29 JULY 1992

In reply refer to 92RC07891

California Environmental Protection Agency
Department of Toxic Substances Control
1405 North San Fernando Road
Burbank, Ca 91504

Attention: Maria Fabella

Subject: Comments to Modified Closure Plan for The Area I Thermal Treatment Facility

This letter puts forth comments by Rockwell International Corporation, Rocketdyne Division to the Modified Closure Plan for the Area I Thermal Treatment Facility. The Modified Closure Plan includes considerations addressed in Rockwell's response to Notice of Deficiency dated May 12, 1992.

Proposed Modification:

Add the following language to Section 3.3.3 Phase I - Closure Activities

Metallic structures found to be hazardous shall be steam-cleaned in order to decontaminate. After steam-cleaning, the structures shall be resampled. If the samples show that the structures are non-hazardous, it will be disposed of as a non-hazardous waste. If the samples show that the structures remain hazardous, it shall be placed into Department of Transportation-Specification (DOT-Specification) 15-yard hazardous waste bins for transportation to an approved treatment, storage and disposal facility.

During all demolition and decontamination procedures, modified level D and level G safety protection will be required for all site workers. The level of protection required will depend on the hazardous waste involved. Personnel health and Safety monitoring shall be conducted during the demolition and decontamination procedures.

Rocketdyne has no comment or objection to this addition to Section 3.3.3.
Proposed Modification:

Add the following language:

If the closure criteria can not be met based on the information obtained during the implementation of this closure plan, an amendment to the closure plan will be submitted to the DTSC. This amendment will include a report of the findings of the results and activities performed to date. It will give further closure activity recommendations and an assessment of the amount of contamination will be given. This amendment shall be in accordance with 22 CCR 66265.112 (c) and 40 CFR 265.112 (c).

This amendment to the closure plan and a revised cost estimate will be submitted to the U.S. Environmental Protection Agency Region IX and to the DTSC no later than 30 days from the time that an unexpected event during final closure of the Thermal Treatment Unit occurs. If it becomes necessary to delay the closure activities from the time table given in 22 CCR 66265.113 (b) and 40 265.113 (b), the DTSC will be contacted and a request for additional time will be made. If it becomes necessary to increase the closure cost estimate, the DTSC will be notified.

In compliance to 22 CCR 66265.112 (a), copies of this plan and any amendment to it will be maintained at the Environmental Protection office at the Santa Susana Field Laboratory in Ventura County, California, until closure is completed and certified by an Independent California registered professional engineer and an authorized responsible corporate officer.

Rocketdyne proposes that this be added as “Section 3.3.5 Closure Plan contingencies” with the following modification:

Third paragraph should read:

In compliance to 22 CCR 66265.112 (a), copies of this plan and any amendment to it will be maintained at the Environmental Protection Hazardous Waste Yard office at Rocketdyne’s Santa Susana Field Laboratory Ventura, California, until closure is completed and certified by an Independent California registered professional engineer and an authorized responsible corporate officer.

Proposed Modification:

Add the following language:

It will be assumed that an excavation equals the amount during the 1982 excavation activities would be necessary. During previous excavation activities at the site, approximately 5000 cubic yards of soil were excavated and disposed of. The worst case estimate for the excavation will be 5000 cubic yards. The cost of removing this quantity will be calculated using $200.00 per yard of removal and disposal of the soil. This price includes all labor materials and equipment needed to excavate and dispose of the soil properly. Using this figure, the additional cost for the worst case scenario would increase by $1,000,000 for excavation and disposal.

Two rounds of groundwater sampling are estimated to cost $4,000. Leachate collection and run on run off control are not expected.

With these two figures, an estimate of the worst case scenario would be $1,222,059.92.

Rocketdyne Comment:

In 1982 only 1600 cubic yards of material were removed from the area. Originally a very conservatively high estimate of 5000 cubic yards was chosen. This estimate is several times the amount of soil that was excavated during the closure operation in 1982. As suggested above, worst case estimate for the amount of soil to be removed and disposed of should be the same amount that was removed and disposed of in 1982. This is 1600 cubic yards.
Rocketdyne proposes that the language to be added should read:

It will be assumed, based on previous excavations at the site, that 16,000 cubic yards of material would be required to be excavated and disposed of in a worst case scenario. The removal and disposal costs for this material is estimated at $200 per cubic yard. This would increase the closure cost if a worst case scenario occurred by $3,200,000.00.

Additionally, if shallow groundwater is encountered, two rounds of sampling and analysis will be performed. The cost for this sampling and analysis is estimated at $4,000.00.

With these two figures, an estimate of the worst case scenario would be $542,059.92.

Proposed Modification:

Page 19 of the Sampling and Analysis Plan: Soil Sampling Location and Frequency

Add the following Language:

Equipment and structures will be steam-cleaned. A steam cleaning area shall be constructed for the cleaning of equipment, movable structures and debris. This area shall be bermed and covered with plastic sheeting in order to contain the rinsate. Immovable structures shall be steam-cleaned and the rinsate captured within plastic covered berms.

Upon completion of the steam cleaning, the rinsate shall be collected in 55 gallon drums by pumping, then sampled. If analysis of the samples show that the rinsate is hazardous, it shall be managed as hazardous waste.

Upon completion of the above operations, samples from the plastic sheeting and berms shall be taken. The plastic sheeting shall be removed, the berms shall be brought down, and both shall be containerized. If analyses show that plastic sheeting and berms are hazardous, it shall be managed as hazardous waste.

The 55-gallon drums containing hazardous rinsate, and the containerized hazardous plastic sheeting and berms shall be subject to labelling requirements in accordance to 22 CCR 66265.43 (f). Containers holding hazardous wastes shall be stored for 90 days or less. If for any reason, storage time shall exceed 90 days, Rockwell will notify and seek prior approval from the DTSC before doing so.

Rocketdyne Comment:

This procedure already exists in the "Sampling equipment and Procedures" section of the Sampling and Analysis Plan. However, Rocketdyne does not object to the addition of the above wording.

Proposed Modification: 4.2 Financial Assurance and Liability Coverage:

Change the existing language to:

Liability

Attachment V contains an originally-signed duplicate of the documentation comprising compliance with liability requirements for sudden accidental occurrences and financial for closure and post-closure care of 22 CCR 66265.148 and 66265.147 (a) (b); 40 CFR 265.146 and 265.147 (a)(b)
Page 2, No. 2, of Rockwell's letter dated December 15, 1991, in support of the financial test to demonstrate financial responsibility coverage and closure and/or post-closure has been changed to:

2. The owner operator identified above owns or operates the following facilities for which financial assurance for closure or post closure care is demonstrated through the financial test specified in 22 CCR 66265.143 and 66265.145; 40 CFR 265.143 and 265.145. The current closure and/or post closure cost estimates covered by the test are shown for each facility:

EPA Region IX

Rockwell International Corporation
6633 Canoga Avenue
Canoga Park, CA 91309-7922

EPA I.D. No. CAD 093365435
Santa Susana Field Laboratory (Thermal Treatment Unit Only) $1,222,059.92
EPA I.D. No. CAD 1800090010
Santa Susana Field Lab/NASA
EPA I.D. No. CAD 000829672
Santa Susana Field Lab
Estimated Closure Cost $5,648,502.92
Estimated Post Closure Cost $33,002,902.92

Rocketdyne Comment:

Rockwell International Corporation submitted to Director, Toxic Substances Control Division Department of Health Services, State of California a letter which is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post closure care as specified in Division 93, Title 22, California Code of Regulations (CCR) on December 16, 1991. This letter is attached.

Rockwell shall include an additional $542,059.92 for worst case scenario for closure at the Area I Thermal Treatment Facility in its next financial assurance report required under 22 CCR 66265 and 40 CFR 265.

The cost estimates for closure of permitted units in each of the Santa Susana Field Laboratory Areas Generator areas will be included our 1992 financial assurance to DTSC. The cost estimate for closure will be broken down by EPA ID number.

The increase of $542,059.92 for the worst case scenario for Closure of the Area I Thermal Treatment Facility will not affect Rockwell International Corporation's ability to meet its financial assurance for closure or post closure of Permitted facilities.
Provided below is the latest cost estimate for the closure for permitted facilities at the Santa Susana Field Laboratory as requested by DTSC.

**EPA Region IX**

Rockwell International Corporation  
6633 Canoga Avenue  
Canoga Park, CA 91309-7922

EPA I.D. No. CAD 093365435  
Santa Susana Field Laboratory  
(Thermal Treatment Unit Only)  
$542,059.92

EPA I.D. No. CAD 1800090010  
Santa Susana Field Lab/NASA

EPA I.D. No. CAD 000629972  
Santa Susana Field Lab

Estimated Closure Cost  
$5,968,503.10

Estimated Post Closure Cost  
$33,002,902.92

ROCKWELL INTERNATIONAL CORPORATION  
Rockwell Division

M.E. Jensen, Manager  
Water and Waste Programs

cc.  Sayareh Aminebrahimi CAL/EPA DTSC  
Lester Kaulman U.S. EPA Hazardous Waste Management Division

Attachment 1  
1991 TSDF Financial Assurance Letters
December 16, 1991

Director
Toxic Substances Control Division
Department of Health Services
State of California
714/744 "F" Street
Sacramento, CA 95814

Dear Sir:

I am the Chief Financial Officer of Rockwell International Corporation located at 2230 E. Imperial Hwy., El Segundo, CA 90245. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Division 30, Title 22, California Code of Regulations (CCR).

1. The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Division 30, Title 22, CCR.

   Sudden Accidental and Non-Sudden Accidental Occurrences:

   EPA Region VI
   Rockwell International Corporation
   2000 North Memorial Drive
   Tulsa, OK 74115
   EPA I.D. No. OKD 007220262

   EPA Region IX
   Rockwell International Corporation
   6633 Canoga Avenue
   Canoga Park, CA 91304
   EPA I.D. No. CAD 09356435
   Santa Susana Field Lab

   Sudden Accidental Occurrences Only:

   EPA Region IX
   Rockwell International Corporation
   6633 Canoga Avenue
   Canoga Park, CA 91304
   EPA I.D. No. CAD 180009010
   Santa Susana Field Lab/NASA
   EPA I.D. No. CAD 00629972
   Santa Susana Field Lab
Rockwell International Corporation  
U.S. Air Force Plant #42  
3000 East Avenue M, Bldg. 313  
Palmdale, CA 93550

Rockwell International Corporation  
Palmdale Aircraft Assembly Plant  
2825 East Ave. P, Bldg. 700  
Palmdale, CA 93550

EPA I.D. No. CA 1570090497

2. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Sections 67009 and 67021, Title 22, CCR. The current closure and/or post-closure cost estimates covered by the test are shown for each facility.

**EPA Region V**

Property West of the AM General Plant located at 13240 McKinley Highway  
Mishawaka, IN 46544

EPA I.D. No. IND 981091515  
Est. Post-Closure Cost $435,733

**EPA Region VI**

Rockwell International Corporation  
2000 North Memorial Drive  
Tulsa, OK 74115

EPA I.D. No. OKD 007220252  
Est. Closure $102,368  
Post-Closure Cost $8,550

**EPA Region IX**

Rockwell International Corporation  
6633 Canoga Avenue  
Canoga Park, CA 91304

EPA I.D. No. CAD 093365435  
Santa Susana Field Lab  
EPA I.D. No. CAD 180090010  
Santa Susana Field Lab/NASA  
EPA I.D. No. CAD 00625972  
Santa Susana Field Lab  
Est. Closure Cost $5,648,502  
Est. Post-Closure Cost $33,002,902

Rockwell International Corporation  
U.S. Air Force Plant #42  
3000 East Avenue M, Bldg. 313  
Palmdale, CA 93550

EPA I.D. No. CA 1570090497  
Est. Closure Cost $1,442,848

Rockwell International Corporation  
Palmdale Aircraft Assembly Plant  
2825 East Ave. P, Bldg. 700  
Palmdale, CA 93550

EPA I.D. No. CAD 982479206  
Est. Closure Cost $2,347,473
3. The owner or operator identified above guarantees, through the corporate guarantee specified in Sections 67009 and 67021, Title 22, CCR, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility.

**EPA Region I**

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>EPA I.D. No.</th>
<th>EST. CLOSURE COST</th>
<th>EST. POST-CLOSURE COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine Electronics, Inc.</td>
<td>MED 065034183</td>
<td>$427,284</td>
<td>$673,317</td>
</tr>
<tr>
<td>River Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lisbon, ME 04250</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is not demonstrated through this financial test or through any other financial assurance mechanism as specified in Division 30, Title 22, CCR. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility.

None.

This owner or operator is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on September 30. The figures for the following items marked with an asterisk (*) are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year ended September 30, 1991.
Alternative II

1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) ........................................... $ 44,088,977

2. Amount of annual aggregate liability coverage to be demonstrated ........................................... $ 40,000,000

3. Sum of lines 1 and 2 ........................................................................... $ 84,088,977

4. Current bond rating of most recent issuance and name of rating service. ........................................... AA Standard & Poor's Aa2 Moody's Aa Duff & Phelps

5. Date of issuance of bond ........................................................................... February 20, 1991

6. Date of maturity of bond ........................................................................... September 15, 2001

7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements, you may add that portion to this line) ........................................... $ 3,158,000,000

8. Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.) ........................................... $ 7,354,000,000

9. Is line 7 at least $10 million? ........................................................................... YES  NO

10. Is line 7 at least 6 times line 3? ......................................................................... YES  NO

11. Are at least 90% of assets located in the U.S.? If not, complete line 12. ........................................................................... YES  NO

12. Is line 8 at least 6 times line 3? ........................................................................... YES  NO

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151 (g) as such regulations were constituted on the date shown immediately below.

W. M. Barnes
Senior Vice President - Finance & Planning
and Chief Financial Officer

December 16, 1991
(Date)

Note: If you have any questions or require additional information, please contact Dr. Richard L. Reisenweber, Vice President, Environmental Control & Energy Conservation, at 2201 Seal Beach Blvd., Seal Beach, CA 90740 (310/797-2975).
Sworn and subscribed to before me

this 16 day of December, 1991.

Notary Public
Rita M. Wasinger

My commission expires: 1/22/93
December 16, 1991

Rockwell International Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

Dear Sirs:

We have audited, in accordance with generally accepted auditing standards, the consolidated financial statements of Rockwell International Corporation and subsidiaries for the year ended September 30, 1991, and have issued our report thereon dated November 6, 1991. We have not performed any auditing procedures beyond the date of our report on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedure enumerated below with respect to the accompanying letter from Mr. W. M. Barnes to the California Department of Health Services, Toxic Substances Control Division dated December 16, 1991. It is understood that this report is solely for filing with the California Department of Health Services, Toxic Substances Control Division in accordance with the requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information or amounts included in items 7, 8 and 11 under the caption Alternative II in the letter referred to above.

Because the procedure referred to in the preceding paragraph was not sufficient to constitute an audit made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative II in the aforementioned letter. In performing the procedure referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 7, 8 and 11 should be adjusted.

Yours truly,

[Signature]

Deloitte & Touche
December 16, 1991

U. S. Environmental Protection Agency - Region IX
1235 Mission Street
San Francisco, CA 94103

Attention: Financial Responsibility Coordinator

Dear Sir:

I am the Chief Financial Officer of Rockwell International Corporation located at 2230 E. Imperial Hwy., El Segundo, CA 90246. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage, and closure and/or post-closure care as specified in Subpart H of 40 CFR Parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and non-sudden accidental occurrences is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265.

**Sudden Accidental and Non-Sudden Accidental Occurrences:**

**EPA Region VI**
Rockwell International Corporation
2000 North Memorial Drive
Tulsa, OK 74115
EPA I.D. No. OKD 007220262

**EPA Region IX**
Rockwell International Corporation
6633 Canoga Avenue
Canoga Park, CA 91304
EPA I.D. No. CAD 09335435
EPA I.D. No. CAD 1800090010
Santa Susana Field Lab
Santa Susana Field Lab/NASA

**Sudden Accidental Occurrences Only:**

**EPA Region IX**
Rockwell International Corporation
6633 Canoga Avenue
Canoga Park, CA 91304
EPA I.D. No. CAD 000629972
Santa Susana Field Lab
The firm identified above guarantees, through the guarantee specified in Subpart H of 40 CFR Parts 264 and 265, liability coverage for both sudden and non-sudden accidental occurrences at the following facilities owned or operated by the following:

**EPA Region I**

Main Electronics, Inc.
River Street
Lisbon, ME 04250

EPA I.D. No. MED 06503183

The firm identified above is the direct or higher tier parent corporation of the owner or operator.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility.

**EPA Region IX**

Rockwell International Corporation
6633 Canoga Avenue
Canoga Park, CA 91304

EPA I.D. No. CA 1570090497

Rockwell International Corporation
U.S. Air Force Plant #42
3000 East Avenue M, Bldg. 313
Palmdale, CA 93550

EPA I.D. No. CAD 982479206

Rockwell International Corporation
Palmdale Aircraft Assembly Plant
2825 East Ave. P, Bldg 700
Palmdale, CA 93550

EPA I.D. No. CA 1570090497

Santa Susana Field Lab
EPA I.D. No. CAD 093365435

Santa Susana Field Lab/NASA
EPA I.D. No. CAD 180009010

Santa Susana Field Lab
EPA I.D. No. CAD 030629972

Santa Susana Field Lab
EPA I.D. No. CAD 030629972

Est. Closure Cost $ 5,648,502
Est. Post-Closure Cost $ 35,002,902

Rockwell International Corporation
U.S. Air Force Plant #42
3000 East Avenue M, Bldg. 313
Palmdale, CA 93550

EPA I.D. No. CA 1570090497

Est. Closure Cost $ 1,442,848

Rockwell International Corporation
Palmdale Aircraft Assembly Plant
2825 East Ave. P, Bldg 700
Palmdale, CA 93550

EPA I.D. No. CAD 982479206

Est. Closure Cost $ 2,347,473
2. The firm identified above guarantees, through the guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure and post-closure care or liability coverages of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:

**EPA Region I**

Maine Electronics, Inc.  
River Street  
Lisbon, ME 04250  
EPA I.D. No. MED 065034183  
Est. Closure Cost $427,264  
Est. Post-Closure Cost $673,317

3. In states where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure or post-closure cost estimates covered by such a test are shown for each facility.

**EPA Region V**

Property West of the AM General Plant located at  
13240 McKinley Highway  
Mishawaka, IN 46544  
EPA I.D. No. IND 981091515  
Est. Post-Closure Cost $435,733

**EPA Region VI**

Rockwell International Corporation  
2000 North Memorial Drive  
Tulsa, OK 74115  
EPA I.D. No. OKD 007220262  
Est. Closure and Post-Closure Cost $21,643

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanisms specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

**EPA Region VI**

Rockwell International Corporation  
2000 North Memorial Drive  
Tulsa, OK 74115  
EPA I.D. No. OKD 007220262  
Est. Closure and Post-Closure Cost $89,275

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on September 30. The figures for the following items marked with an asterisk (*) are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year ended September 30, 1991.
Alternative II

1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above) ........................................ $ 44,088,977

2. Amount of annual aggregate liability coverage to be demonstrated ............................................................... $ 40,000,000

3. Sum of lines 1 and 2 ............................................................................................................................................. $ 84,088,977

4. Current bond rating of most recent issuance and name of rating service. .............................................................. AA Standard & Poor's Aa2 Moody's AA Duff & Phelps

5. Date of issuance of bond ................................................................. February 20, 1991

6. Date of maturity of bond ................................................................. February 15, 2001

7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in “total liabilities” on your financial statements, you may add that portion to this line) .............................................................. $ 3,198,000,000

8. Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.) .................................................. $ 7,354,000,000

9. Is line 7 at least $10 million? .............................................................. YES NO

10. Is line 7 at least 6 times line 3? ...................................................... x

11. Are at least 90% of assets located in the U.S.? If not, complete line 12. .............................................................. x

12. Is line 8 at least 6 times line 3? .............................................................. x

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151 (g) as such regulations were constituted on the date shown immediately below.

W. M. Barnes
Senior Vice President - Finance & Planning
and Chief Financial Officer

December 16, 1991

Note: If you have any questions or require additional information, please contact
Dr. Richard L. Riessenweber, Vice President, Environmental Control & Energy Conservation, at 2201 Seal Beach Blvd., Seal Beach, CA 90740 (310/797-2975).
Sworn and subscribed to before me
this 16 day of December, 1991.

[Signature]
Notary Public
Rita M. Wasinger

My commission expires: 1/22/93