

Y-12

Y/TS-1482

OAK RIDGE Y-12 PLANT

MARTIN MARIETTA

EMERGENCY PLANNING AND
COMMUNITY RIGHT-TO-KNOW ACT
SECTION 311

R. A. Evans
K. J. Martin

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Health, Safety, Environment,
and Accountability Organization

March 1996

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Prepared by the
Oak Ridge Y-12 Plant
Oak Ridge, Tennessee 37831
managed by
Lockheed Martin Energy Systems, Inc.
for the U.S. Department of Energy
under Contract DE-AC05-84OR21400

MANAGED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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**LIST OF HAZARDOUS AND EXTREMELY HAZARDOUS
SUBSTANCES AT THE OAK RIDGE Y-12 PLANT**

The following information reflects changes in the lists of hazardous chemicals present at this facility in amounts equal to or greater than 10,000 pounds and extremely hazardous substances present in amounts equal to or greater than 500 pounds or its Threshold Planning Quantity, whichever was lowest. These lists represent the following:

- List of materials last reported in February 1995 (reference Y/TS-1302),
- Materials to be deleted from list,
- Materials to be added to list, and
- Revised list of materials.

The revised list of materials is a composite of the Y-12 Plant Emergency Planning and Community Right-to-Know Act Section 312 report prepared and submitted for calendar year 1995 (reference Y/TS-1468).

List of Materials Last Reported

| Material | CAS | Hazard Code ^a |
|---|------------|--------------------------|
| Acetic Acid | 64-19-7 | 1,3 |
| Activated Carbon (carbon graphite, synthetic) | 7440-44-0 | 1,3 |
| Aluminum Chloride (anhydrous) | 7446-70-0 | 1,5 |
| Ammonia | 7664-41-7 | 1,2,3,4,5 |
| Argon | 7440-37-1 | 4 ^b |
| | | |
| Beryllium and Beryllium Compounds | 7440-41-7 | 1,2,5 |
| | | |
| Calcium Chloride | 10043-52-4 | 1 |
| Calcium Metal | 7440-70-2 | 1,3,5 |
| Carbon Dioxide (gas) | 124-38-9 | 4 ^b |
| Carbon Dioxide (solid) | 124-38-9 | 1 |
| Chlorine | 7782-50-5 | 1,4,5 |
| | | |
| Diatomaceous Earth | 61790-53-2 | 1,2 |
| Diesel (Fuel Oil No. 2) | ----- | 1,2,3 |
| | | |
| Ethanol | 64-17-5 | 1,3 |
| Ethylene Glycol | 107-21-1 | 1,2 |
| | | |
| Ferric Sulfate (solution) | 10028-22-5 | 1 |
| Freon 11 (Trichlorofluoromethane) | 75-69-4 | 1,2 |
| Freon 12 (Dichlorodifluoromethane) | 75-71-8 | 1,2,4 |
| Freon 22 (Chlorodifluoromethane) | 75-45-6 | 1,2,4 |
| Freon 113 (Trichlorotrifluoroethane) | 76-13-1 | 1,2 |
| | | |
| Gasoline (unleaded) | ----- | 1,2,3,5 |
| | | |
| Hydraulic Oil | ----- | 1,2 |

List of Materials Last Reported (Continued)

| Material | CAS | Hazard Code ^a |
|---|------------|--------------------------|
| Hydrochloric Acid | 7647-01-0 | 1,2,3,4,5 |
| Hydrogen Fluoride | 7664-39-3 | 1,2,4 |
| Lithium Chloride | 7447-41-8 | 1,2 |
| Lithium Deuteride | 13587-16-1 | 1,2,3,5 |
| Lithium Hydride | 7580-67-8 | 1,2,3,5 |
| Lithium Hydroxide | 1310-65-2 | 1,2,5 |
| Lubricating Oil | ----- | 1,2 |
| Magnesium Oxide | 1309-48-4 | 1,2 |
| Mercury | 7439-97-6 | 1,2 |
| Methanol (Methyl Alcohol) | 67-56-1 | 1,2,3 |
| Methyl Chloroform (1,1,1-Trichloroethane) | 71-55-6 | 1,2 |
| Moltan Safety Absorbent | 70892-59-0 | 2 |
| Naphtha | 8030-30-6 | 1,2,3 |
| Nickel and Nickel Soluble Compounds | 7440-02-0 | 1,2 |
| Nitric Acid | 7697-37-2 | 1,2,3,5 |
| Nitrogen | 7727-37-9 | 1,4 |
| Oxygen | 7782-44-7 | 3,4 |
| Petroleum Oil | ----- | 1,2 |
| Phosphoric Acid | 7664-38-2 | 1,3,5 |
| Portland Cement | 65997-15-1 | 1,2 |
| Sodium Bisulfite | 7631-90-5 | 1 |
| Sodium Chloride | 7647-14-5 | 1 |
| Sodium Hydroxide | 1310-73-2 | 1,2,5 |
| Sodium Hypochlorite | 7681-52-9 | 1 |

List of Materials Last Reported (Continued)

| Material | CAS | Hazard Code ^a |
|-------------------------------|------------|--------------------------|
| Sodium Oxydeuteride | 14014-06-3 | 1,2 |
| Sodium Phosphate | 10101-89-0 | 1 |
| Sodium Silicofluoride | 16893-85-9 | 1,5 |
| Sulfuric Acid | 7664-93-9 | 1,2,5 |
| | | |
| Toluene 2, 4-Diisocyanate | 584-84-9 | 1,2,4 |
| | | |
| Uranium and Uranium Compounds | 7440-61-1 | 1,2,3 |
| Urea | 57-13-6 | 2,3 |

^aHazard Codes:

- 1 - Immediate (acute) Health Hazard
- 2 - Delayed (chronic) Health Hazard
- 3 - Fire Hazard
- 4 - Sudden Release of Pressure (compressed gases)
- 5 - Reactive Hazard

^bIncluded also on the basis of its classification as an asphyxiant.

Materials to be Deleted from List

| Material | CAS | Hazard Codes^a |
|-------------------------------------|------------|---------------------------------|
| Ammonia | 7664-41-7 | 1,2,3,4,5 |
| | | |
| Ethanol | 64-17-5 | 1,3 |
| | | |
| Ethylene Glycol | 107-21-1 | 1,2 |
| | | |
| Methyl Chloroform | 71-55-6 | 1,2 |
| Moltan Safety Absorbent | 70892-59-0 | 2 |
| | | |
| Naphtha | 8030-30-6 | 1,2,3 |
| Nickel and Nickel Soluble Compounds | 7440-02-0 | 1,2 |
| | | |
| Phosphoric Acid | 7664-38-2 | 1,3,5 |
| Portland Cement | 65997-15-1 | 1,2 |
| | | |
| Sodium Oxide | 14014-06-3 | 1,2 |
| Sodium Phosphate | 10101-89-0 | 1 |
| | | |
| Toluene 2,4,-Diisocyanate | 584-84-9 | 1,2,4 |

^aHazard Codes:

- 1 - Immediate (acute) Health Hazard
- 2 - Delayed (chronic) Health Hazard
- 3 - Fire Hazard
- 4 - Sudden Release of Pressure (compressed gases)
- 5 - Reactive Hazard

Materials to be Added to List

| Material | CAS | Hazard Codes ^a |
|-------------------|-----------|---------------------------|
| Calcium Hydroxide | 1305-62-0 | 1,2 |
| Helium | 7440-59-7 | 4 ^b |
| Isopropyl Alcohol | 67-63-0 | 1,3,5 |
| Propane | 74-98-6 | 4 |
| Propylene Glycol | 57-55-6 | 3 |

^aHazard Codes:

- 1 - Immediate (acute) Health Hazard
- 2 - Delayed (chronic) Health Hazard
- 3 - Fire Hazard
- 4 - Sudden Release of Pressure (compressed gases)
- 5 - Reactive Hazard

^bIncluded also on the basis of its classification as an asphyxiant.

Revised List of Materials

| Material | CAS | Hazard Code ^a |
|---|------------|--------------------------|
| Acetic Acid | 64-19-7 | 1,3 |
| Activated Carbon (carbon graphite, synthetic) | 7440-44-0 | 1,3 |
| Aluminum Chloride (anhydrous) | 7446-70-0 | 1,5 |
| Argon | 7440-37-1 | 4 ^b |
| | | |
| Beryllium and Beryllium Compounds | 7440-41-7 | 1,2,5 |
| | | |
| Calcium Chloride | 10043-52-4 | 1 |
| Calcium Hydroxide | 1305-62-0 | 1,2 |
| Calcium Metal | 7440-70-2 | 1,3,5 |
| Carbon Dioxide (Gas) | 124-38-9 | 4 ^b |
| Carbon Dioxide (Solid) | 124-38-9 | 1 |
| Chlorine | 7782-50-5 | 1,4,51 |
| | | |
| Diatomaceous Earth | 61790-53-2 | 1,2 |
| Diesel (Fuel Oil No. 2) | ----- | 1,2,3 |
| | | |
| Ferric Sulfate (solution) | 10028-22-5 | 1 |
| Freon 11 (Trichlorofluoromethane) | 75-69-4 | 1,2 |
| Freon 12 (Dichlorodifluoromethane) | 75-71-8 | 1,2,4 |
| Freon 22 (Chlorodifluoromethane) | 75-45-6 | 1,2,4 |
| Freon 113 (Trichlorotrifluoroethane) | 76-13-1 | 1,2 |
| | | |
| Gasoline (unleaded) | ----- | 1,2,3,5 |
| | | |

Revised List of Materials (Continued)

| Material | CAS | Hazard Code ^a |
|---------------------------|------------|--------------------------|
| Helium | 7440-59-7 | 4 |
| Hydrochloric Acid | 7647-01-0 | 1,2,3,4,5 |
| Hydrogen Fluoride | 7664-39-3 | 1,2,4 |
| Isopropyl Alcohol | 67-63-0 | 1,3,5 |
| Lithium Chloride | 7447-41-8 | 1,2 |
| Lithium Deuteride | 13587-16-1 | 1,2,3,5 |
| Lithium Hydride | 7580-67-8 | 1,2,3,5 |
| Lithium Hydroxide | 1310-65-2 | 1,2,5 |
| Magnesium Oxide | 1309-48-4 | 1,2 |
| Mercury | 7439-97-6 | 1,2 |
| Methanol (Methyl Alcohol) | 67-56-1 | 1,2,3 |
| Nitric Acid | 7697-37-2 | 1,2,3,5 |
| Nitrogen | 7727-37-9 | 1,4 |
| Oxygen | 7782-44-7 | 3,4 |
| Petroleum Oil* | ----- | 1,2 |
| Propane | 74-98-6 | 4 |
| Propylene Glycol | 57-55-6 | 3 |
| Sodium Bisulfite | 7631-90-5 | 1 |
| Sodium Chloride | 7647-14-5 | 1 |
| Sodium Hydroxide | 1310-73-2 | 1,2,5 |

Revised List of Materials (Continued)

| Material | CAS | Hazard Code ^a |
|-------------------------------|------------|--------------------------|
| Sodium Hypochlorite | 7681-52-9 | 1 |
| Sodium Silicofluoride | 16893-85-9 | 1,5 |
| Sulfuric Acid | 7664-93-9 | 1,2,5 |
| | | |
| Uranium and Uranium Compounds | 7440-61-1 | 1,2,3 |
| Urea | 57-13-6 | 2,3 |

*Hydraulic and Lubricating Oils were added to Petroleum Oil per CY 1995.

^aHazard Codes:

- 1 - Immediate (acute) Health Hazard
- 2 - Delayed (chronic) Health Hazard
- 3 - Fire Hazard
- 4 - Sudden Release of Pressure (compressed gases)
- 5 - Reactive Hazard

^bIncluded also on the basis of its classification as an asphyxiant.

Distribution List

T. Bauckham, U.S. West
L. C. Brantley
W. L. Clements
S. L. Davis, DOE-ORO
R. A. Evans
R. T. Ford
C. M. Frasier
P. Gross, DOE-ORO
S. Hackler
P. Kegley, Johnson Controls
N. Kramer, MK-Ferguson
E. C. Leming, TDEC/DOE-O
K. J. Martin
J. Rothrock/B. E. Cochran, DOE-ORO
R. L. Sampsel
L. M. Sparks, DOE-ORO
C. L. Stair/T. E. Hart
W. K. Wagner
Y-12 Plant Central Files
Y-12 Plant Shift Superintendent
File-EMD-RC