprise 452 acres. The initial parent company, North American Aviation, of what is now Boeing North American, Inc., established the Rocketdyne Division in 1955 to operate the SSFL. North American Aviation owned much of the land at the SSFL since 1954 and operated most of the facilities since 1947.

Use of trichloroethylene (TCE) as a cleaning solvent for flushing engines and test stands after test firings resulted in significant environmental contamination from 1954 through 1961. Rocketdyne conducted test firings for the U.S. Air Force (USAF) when there were no restrictions on the release or disposal of TCE or any other hazardous chemicals. TCE is now considered a cancer-causing agent. Rocketdyne discovered TCE contamination during tests of water supply wells on laboratory grounds in March 1984 and reported the problem to Federal and State environmental authorities. Since then, environmental authorities have issued various orders and permits requiring that corrective actions be taken. The estimated time to clean up groundwater contamination at the SSFL is 40 years.

OBJECTIVES

Our objectives were to determine whether NASA was paying only its fair share of the costs to remediate the TCE contamination at the SSFL, and whether adequate actions are being taken to prevent future contamination.

RESULTS OF AUDIT

Environmental laws require past and present owners, operators, and generators of hazardous waste to clean up hazardous waste sites. As one of the owners, NASA has accepted responsibility for resolving SSFL contamination problems. However, NASA has in the past paid more than its fair share of remediation costs

and will continue to do so in the future if it does not take appropriate steps. Specifically:

- NASA has not been successful in negotiating a fair cost sharing agreement for remediation costs. As a result, NASA may have overpaid Rocketdyne at least \$16.4 million for these costs during 1984 through 1997 that NASA should attempt to recover from the responsible parties. Additionally, NASA could pay an estimated average of \$6.8 million a year in remediation costs, more than NASA's fair share, with little assurance that these costs will be recovered from other responsible parties, including the Department of Defense.
- Rocketdyne's methodology for distributing environmental preventive costs resulted in a disproportionate share of the costs being distributed to NASA through Rocketdyne's General and Administrative cost pool. This practice is potentially not in compliance with Cost Accounting Standards, which prescribe that these costs be allocated directly to the contracts that either benefit from or cause the preventive expenditures. As a result, NASA may have overpaid Rocketdyne \$4.7 million during FYs 1996 and 1997 which NASA should attempt to recover from other Rocketdyne customers, most notably the Department of Defense. Additionally, NASA may overpay an estimated average of \$6.9 million a year in preventive costs, more than NASA's fair share, unless this methodology is changed.

We calculated the amounts in each of the above scenarios based on NASA's share of Rocketdyne's current business base.

***RECOMMENDATIONS
AND MANAGEMENT'S
RESPONSE***

This report contains recommendations aimed at negotiating a cost sharing arrangement for remediation costs and obtaining an equitable distribution of preventive costs. Management suggested changes to the language of the draft report recommendations. We made the changes in the final report, and management concurred with the recommendations. Management has already begun to implement some recommendations to stop Rocketdyne from charging environmental remediation and preventive costs to NASA.

INTRODUCTION

The Rocketdyne Division operates the Santa Susana Field Laboratory (SSFL) in Ventura County, California, to test rocket engines. The map of the SSFL in Exhibit 1 shows how the laboratory is divided into four areas and a buffer zone.

In 1955, the USAF acquired title to the Liquid Oxygen Plant in Area 1 and all of Area II from Rocketdyne. NASA negotiated a facilities contract in August 1962 with the USAF for joint usage of Area II. NASA acquired this property in November 1973 to support the Space Shuttle Main Engine Project. The Marshall Space Flight Center (MSFC) in Huntsville, Alabama, manages the NASA facility and main engine contracts.

The U.S. Environmental Protection Agency (EPA) classified TCE as a hazardous waste. Instead of capturing the TCE during its cleaning process, Rocketdyne allowed the chemical to seep into the ground, resulting in groundwater contamination at the test stands and other locations on laboratory grounds. Rocketdyne built recovery systems under each test stand in 1961 to capture and reuse the spent TCE. The recovery systems have minimized further groundwater contamination. Exhibit 2 shows the location of the TCE contamination at the SSFL.

The EPA listed the SSFL on the Federal Facilities docket which required a Preliminary Assessment/Site Inspection under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Since then, environmental authorities have issued various environmental orders and permits requiring corrective actions. Appendix 1 provides further details on the history of the SSFL and its contamination.

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. Sec. 6901 *et seq.*), was enacted in 1976 by Public Law 94-580 to establish standards and procedures for the handling, storage, treatment, and disposal of hazardous waste. Title 42 U.S.C. Sec. 6973(a) imposes strict liability on any person who is contributing or has contributed to the disposal of hazardous substances. The statute also requires consideration of past and present owners, operators, and generators of hazardous waste in

determining liability. Thus, it is unnecessary for a party to prove that a past owner or operator was negligent or otherwise caused a release. A party must merely establish that a hazardous substance was released at the site. The EPA, however, first requires that current owners and operators clean up hazardous waste sites and allows owners and operators to recover costs from previous owners, operators, or generators of hazardous waste that may have caused contamination of soil and/or groundwater. NASA Headquarters Office of General Counsel officials pointed out that if NASA has to go to court, the statutory basis for cost recovery would be the CERCLA, as amended, 42 U.S.C 9601 et seq.

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

Our objectives were to determine whether NASA was paying only its fair share of the costs to remediate the TCE contamination at the SSFL, and whether adequate actions are being taken to prevent future contamination.

SCOPE AND METHODOLOGY

The scope of this audit included a review of NASA's efforts to obtain cost sharing arrangements with other potentially responsible parties at the SSFL, including evaluation of possible alternatives to ensure that NASA pays only a fair share of the TCE contamination cleanup costs.¹ We either contacted or visited NASA Headquarters; MSFC; Johnson Space Center; Lewis Research Center; Stennis Space Center; the U.S. Army Corps of Engineers (COE); the Defense Contract Audit Agency (DCAA); the Defense Contract Management Command (DCMC); Federal and State EPA offices; the Department of Justice; and the Rocketdyne Division of Boeing North American, Inc.

Our methodology included interviewing responsible officials, reviewing pertinent documents and files, and having DCAA determine whether Rocketdyne's methodology for charging cleanup costs to NASA through overhead and General and Administrative (G&A) pools was equitable. We also reviewed applicable laws and regulations, as well as Agency and contractor records related to the audit objectives, including: the RCRA of 1976; the Federal Acquisition Regulation (FAR) Parts 31, 42 and 45; NASA Procedures and Guidelines 8850; NASA Contracts NAS8-27980, NAS8-39236(f), NAS8-40000, and NAS8-45000; and Cost Accounting Standards 402, 410, and 418.

¹ Rocketdyne considers remediation costs for SSFL to be those to design, develop, and install (1) wells, (2) pump and treat systems, and (3) pollutant capture systems to monitor and clean up the TCE groundwater contamination at the laboratory. Rocketdyne considers the costs to comply with permits for daily operations and to prevent future contamination as preventive costs. The Defense Contract Audit Agency (DCAA) Contract Audit Manual states that environmental costs include such costs as those to prevent environmental contamination and those to clean up prior contamination. The Manual points out that (1) costs incurred to prevent environmental contamination are generally allocated as an indirect expense through overhead using a causal or beneficial base and (2) costs to clean up environmental contamination caused in prior years are generally period costs allocated through a company's General and Administrative (G&A) expense pool.

AUDIT FIELD WORK

Field work was conducted from May 1997 through February 1998 at MSFC; NASA Headquarters; Johnson Space Center; Lewis Research Center; and Rocketdyne's SSFL, Canoga Park, and De Soto facilities. The audit was performed in accordance with generally accepted government auditing standards.

FINDINGS AND RECOMMENDATIONS

REMEDICATION COSTS NEED TO BE SHARED

NASA has not been successful in negotiating a fair cost sharing agreement for remediation costs. As a result, NASA overpaid Rocketdyne at least \$16.4 million for these costs from 1984 through 1997. NASA should attempt to recover the funds from the U.S. Air Force (USAF) through the U.S. Army Corps of Engineers (COE). Rocketdyne's approved methodology for distributing remediation costs has the effect of charging NASA most of the costs because NASA represents the majority of Rocketdyne's current business base. Environmental regulations call for responsible parties to share in the costs of cleanup; however, NASA has been unsuccessful in negotiating an agreement with the parties most responsible for the contamination. If an agreement is not worked out, NASA could pay an estimated \$6.8 million a year in remediation costs, more than NASA's fair share, with little assurance that the funds will be recovered.

EPA Looks to Current Owners for Action

RCRA (42 U.S.C. Sec. 6901 et seq.), was enacted in 1976 by Public Law 94-580 to establish standards and procedures for the handling, storage, treatment, and disposal of hazardous waste. EPA uses 42 U.S.C. Sec. 6928(h)(1) to order current owners and operators of hazardous waste sites to perform corrective actions to protect human health and/or the environment. Section 6928(h)(2) allows the EPA Administrator to assess penalties up to \$25,000 for each day of noncompliance with the order.

In addition, 42 U.S.C. Sec. 6973(a) imposes strict liability on any person who is contributing or has contributed to the disposal of hazardous substances. This Section also requires consideration of past and present owners, operators, and generators of hazardous waste in determining liability. Thus, it is unnecessary for a party to prove that a past owner or operator was negligent or otherwise caused a release. One must merely establish that a hazardous substance was released at the site. The U.S. EPA requires current owners and operators to clean up hazardous waste sites and leaves it up to them to recover any costs from previous owners, operators, or generators of hazardous waste. NASA Headquarters Office of General Counsel officials pointed out that if NASA has to go to court, the statutory basis for cost recovery would be the CERCLA, as amended, 42 U.S.C 9601 et seq.

Until recently, NASA did not have a policy addressing the issue of identifying and pursuing potentially responsible parties where appropriate. On June 26, 1997, however, the Agency issued NASA Procedures and Guidelines (NPG) 8850.1. For the first time, NASA policy established requirements, responsibilities, procedures, and guidelines related to (1) the identification of potentially responsible parties and (2) the development of cost-sharing or cost recovery arrangements for the purpose of pursuing or negotiating for equitable funding for the investigation and remediation of contaminated sites on NASA Centers and component facilities. The policy provided that cost sharing arrangements were preferred over the pursuit of cost recovery.

NASA procurement officials are to comply with FAR Part 31 in determining whether costs such as TCE contamination cleanup costs are reimbursable to contractors performing cleanup. Part 31 states that a cost is reimbursable in cost type contracts if it is reasonable, properly “allocable” to the Government contracts, and not specifically made unallowable under FAR Part 31 or by mutual agreement.

***NASA Has Paid
More than a Fair
Share for Past
Remediation Costs***

NASA has overpaid Rocketdyne at least \$16.4 million for past TCE remediation costs at the SSFL that the Agency should attempt to recover during cost sharing negotiations. The discussion that follows explains how NASA paid for these costs and why it should pay no more than 12 percent for past remediation costs.

Rocketdyne officials believe that the USAF should be responsible for paying at least 97 percent of all remediation costs associated with the TCE contamination. Their conclusion was based on the following:

- the USAF owned all the test stands during 1954 through 1961 and Area II during 1956 through 1961 when 97 percent of the contamination occurred;
- the contamination was generated in support of USAF programs;
- USAF officials approved procedures followed by Rocketdyne officials; and

- USAF officials participated in the tests conducted by Rocketdyne officials.

Rocketdyne officials also believe that responsibility for the remaining 3 percent of the TCE contamination should be shared between the USAF and NASA. Further, Rocketdyne officials strongly believe that Rocketdyne should not be responsible for any of the TCE contamination cleanup costs.

COE officials, who are representing the USAF in negotiations with NASA, believe Rocketdyne should be responsible for 92.1 percent of the TCE contamination cleanup costs, with NASA and the USAF responsible for 3.95 percent each. COE officials also believe that Rocketdyne should not be allowed to charge its share of the remediation costs to its customers through indirect charges. COE officials based their conclusions on an October 1990 TechLaw report. TechLaw, an environmental consulting firm for the COE, based its conclusions on the following:

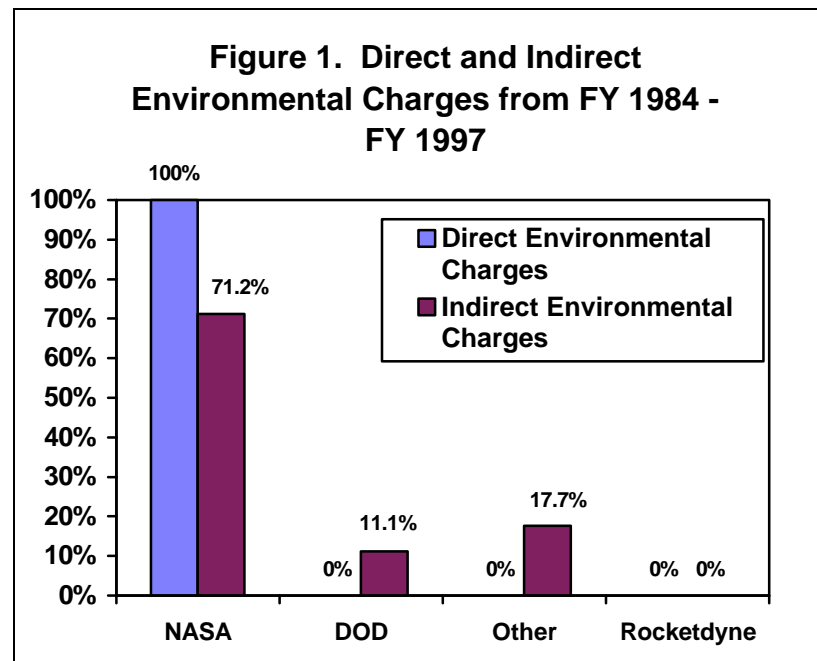
- Rocketdyne owned and operated Area I from the beginning;
- Rocketdyne owned Area II during 1954 and 1955; and
- Rocketdyne operated Area II during the entire time the contamination occurred.

The MSFC officials involved in negotiations with COE officials believe that NASA should pay no more than 12 percent of the TCE contamination cleanup costs, while the USAF should be responsible for 88 percent. The Agency's position is based on a study done by CH2M Hill, an environmental consulting firm for NASA. NASA contracted with CH2M Hill to research Rocketdyne's records and determine how much TCE was released into the ground, when the TCE was released, and what programs the TCE supported. In June 1993, CH2M Hill reported its conclusion that the USAF contributed to 88 percent and that NASA contributed to 12 percent of the TCE contamination. CH2M Hill's conclusion considered that, even though NASA did not sign its first contract with Rocketdyne until 1962, the Agency received some benefit from Rocketdyne testing Atlas and Delta engines for the USAF during 1956 through 1961.

The Office of Inspector General (OIG) thus concluded that NASA

should not pay directly for more than 12 percent of past or future TCE contamination cleanup. NASA should conduct a Potentially Responsible Parties analysis, in accordance with the requirements of NPG 8850, to identify those parties and the degree of their liability. This analysis may conclude that Rocketdyne is responsible for some of the remaining 88 percent of the liability for TCE contamination cleanup, even though Rocketdyne strongly believes it should not be responsible for any of the cleanup costs. If Rocketdyne is responsible for some portion of the 88 percent, Rocketdyne would be allowed to charge its costs to its customers through its G&A pool based on the provisions of FAR Part 31. Therefore, the potential savings to NASA identified in this report may be reduced somewhat.

Figure 1 shows the disproportionate share already charged to NASA, considering that it should not have paid more than 12 percent of past TCE remediation costs.



No Cost Sharing Agreement

NASA does not have a cost sharing arrangement, more than 12 years after formal notification of the TCE contamination at the SSFL. For about 4.3 years during this 12-year period, NASA officials unsuccessfully pursued an arrangement with the COE, Omaha District. Negotiations were blocked because of major

differences over the degree of liability among the parties and the extent to which the contractor would be allowed to charge certain costs back to the Government, as addressed below. MSFC referred this situation to NASA Headquarters in March 1995; however, no significant progress has been made.

In March 1984, Rocketdyne identified TCE contamination in the groundwater at the SSFL and notified the EPA authorities at the State and Federal levels. In April 1984, the California EPA required Rocketdyne to define the problem and take action. In February 1986, Rocketdyne formally notified NASA and the USAF that the TCE contamination at the SSFL was so severe that the California EPA had placed the SSFL on its list of CERCLA sites.

From 1986 through 1990, NASA and the COE worked independently, gathering information and planning their strategies. For example, NASA hired a contractor to evaluate whether Area II would qualify as a CERCLA site. Meanwhile, the COE sought to establish a Department of Defense (DoD) position regarding how the potentially responsible parties should share in the costs to clean up the SSFL.

From December 1990 through March 1995, teams of NASA officials attempted to negotiate a fair cost sharing agreement with COE officials. NASA met with COE officials in December 1990, October 1992, June 1993, and October 1993. In addition to these meetings, NASA corresponded on numerous occasions through March 1995 but could not arrive at an agreement. When the negotiations failed in March 1995, the Director of the MSFC Environmental Engineering and Management Office elevated the negotiations to the Director of the Environmental Management Division, Code JE, NASA Headquarters. Since then, neither NASA Headquarters nor MSFC officials have vigorously pursued negotiations with the COE. According to the Acting Director of the NASA Headquarters Environmental Management Division, Code JE has not had the time or resources to pursue the negotiations because of higher priority work.

The negotiations failed because of the diverse positions taken by NASA and the COE. As pointed out, COE officials took the position that Rocketdyne was the principle responsible party and,

therefore, should be responsible for 92.1 percent of the TCE contamination cleanup costs and that it should not be allowed to charge these costs back to the Government through indirect costs. The COE position was based on the facts that Rocketdyne operated the SSFL and owned Area I during the entire contamination period and that Rocketdyne owned Area II during some of the contamination period. The COE continues to support this position. The MSFC negotiating team, however, believed that the USAF should be responsible for at least 88 percent of the TCE contamination cleanup costs and that Rocketdyne should be allowed to charge the costs attributed to Rocketdyne through its indirect costs. Such differences require resolution among the parties.

There is no incentive for the COE and other responsible parties to negotiate a fair cost sharing agreement as long as NASA continues to pay most of the cleanup costs instead of pursuing an agreement. NASA management should escalate and intensify negotiations. The Assistant Chief of Environmental Defense of the Environmental and Natural Resources Division, Department of Justice, stated that his organization will address the dispute between NASA and the COE once the Agency exhausts negotiation efforts at its highest levels. NPG 8850.1 provides that the Office of the General Counsel (Code G) is the designated liaison with the Department of Justice on any efforts requiring that Department's involvement.

***Why NASA Pays
More***

NASA has paid significantly more than its fair share to clean up the TCE contamination at the SSFL because:

- NASA paid most of the costs to assess the TCE contamination and to develop and install remediation systems through direct charges, and
- Rocketdyne's distribution of the costs to operate and maintain the remediation systems through its overhead and G&A pools has the effect of shifting most of this indirect cost to NASA.

Direct Charges of Remediation Costs - NASA accepted responsibility for the following expenses at the SSFL:

- investigation and assessment of the TCE contamination,

- study and design of remediation systems, and
- installation of remediation systems.

Rocketdyne had initially requested DoD to approve the charge of these costs directly to DoD contracts because Rocketdyne believed the USAF should be responsible for at least 97 percent of the cleanup costs. However, the COE in January 1990 refused to allow Rocketdyne to charge remediation expenses directly to DoD contracts.

In November 1991, the Director of the Office of Management Systems and Facilities, Code J, approved Rocketdyne's request to charge these expenses directly to the NASA Facilities Contract. The approval covered both NASA-owned Area II and non-NASA-owned land. Rocketdyne charged NASA \$7 million for these expenses under the contract from FY 1990 through FY 1997. The direct charges include costs to assess the TCE contamination, as well as the cost to design, develop, and install (1) wells, (2) pump and treat systems, and (3) pollutant capture systems to monitor and clean up the TCE groundwater contamination at the SSFL.

Methodology for Distributing Indirect Costs - Rocketdyne currently charges the costs of operating and maintaining the remediation systems developed during the design and installation phase to a single G&A pool for the Rocketdyne Division and distributes these costs to all contracts on the basis of total cost input. The G&A pool includes the SSFL, Canoga Park, and De Soto facilities. See Exhibit 3 for the location of the Rocketdyne facilities. NASA's work at the latter two facilities (including the Space Station and the Space Shuttle Main Engine) comprises the bulk of Rocketdyne's work for its facilities. Therefore, during FYs 1996 and 1997, Rocketdyne charged NASA \$2.4 million (71.4 percent) through Rocketdyne's G&A cost pool for its cost to operate and maintain the remediation systems. Also, during FYs 1984 through 1995, Rocketdyne charged NASA \$9.9 million through its common overhead pool for its cost to operate these systems.

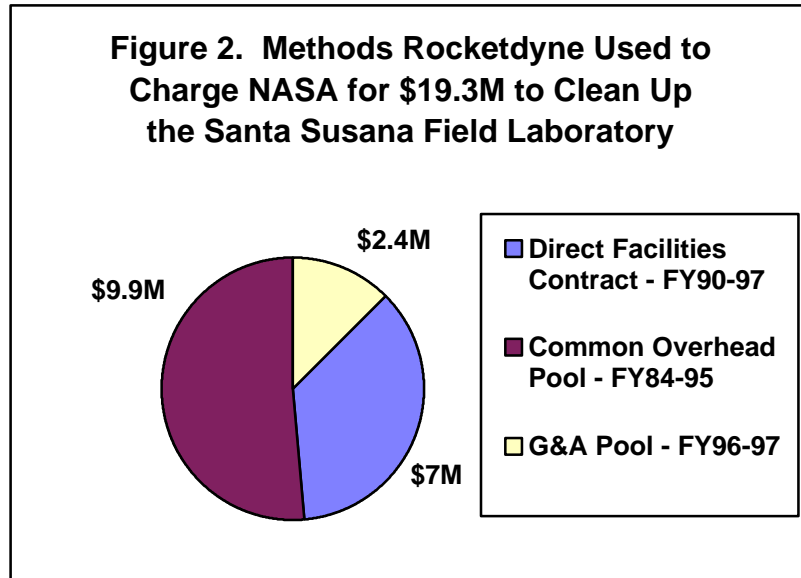
NASA delegated review and approval authority for Rocketdyne's accounting system, including its overhead and G&A charging methodologies, to the DCAA and DCMC. DCMC approved

Rocketdyne's accounting system, including the methodology for charging environmental costs.

After reviewing the provisions of FAR Part 31, conducting additional research, and discussing environmental costs with NASA's Office of General Counsel, MSFC's Assistant Chief Counsel and Environmental Attorney concluded that environmental cleanup costs are generally allowable and can be considered normal costs of doing business.

NASA Has Paid More than a Fair Share for Past Remediation Costs

Of the \$24.3 million Rocketdyne incurred for FYs 1984 through 1997 to clean up TCE contamination at the SSFL, Rocketdyne charged \$19.3 million to NASA, representing 79.5 percent of the total amount. The methods Rocketdyne used to charge NASA are summarized in Figure 2.



NASA should have paid only \$2.9 million, or 12 percent of the \$24.3 million. Therefore, NASA should attempt to recover \$16.4 million (\$19.3 million less \$2.9 million) from the USAF.

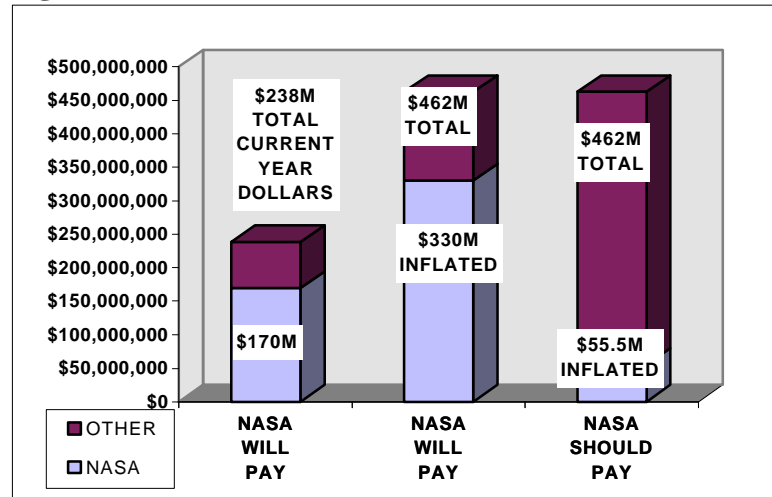
NASA Will Pay More Than a Fair Share for Future Remediation Costs

During the next 40 years, NASA could pay \$8.2 of the \$11.6 million a year in additional remediation costs with little assurance that those funds will be recovered. The Agency should negotiate a cost sharing agreement that would require NASA to pay no more than \$1.4 (12 percent) of the \$11.6 million a year. This

action would save NASA an average of \$6.8 million a year over the next 40 years.

The future impact of NASA continuing to pay more than a fair share to clean up the SSFL is shown in Figure 3.

Figure 3. ESTIMATED FUTURE REMEDIATION COSTS



As indicated in Figure 3, if things continue as they are, NASA will pay \$170 million of an estimated \$238 million (in FY 1997 dollars) to clean up the TCE contamination at the SSFL over a 40-year period. A 40-year cleanup is based on a consensus of NASA and contractor environmental experts. NASA’s share, however, grows to about \$330 million, or an average of \$8.2 million annually, once inflation is factored in. If NASA’s share of Rocketdyne’s G&A pool were to decline as expected by as much as 50 percent in the years ahead, NASA would still pay \$165 million of the total \$462 million needed to clean up the TCE contamination. According to OIG estimates, NASA should pay no more than \$55.5 million (12 percent) over the 40-year period, or an average of \$1.4 million a year. (See Appendix 2 for a detailed explanation of the amounts and how they were computed).

NASA should negotiate a cost sharing agreement that would require the Agency to pay no more than \$55.5 million. This

action would save NASA \$274.5 million over the next 40 years

or an average of \$6.8 million a year.

The OIG estimates were based on the additional assumption that TCE cleanup costs would continue to be incurred over a 40-year period. This assumption could prove conservative. According to both the Director of the NASA Headquarters Environmental Management Division and the Federal EPA Project Manager for the SSFL site, NASA could pay for TCE cleanup for a much longer period. These officials believed that the nature of the TCE contamination at the SSFL could require 100 years or longer before cleanup is fully accomplished based on current technological techniques.

MSFC financial and procurement officials have already initiated certain actions in response to our audit work. For example, the Director of MSFC's Procurement Office requested the DCMC Administrative Contracting Officer in January 1998 to reevaluate Rocketdyne's methodology for charging environmental remediation costs through G&A. The Director's intent was for the DCMC to identify the liabilities of the responsible parties and to reallocate the USAF's share of the remediation costs from the NASA contract.

***REVISED AND
RENUMBERED
RECOMMENDATIONS***

As a result of management's comments on the draft report, we combined draft Recommendations 1 and 2 into revised Recommendation 1 in the final report. Also, we renumbered draft report Recommendations 3, 4, and 5 as Recommendations 2, 3, and 4, respectively. Draft report Recommendation 1 sought reimbursement from the DoD of prior year charges already made to NASA for direct and indirect remediation costs. Draft report Recommendation 2 required negotiating a cost sharing agreement with the COE and other responsible parties to limit NASA's liability for the SSFL future cleanup costs. Recommendation 1 now incorporates the language recommended by management.

RECOMMENDATION 1

The Associate Administrator for the Office of Management Systems and Facilities (Code J) should seek a cost sharing agreement, with the Department of Defense and other potentially responsible parties, that covers prior year and future charges of the remediation costs associated with the clean up at the Santa Susana Field Laboratory.

***MANAGEMENT'S
RESPONSE***

Management suggested changes to the draft report recommendation to seek a single agreement that covers total liability, that is, costs already incurred as well as future costs. Rather than have DoD reimburse NASA the amount of the overpayment as recommended in the draft report, the cost sharing agreement should seek an adjustment in the apportionment of future costs to account for the discrepancy in the distribution of costs already incurred. Further, in the context of apportioning liability for the total cleanup cost between two Government agencies, allocation as direct or indirect has no relevance. Although NASA believes that paying no more than 12 percent of the cleanup costs is a good negotiating tool based on current information, new information may be produced to change NASA's current understanding of the site. In addition, a legal interpretation of the environmental laws may limit full recovery of all future costs. Therefore, the percentage that NASA would pay should not be stipulated for those reasons. The complete text of management's comments is in Appendix 4.

***EVALUATION OF
MANAGEMENT'S
RESPONSE***

We revised the recommendation as management suggested. Management's comments are responsive to the recommendation.

***REVISED
RECOMMENDATION***

In response to management's comments on the draft report, we revised the current Recommendation 2 to designate the Administrator as the level of authority to work with the Department of Justice in settling disputes, whereas, the draft recommendation showed the Office of General Counsel.

RECOMMENDATION 2

If a negotiated settlement cannot be reached in a timely manner, the Associate Administrator for the Office of Management Systems and Facilities (Code J) should consider other alternatives including elevating the negotiations to the level of the NASA Administrator and U.S. Army Corps of Engineers Commanding General. If satisfactory resolution for NASA cannot be reached, the Office of General Counsel (Code G) should advise the Administrator that this matter can be referred to the Department of Justice to settle the dispute.

***MANAGEMENT'S
RESPONSE***

NASA management concurred with this recommendation. Management stated that Code J should consider other alternatives including elevating the negotiations to the level of the NASA Administrator and the U.S. Army Corps of Engineers Commanding General.

***EVALUATION OF
MANAGEMENT'S
RESPONSE***

Management's comments are responsive to the intent of the recommendation.

***PREVENTIVE COSTS
NEED TO BE
PROPERLY
ALLOCATED***

Rocketdyne's methodology for distributing environmental preventive costs through Rocketdyne's G&A cost pool may have resulted in a disproportionate share of the costs being distributed to NASA. This pool is allocated among Rocketdyne customers but not necessarily among SSFL users. This practice also may not be in compliance with Cost Accounting Standards (CAS), which prescribe that these costs be allocated directly to the contracts that either benefit from or cause the preventive expenditures. Limited NASA work was performed at the SSFL during FYs 1996 and 1997, and none is projected for the future. As a result, NASA may have overpaid Rocketdyne as much as \$4.7 million for preventive costs during FYs 1996 and 1997 that the Agency should attempt to recover. Additionally, NASA may overpay Rocketdyne an estimated average of \$6.9 million a year more than its fair share in future preventive costs unless this methodology is changed.

***Allocation
Methodology***

The methodology Rocketdyne uses to distribute environmental preventive costs allocates the costs among Rocketdyne customers, including NASA. Since the Agency is a major customer of Rocketdyne and represents approximately 71.4 percent² of the G&A cost pool during FYs 1996 and 1997 for allocation of preventive costs, NASA paid an estimated \$4.7 million of the \$6.5 million incurred for environmental preventive costs at the SSFL. We calculated all costs to NASA (both past and future) using data Rocketdyne officials provided the DCAA. During DCAA's Exit Conference with Rocketdyne in February 1998, Rocketdyne officials pointed out that the data they provided DCAA may not be accurate. As of the date of this report, DCAA is continuing its audit. Based on the results of the DCAA audit, the costs to NASA may change.

In our opinion, NASA should seek to adjust the Rocketdyne allocation methodology so that SSFL preventive costs are allocated among SSFL users rather than among all Rocketdyne customers. In this manner, NASA and other Rocketdyne customers would be more equitably charged for costs associated with performance under their respective contracts.

² Rocketdyne charged an average of 71.4 percent of its G&A cost pool to NASA, 20.6 percent to its commercial customers, and 8 percent to its DoD customers during FYs 1996 and 1997. McDonnell Douglas is Rocketdyne's primary commercial customer and is now a subsidiary of Boeing North American, Inc.

As discussed below, there was very little work performed in support of NASA contracts at the SSFL during FYs 1996 or 1997 and no future NASA work is contemplated. Therefore, NASA may have reimbursed Rocketdyne for work costing \$4.7 million that should properly be charged to the actual users of the SSFL facilities. The Rocketdyne methodology for charging SSFL preventive costs may require modification to preclude the allocation of these costs to NASA. Also, NASA should attempt to recover previous, improperly allocated costs.

Potential Non-compliance with Cost Accounting Standards

Title 41 U.S.C. 422 requires certain contractors and subcontractors to comply with CAS, to disclose their cost accounting practices in writing and to follow them consistently. The DCAA, which performs audit functions for NASA as prescribed by NASA FAR Supplement Subpart 1842.1, regularly performs reviews of CAS compliance. At our request, DCAA is reviewing Rocketdyne's methodology for distributing environmental costs through its G&A expense pool. As pointed out, all costs to NASA (both past and future) are based on data provided by Rocketdyne to the DCAA. Rocketdyne recently stated that the data it provided DCAA is not accurate. Therefore, DCAA is continuing its audit of Rocketdyne's environmental accounting records and is evaluating Rocketdyne's response to an earlier DCAA draft report on potential CAS 410 and 418 violations. Once the DCAA completes the evaluation, it will provide a final report to NASA and the OIG, stating DCAA's position on the potential violations.

Based on our work, however, Rocketdyne is potentially in non-compliance with CAS 418, "Allocation of Direct and Indirect Costs," and CAS 410, "Allocation of Business Unit General and Administrative Expenses to Final Cost Objectives." The potential noncompliance pertains to the allocation of costs incurred to prevent contamination because such costs were not being allocated as an indirect expense using a beneficial or causal basis. CAS 418-40(c) requires that pooled costs be allocated to cost objectives in reasonable proportion to the causal or beneficial relationship of the pooled costs to cost objectives. In our opinion, Rocketdyne's allocation of approximately 71.4 percent of its preventive costs to NASA through its G&A pool does not satisfy the CAS 418 requirement since NASA contract work at the

SSFL comprised very little of the direct contract activity at the SSFL. We have referred this matter to the DCAA for its consideration.

As pointed out, CAS 418 prescribes that pooled costs be allocated in reasonable proportion to the causal or beneficial relationship between the cost and the cost objective. However, NASA is not benefiting from the preventive expenditures because NASA officials have stated that the Agency has no current or future requirements for the SSFL facilities. In addition, NASA's use of SSFL facilities in FYs 1996 and 1997 was extremely limited. Rocketdyne officials escorted OIG representatives through the SSFL on two occasions during the fall of 1997 and could not identify any work for NASA at the SSFL.

Moreover, NASA has no future plans for work at the SSFL. Thus, NASA needs to take action to prevent paying an estimated average of \$6.9 million a year in preventive costs, during the 40 years required to clean up the SSFL. The \$6.9 million should be paid by the Rocketdyne customers receiving benefit from the preventive expenditures. See Appendix 3 for details on the \$6.9 million estimate.

In response to our audit work, the Director of MSFC's Procurement Office requested that DCMC reevaluate Rocketdyne's methodology for charging environmental preventive costs through G&A to ensure that only allowable costs are charged to NASA. We will assess the results of the evaluation upon its completion. In our opinion, regardless of whether Rocketdyne is in noncompliance with CAS, NASA needs to pursue a fair allocation methodology for preventive costs.

RECOMMENDATION 3

The NASA cognizant Contracting Officer should seek recovery of the costs already charged to NASA for preventive costs for other Rocketdyne customers.

***MANAGEMENT'S
RESPONSE***

Management partially concurred. Management is uncertain whether there is a basis to recover the preventive costs by NASA. Therefore, the contracting officer has requested that the DCAA and the DCMC investigate Rocketdyne's accounting practices and determine whether Rocketdyne is properly allocating preventive costs. Based on the results of that review, the

contracting officer will take the appropriate action to seek recovery of preventive costs paid to Rocketdyne. The Procurement Office at MSFC will coordinate any actions to recover preventive costs with the MSFC Office of Chief Counsel upon disposition of this matter.

***EVALUATION OF
MANAGEMENT'S
RESPONSE***

The proposed actions are responsive to the intent of our recommendation. We agree that NASA should wait until DCAA completes its review of Rocketdyne's accounting practices for charging preventive costs.

RECOMMENDATION 4

The NASA cognizant Contracting Officer should direct Rocketdyne to allocate future preventive costs on a causal or beneficial relationship based on the work performed at the Santa Susana Field Laboratory, considering any DCMC recommendations resulting from the DCAA audit work.

***MANAGEMENT'S
RESPONSE***

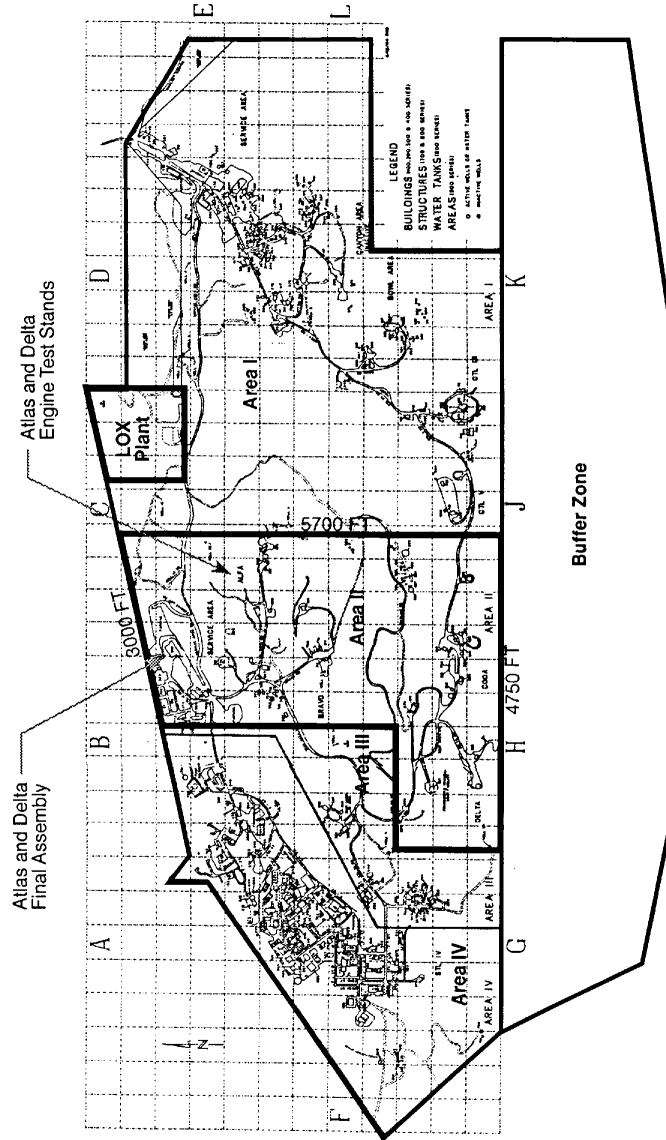
Management concurs. The disposition of the recommendation will determine any future charges to NASA for preventive costs. The contracting officer will ensure that future preventive costs are allocated appropriately, considering any DCMC recommendations resulting from the DCAA audit work.

***EVALUATION OF
MANAGEMENT
RESPONSE***

The proposed actions are responsive to the intent of our recommendation. We agree that NASA should wait until DCAA completes its review of Rocketdyne's accounting practices for charging preventive costs.

MAP OF THE SSFL

SANTA SUSANA FIELD LABORATORY

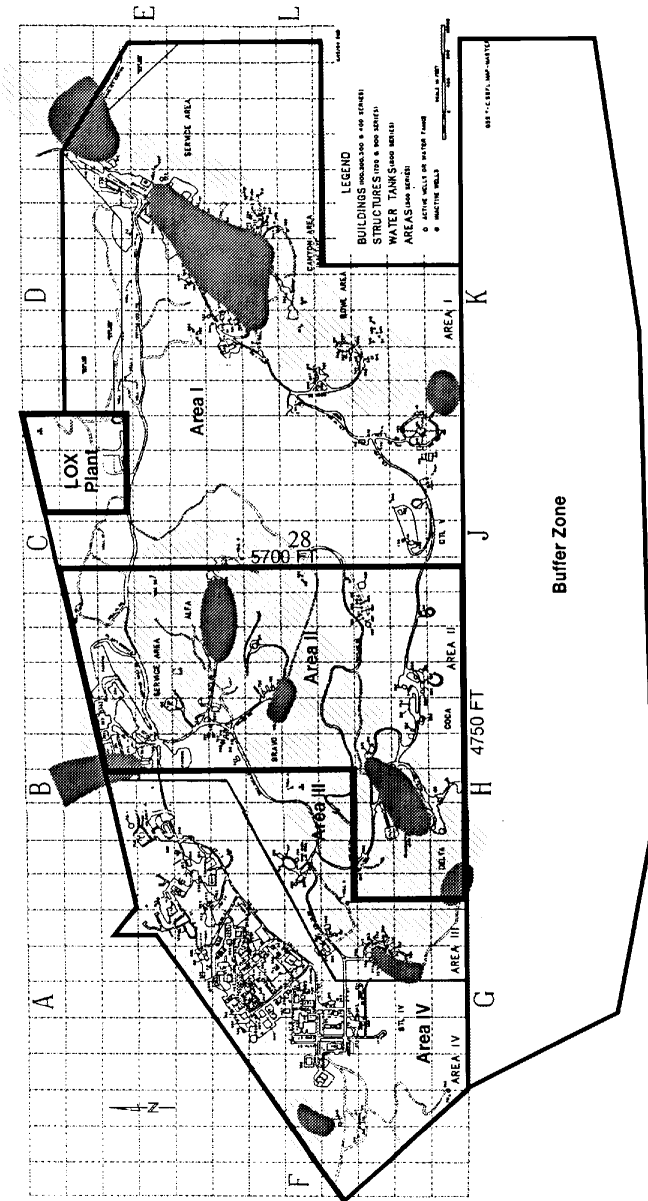


Notes

- (1) Area II is owned by NASA—410 acres.
- (2) The LOX plant area is owned by NASA—42 acres.

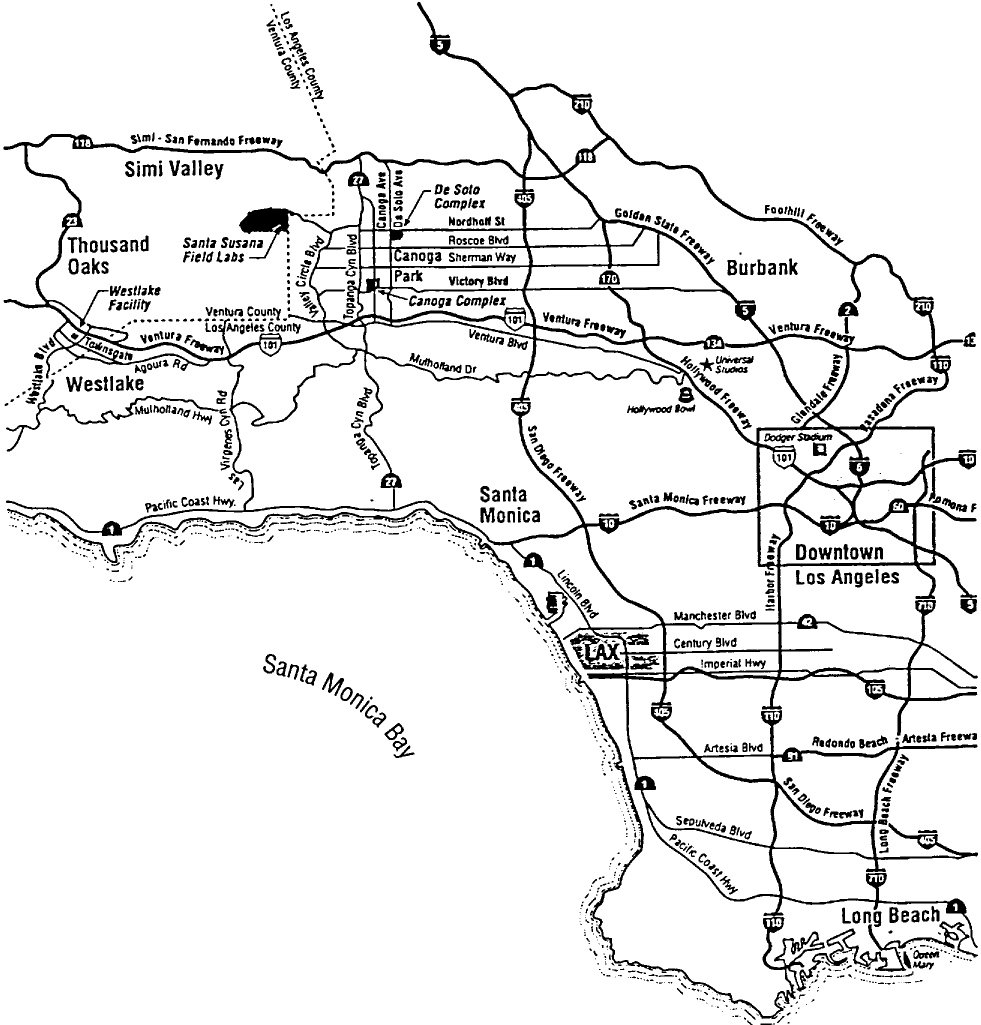
MAP OF THE SSFL SHOWING LOCATION OF CONTAMINATION

SANTA SUSANA FIELD LABORATORY



- Approximated lateral extent of trichloroethylene (TCE) concentrations ≥ 5 micrograms per liter
- Approximated lateral extent of TCE concentrations ≥ 100 micrograms per liter

MAP OF THE SSFL, CANOGA PARK, AND DE SOTO FACILITIES IN RELATIONSHIP TO THE CITY OF LOS ANGELES



BACKGROUND

The SSFL, in eastern Ventura County, California, is divided into four areas (Areas I, II, III, and IV). These areas along with a buffer zone comprise approximately 2,700 acres. NASA currently owns the 42-acre former Liquid Oxygen Plant site in Area I. NASA also owns another 410 acres in Area II on which are situated four rocket engine test stands. Rocketdyne owns 785 acres in Areas I and III; 290 acres in Area IV; and a 1,140 acre buffer zone. Rocketdyne operates the facilities in Areas I, II, and III. The Department of Energy leases, with an option to buy, 90 of the 290 acres in Area IV from Rocketdyne.

Section 7003(a) (42 United States Code 6973) of the Resource Conservation and Recovery Act (RCRA) imposes strict liability on any person who is contributing to or has contributed to the disposal of hazardous substances. This law requires consideration of past and present owners, operators, and generators of hazardous waste in determining liability. The following describes the events that led to NASA's payment for most of the contamination remediation and cleanup costs.

Operator of the SSFL - The contractor, currently Boeing North American, Inc., Rocketdyne Division, has owned much of the land and operated most of the facilities at the Santa Susana Field Laboratory (SSFL) since 1947. This contractor changed its name several times during that period and added the Rocketdyne Division in 1955. Also, this contractor operated SSFL facilities using the following names:

- 1947 to 1955 North American Aviation (NAA)
- 1955 to 1967 North American Aviation, Rocketdyne Division
- 1967 to 1974 North American Rockwell, Rocketdyne Division
- 1974 to 1996 Rockwell International Corporation, Rocketdyne Division
- 1996 to present Boeing North American, Inc., Rocketdyne Division

For purposes of this appendix, we refer to the contractor as NAA in any discussions of events prior to 1955 and as Rocketdyne for those activities occurring in 1955 and thereafter.

Acquisition of Area I - In 1947, the NAA acquired a parcel of land that became the first part of what was later called Area I of the SSFL. NAA, the COE, and outside contractors built two

APPENDIX 1

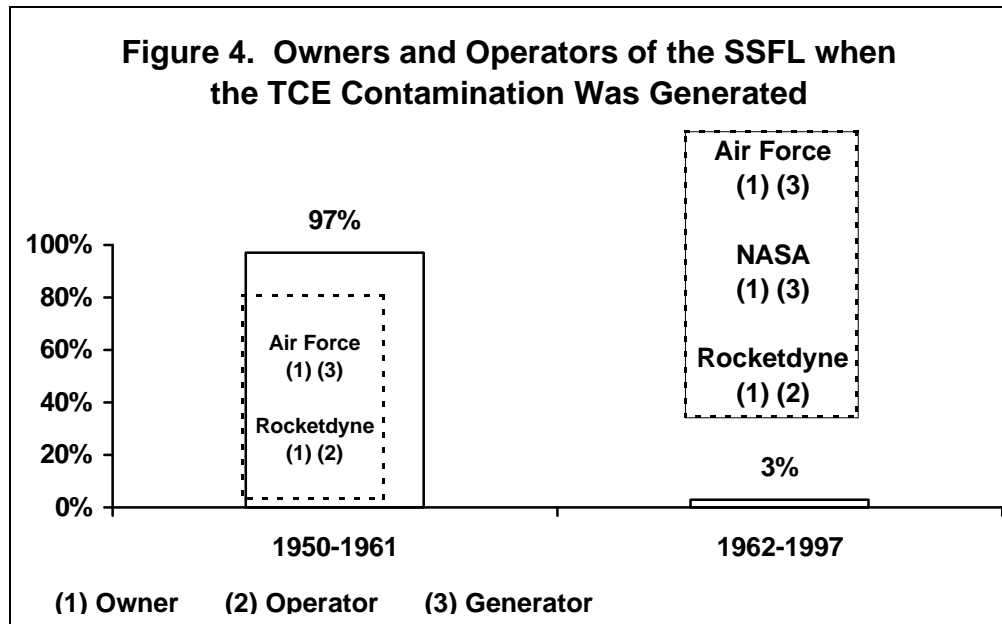
test stand facilities and the Liquid Oxygen Plant on this land for the USAF, which originally owned the facilities. The NAA began using this property to test rocket engines for the USAF in 1950.

Acquisition of Area II - In 1954, the NAA acquired 838 acres of land next to the original purchase. By prior agreement with the USAF, 410 acres were to become a USAF-owned rocket engine test facility. From 1954 through 1957, the NAA, the COE, and outside contractors built four test stand facilities for the USAF. Rocketdyne began testing engines for the USAF on this land shortly after it was established in 1955 as a part of the NAA. Rocketdyne then conducted test operations with the USAF's oversight in performance of contracts with the DoD. Rocketdyne deeded this property to the USAF in 1955, and the USAF recorded the deed in December 1958. The USAF contracted with Rocketdyne to manage and maintain these facilities under a series of facilities contracts, and maintained a facilities contract relationship with Rocketdyne while the USAF owned this land. This land was named the USAF Plant Number 57.

Use of TCE to Clean Engines after Test Firings - Rocketdyne's use of TCE to clean rocket engines after test firings contaminated the groundwater at the two test stand facilities in Area I during 1950 through 1961, and at the four test stand facilities at Plant Number 57 during 1955 through 1961. Rocketdyne's procedures required cleaning the engines by pumping TCE through the fuel channels, thrust chambers, and injectors while the engines were mounted on test stands. In addition, Rocketdyne used TCE to clean up work areas and tools at the test stands. Rocketdyne allowed the TCE to drain into unlined channels that dumped into unlined retention ponds. Rocketdyne did not treat the TCE before allowing it to percolate into the ground. Rocketdyne officials stated that the USAF approved Rocketdyne's procedures because they were considered "Industry Accepted Practice" at the time. USAF officials also approved the design and specifications for the test stand facilities. Rocketdyne and USAF officials believed the TCE would evaporate into the atmosphere while doing no harm to the environment.

Installation of TCE Recovery Systems - In 1961, Rocketdyne and USAF officials decided (for economic reasons) to build a TCE recovery system under each test stand. CH2M Hill representatives researched Rocketdyne's records for NASA and determined that 512,900 (97 percent) of 530,400 gallons of TCE were released before the recovery systems were installed. The COE designed and built the reclamation systems for Rocketdyne, which used the systems to collect the TCE and store it in tanks prior to redistillation, recertification, and reuse. This practice saved Rocketdyne the cost of buying new TCE for each test firing. Figure 4 shows that, since installation of TCE recovery systems in 1961, the contamination of groundwater has been effectively stopped.

APPENDIX 1



First NASA Use of the SSFL Facilities - In 1962, the USAF contracted with NASA for joint use of Plant Number 57 for a 20-year period. NASA contracted separately with Rocketdyne to operate these facilities for NASA. For 12 years, the NASA facilities and the USAF facilities contracts ran concurrently with Rocketdyne. Rocketdyne continued to operate test facilities for the USAF while also operating them in support of supply contracts for NASA. Rocketdyne continued to use TCE to clean the engines after test firings.

NASA Acquisition of Area II - In November 1972, the USAF granted NASA a permit to use Plant Number 57 to test the Space Shuttle Main Engine, with the understanding that the USAF would eventually transfer title to NASA. In June 1973, the USAF declared this property surplus and transferred it to the General Services Administration for disposal. In November 1973, the General Services Administration transferred the property to NASA. From that point, Plant Number 57 became known as Area II.

State of California EPA Requirements and Order - Rocketdyne discovered TCE contamination in water supply wells at the SSFL and reported it to the State of California EPA and the Federal EPA in March 1984. In April 1984, the State of California EPA requested a TCE investigation. In July 1989, the Federal EPA delegated responsibility to the State of California EPA for monitoring and administering the cleanup effort. In November 1990, the State of California Attorney General required Rocketdyne to begin sampling of the surface ponds. In

APPENDIX 1

December 1990, the State of California EPA issued a Comprehensive Ground Water Monitoring Evaluation requesting Rocketdyne to prepare a Groundwater Sampling and Analysis Plan and a Groundwater Quality Assessment Plan.

The State of California EPA and the Federal EPA jointly completed a preliminary RCRA Facility Assessment and issued a report in July 1991. The Assessment identified areas of the SSFL for designation as Solid Waste Management Units and Areas of Concern. In August 1992, the State of California EPA issued a Stipulation Enforcement Order requiring Rocketdyne to submit a Current Conditions Report, within 7 months, containing an in-depth investigation of the hazardous waste generated and released at each area. The Order required Rocketdyne to submit a Draft RCRA Facility Investigation (RFI) Workplan, which would include plans to clean up the areas identified in the Current Conditions Report within 3 months of the completion of the report.

Rocketdyne was also required to prepare an RFI Report and Corrective Measure Studies and to clean up the areas identified in the final approved Corrective Measure Studies following the State of California EPA approval of the RFI Workplan. The Order also required Rocketdyne to make the Current Conditions Report and the Draft RFI Workplan available for public review and comment when Rocketdyne submitted the Draft Workplan to the State of California EPA for review. NASA officials stated that, although Rocketdyne requested extensions, it complied with all State of California EPA requirements.

OIG COMPUTATION OF FUTURE REMEDIATION COSTS

Future Remediation Costs Based on FY 1997 Dollars - We calculated the total future remediation cost of \$238 million (an average \$5.95 million per year) to clean up the SSFL in FY 1997 dollars during the 40-year cleanup period by combining the following costs.

- In February 1997, Foster Wheeler Environmental Corporation (NASA's Environmental Support Contractor) estimated a cost to the Agency of \$125 million to clean up just the NASA-owned portions of the SSFL. The Foster Wheeler estimate considered a 40-year cleanup based on (1) the State of California EPA's issuance of a 30-year, post-closure permit for the SSFL and (2) NASA and contractor environmental experts who believe at least 40 years will be needed to satisfactorily clean up the TCE contamination with current technology.
- In January 1993, EMCON Associates prepared an estimate for Rocketdyne to clean up Rocketdyne-owned Areas I and III. We recomputed this estimate as \$105 million after adjusting the initial estimate to reflect 1997 dollars (in lieu of 1992 dollars) and to add the same contingency used in the Foster Wheeler estimate. We coordinated our figures with the SSFL Project Leader of Rocketdyne's Environmental Department.
- Officials of the MSFC Environmental Engineering and Management Office estimated that NASA will be charged another \$8 million before work identified in the post-closure permit begins. The officials stated that these charges will be a combination of direct charges to the NASA Facilities Contract for NASA-owned Area II and indirect charges through G&A.

We computed the total future remediation cost to NASA of \$170 million (an average \$4.25 million per year) to clean up the SSFL by multiplying NASA's current G&A rate of 71.4 percent times the total cost of \$238 million to clean up the SSFL. The \$170 million assumes NASA's share of Rocketdyne's G&A pool will be the same (71.4 percent) during the 40-year cleanup period as it was during FY 1996 through FY 1997.

Future Remediation Costs Based on Escalated Dollars - We calculated the escalated total future remediation cost of \$462 million (an average \$11.6 million per year) to clean up the SSFL during the 40-year cleanup period by applying a 3-percent inflation rate to the total remediation cost of \$238 million. The 3-percent is the rate NASA uses for 5-year budget estimating purposes. We believe that 3-percent is a conservative rate considering U.S. Bureau of Labor Statistics show that inflation rates averaged 4.7 percent during the period 1960 through 1996.

APPENDIX 2

We computed the escalated total future remediation cost to NASA of \$330 million (an average \$8.2 million per year) to clean up the SSFL by multiplying NASA's current G&A rate of 71.4 percent times the total cost to clean up the SSFL of \$462 million.

Future Remediation Costs Based on NASA's Share of Rocketdyne's G&A Declining by 50 Percent -MSFC Chief Financial Officer and management officials of two key NASA programs under contract with Rocketdyne were unable to predict what NASA's share of Rocketdyne's G&A pool will be over the next 40 years. However, these managers expect NASA's share of Rocketdyne's business base to decline in the future. According to the officials, NASA's share of Rocketdyne's G&A pool will also decline. The officials expect the Space Shuttle Main Engine and the International Space Station to continue to be the primary NASA programs for the Rocketdyne Division. Space Shuttle management officials anticipate using the main engine through the year 2030. According to the contracting officer for the Space Station contract, Rocketdyne's involvement in the manufacturing phase is scheduled to end on June 30, 2003, but NASA could exercise an option for an additional year. The contracting officer stated that Rocketdyne is expected to support the Space Station through the operational phase which would extend to the year 2013.

Because officials believed NASA's share of Rocketdyne's G&A pool will decline, they requested that we consider this probability in calculating estimates of future costs and savings. Therefore, we computed the escalated total future remediation cost to NASA of \$165 million (an average \$4.1 million per year) to clean up the SSFL by multiplying NASA's current G&A rate of 71.4 percent times 50 percent times the total cost to clean up the SSFL of \$462 million.

Amount of Overpayment by NASA - We concluded that NASA should not pay anymore than 12 percent of the total future remediation cost to clean up the SSFL of \$462 million or \$55.5 million. Thus, NASA should negotiate a cost sharing agreement that would require the Agency to pay no more than \$55.5 million (an average of \$1.4 million per year) to clean up the SSFL during the 40-year cleanup period. If NASA's share of Rocketdyne's G&A remains the same, the Agency will pay \$330 million (an average \$8.2 million per year) to clean up the SSFL. Therefore, NASA will overpay Rocketdyne \$274.5 million (an average \$6.8 million per year). If NASA's share of Rocketdyne's G&A declines by 50 percent, the Agency will pay \$165 million (an average \$4.1 million per year) to clean up the SSFL. Therefore, NASA would overpay Rocketdyne \$109.5 million (an average \$3.4 million per year).

OIG COMPUTATION OF FUTURE PREVENTIVE COSTS

We calculated that NASA could pay an average of \$6.9 million a year for preventive costs for the 40 years projected to clean up TCE contamination at the SSFL as follows.

- Rocketdyne officials provided a breakdown of preventive costs by its Canoga Park, De Soto, and SSFL facilities for the period FYs 1990 through 1997. The average total preventive cost for the SSFL for this period was \$5.0 million a year.
- We escalated the \$5.0 million a year for the 40 years using the 3 percent inflation rate that NASA uses for its 5 year projections for budgeting.
- We computed a total of \$385.2 million in preventive costs for the SSFL for the 40 years.
- The average total preventive costs for the SSFL of \$9.6 million a year was calculated by dividing \$385.2 million by the 40 years.
- The average preventive costs to NASA for the SSFL of \$6.9 million a year was calculated by multiplying the \$9.6 million by 71.4 percent.

This estimate was based on NASA's share of Rocketdyne's G&A pool remaining unchanged for 40 years. If NASA's share of Rocketdyne's G&A pool declines by 50 percent, NASA could pay an average of \$3.4 million a year for preventive costs.

**COMMENTS FROM ASSOCIATE ADMINISTRATOR FOR
MANAGEMENT SYSTEMS AND FACILITIES**

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



JUL 1 1998

Reply to Attn of JE

TO: W/Assistant Inspector General for Auditing
FROM: J/Associate Administrator for Management Systems and Facilities
SUBJECT: Draft Audit Report, Cost Sharing for Santa Susana Field Laboratory
Cleanup Activities, Assignment No. A-HA-97-044

We have reviewed the Draft Audit Report, Cost Sharing for Santa Susana Field Laboratory Cleanup Activities dated April 27, 1998. Enclosed are responses to the recommendations.

We concur with Recommendation 5. We partially concur with the Recommendations 1, 2, 3 and 4. In response to Recommendations 1 and 2, we concur that NASA should seek a single agreement that covers total liability, *i.e.*, costs already incurred as well as future costs. We are concerned that very specific language regarding reimbursement of past direct and indirect costs and setting a percentage for recovery of future costs may be restricted by new site data and legal interpretation of environmental laws. We propose revised language which combines Recommendations 1 and 2. In Recommendation 3, we have proposed revised language which provides for the Office of the General Counsel advising the Administrator that failure to resolve a cost sharing agreement can be referred to the Department of Justice for settlement. In Recommendation 4, we concur that NASA should seek recovery of preventive costs inappropriately charged to NASA. However, we are uncertain that NASA can seek recovery pending completion of the investigation by the Defense Contract Audit Agency (DCAA). The contracting officer will take appropriate actions to seek recovery to the extent allowed by the DCAA report.

We appreciate the opportunity to review the draft report.

Handwritten signature of Jeffrey E. Sutton in black ink.
Jeffrey E. Sutton

Enclosure

APPENDIX 4

2

cc:
JM/Mr. Werner
G/Mr. Frankle
H/Ms. Lee
M/Dr. Rothenberg
W/Mr. Sipsock
MSFC/AA01/Ms. Cloud
 AE01/Dr. McCaleb
 DE01/Mr. Saudier
 BE01/Mr. Kerby
 CC01/Mr. Hicks
 GP01/Mr. Beale
 SA01/Mr. McCool

**NASA RESPONSE TO THE OIG DRAFT REPORT COST SHARING FOR
SANTA SUSANA FIELD LABORATORY CLEANUP ACTIVITIES
ASSIGNMENT NO. A-HA-97-044**

RESPONSE TO OIG RECOMMENDATIONS:

OIG Recommendation 1: The Associate Administrator for the Office of Management Systems & Facilities (Code J) should request reimbursement of the prior year charges already made to NASA for direct and indirect remediation costs on behalf of the U.S. Air Force.

NASA Response: Partially Concur. We concur that NASA should seek a single agreement which covers total liability, *i.e.*, costs already incurred as well as future costs. In contrast, the recommendation suggests that NASA seek direct reimbursement of prior year charges from the Department of Defense (DoD). Rather than insisting that DOD directly reimburse NASA the amount of overpayment, we believe that the only reasonable approach is for NASA to seek, in the agreement, an adjustment in the apportionment of future costs to account for the discrepancy in the distribution of costs already incurred. In addition, the recommendation refers to reimbursement of “direct and indirect remediation costs.” In the context of apportioning liability for the total cleanup cost between two Government agencies, allocation of costs as direct or indirect has no apparent relevance. For these reasons, we believe that Recommendation 1 should be combined with Recommendation 2.

We believe that the recommendation should be revised to read: “The Associate Administrator for the Office of Management Systems & Facilities (Code J) should seek a cost sharing agreement with the Department of Defense (DOD) and other potentially responsible parties which covers prior year and future charges of the remediation costs associated with the SSFL.”

OIG Recommendation 2: The Associate Administrator for the Office of Management Systems & Facilities (Code J) should negotiate a cost sharing agreement with the U.S. Corps of Engineers and other responsible parties that would require NASA to pay no more than 12 percent of the SSFL’s future cleanup cost.

NASA Response: Partially Concur. We concur that NASA should attempt to negotiate a cost sharing agreement. However, we are concerned that the recommendation stipulates that NASA pay no more than 12 percent. We believe that this is a good negotiating position with the current information available. However, we must recognize that new information may be produced which changes our current understanding of the site or that legal interpretation of the environmental laws may limit full recovery of all future costs. We recommend that the percentage be deleted, and for the reasons stated previously, we believe that this recommendation should be combined with Recommendation 1. Proposed revised language is provided in the response to Recommendation 1.

Enclosure

OIG Recommendation 3: If a negotiated settlement cannot be reached in a timely manner, the Associate Administrator for the Office of Management Systems & Facilities (Code J) should consider other alternatives including elevating the negotiations to the level of the NASA Administrator and U.S. Corps of Engineers Commanding General. If satisfactory resolution for NASA cannot be reached, the Office of General Counsel (Code G) should refer this matter to the appropriate levels within the Department of Justice to settle the dispute.

NASA Response: Partially Concur. We concur that Code J should consider other alternatives including elevating the negotiations to the level of the U.S. Corps of Engineers Commanding General. As written, the last sentence essentially directs Code G to refer the matter to the Department of Justice, which we believe is more appropriately the authority of the Administrator. We believe that the last sentence should be revised to read as: "If satisfactory resolution for NASA cannot be reached, the Office of the General Counsel (Code G) should advise the Administrator that the matter can be referred to the Department of Justice to settle the dispute."

OIG Recommendation 4: The NASA cognizant Contracting Officer should recover the costs already charged to NASA for preventive costs for other Rocketdyne customers.

NASA Response: Partially Concur. At this point, it is uncertain whether there is a basis for a claim by NASA. Therefore, the Contracting Officer has requested the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Command (DCMC) to investigate Rocketdyne's accounting practices and determine if Rocketdyne is properly allocating preventive costs. Based on the results of that review the Contracting Officer will take the appropriate action to seek recovery of monies paid to Rocketdyne by NASA for preventive costs. The Procurement Office at Marshall Space Flight Center (MSFC) will coordinate with the Office of Chief Counsel at MSFC for concurrence upon final disposition of this matter.

OIG Recommendation 5: The NASA cognizant Contracting Officer should ensure that Rocketdyne allocates future preventive costs on a causal or beneficial relationship based on the work performed at the SSFL, considering any DCMC recommendations resulting from the DCAA audit work.

NASA Response: Concur. The disposition of recommendation 4 will determine any future charges to NASA for preventive costs. The Contracting Officer will ensure that future preventive costs are allocated appropriately, considering any DCMC recommendations resulting from the DCAA audit work

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APPENDIX 5

Non-NASA Federal Organizations and Individuals

Assistant to the President for Science and Technology Policy

Deputy Associate Director, Energy and Science Division, Office of Management and Budget

Budget Examiner, Energy Science Division, Office of Management and Budget

Associate Director, National Security and International Affairs Division, General Accounting Office

Special Counsel, House Subcommittee on National Security, International Affairs, and Criminal Justice

Professional Assistant, Senate Subcommittee on Science, Technology and Space

Administrator, Office of Federal Procurement Policy

Federal Environmental Executive/Office of Federal Environmental Executive

Defense Contract Audit Agency, Los Angeles Regional Office

Environmental Protection Agency, Ninth Region

Assistant Chief, Environmental Defense, Environmental and Natural Resources Division, Department of Justice

Chairman and Ranking Minority Member - Congressional Committees and Subcommittees

Senate Committee on Appropriations

Senate Subcommittee on VA, HUD and Independent Agencies

Senate Committee on Commerce, Science and Transportation

Senate Subcommittee on Science, Technology and Space

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on VA, HUD and Independent Agencies

House Committee on Government Reform and Oversight

House Committee on Science

House Subcommittee on Space and Aeronautics

Congressional Member

Honorable Pete Sessions, U.S. House of Representatives

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