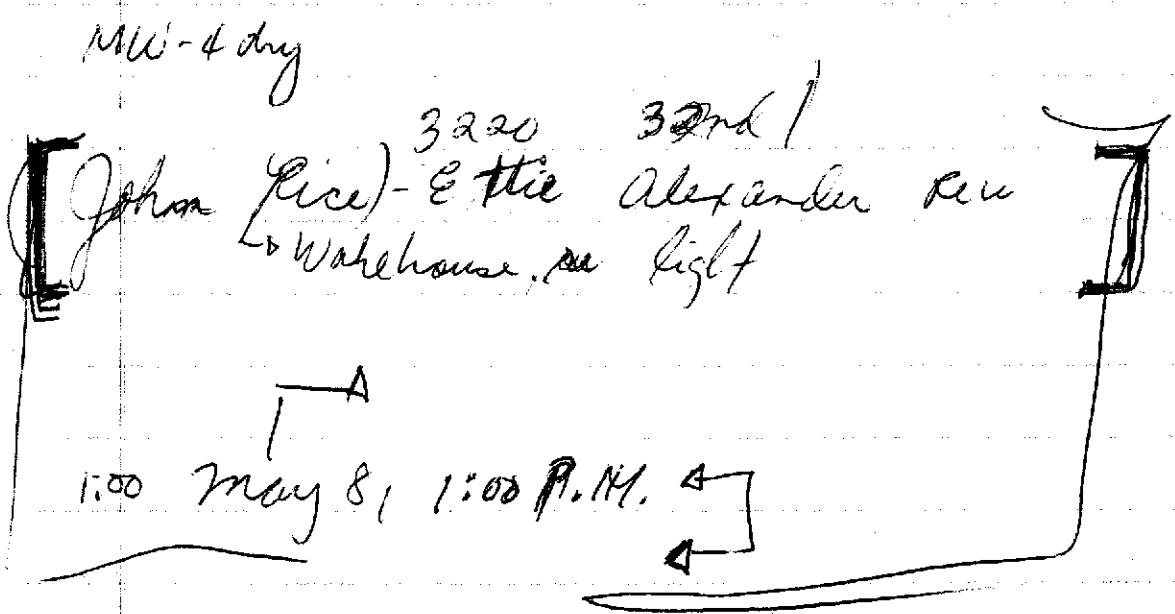


5/6/91

280 W MacArthur Blvd. 8:30 - Mineral
1500000/2,000 ppm
1800
1600 μ

6 MW
Mineral Sprites - 2600 ppm
Benzene - 0.4 ppm
Toluene - 1.0 ppm

Gradient been defined?



Plywood & Lumber -
4000 Horton 94608 →
20 Randall Morrison - 763-2000
LT

5/14/91

DOD

LOP - Alameda Co. - 360 (sites)

324 - 325 money allocated to Co.

32405

302 - per. fund → not getting 2004 money

161 - per. slice fund

161 - DOD, DOE - 1 position

↳ 4 people

Craig Kerouey,
IPA's - sharing

LOP - for Alameda Co - ^{supposed to have} has 1 person for RWA CB
but Lester was told - there's ~~no~~ 1 person but have to
be absorbed by existing staff

Lester - Rich } engineer
Linda } geologist
Rico } env. health specialist
Tom }

LOP:

State Board - closure?

provide training?

- appeal to State Board?

Appeal of local Agency decision → directly →

Baccarat case - workshop in June

2004 - money kept ^{all} by State Water Resource Board
Federal & State money - to fund LOP

State will be ^{paying} \$109/hr
Co. charge \$67/hr
Parties will be charge \$45⁰⁰/hr
RP - Grant application

SLIC Program - new data base

Site Clean up order for RWQCB

Potential future problem - industrial asphalt
EPA - do Hazard Ranking

Enforcement action
Screen properly?
Fluctuation
15 ft below

10 ft separation

Historic water level 7.5 ft
water level } after
10 ft above -
as long as there's
cover
10 ft above 15 ft below

Where the mineral

0 to 15 ft to

release continuing
remove source control +
threat to ground water

Lester, Feldman
↓

develop cost
benefit

Lester

discuss w/ ^{LF} appropriate to do feasibility study
because of the threat to ground water quality.

Deadline → R
↳ schedule

Risk assessment - baseline public will always tell
(Don Clarke) mini feasibility - remedial investigation
^{them to do something}

Feasibility Study - you have benzene
↳ ^{sets} goal baseline risk -

Risk assessment - will always tell you

Cost Benefit → protecting resource of ground H₂O
not public or land value

1 ppb benzene

1 ppb TCA

Federal Superfund Guidance:
Circular " Process

RIFS →
~~As that~~ 0 → 15

but restriction
not moving
not a threat to H&O quality

Alameda Co - Guidance Co.
LA County - Guidance Document

R I / FS
Remedial
Investigations

Pump & Treat

Clean up & abatement order

280 W. MacArthur Blvd. 94611

Kaiser Oakland

Rich Hiett - (464-4359) 2101 Webster Co. Oakland 94612

5/31/91

MW1-

- 1) Seed Restrictions - B or DHS?
- 2) Leaching Test?

1) When do you start groundwater remediation
20,000 µg/L in the 0

2)

9/21/90

Rec'd manifest of PCP disposal
↳ classified D037 & D041
by 9/25/90

9/25/90

Rec'd letter from Kaiser request meeting
to discuss change in remediation plan
of mineral spirits contamination
Oct 4, 1990.

10/9/90

Letter out request for additional \$500 D/R

11/13/90

Rec'd for geomatrix modification of
workplan for mineral spirits
- will file WDR
- proposed 4 G/MWS
- WDR not appropriate with present
conclusions & recommendations
for additional remediation

11/90

Rec'd report on PCP soil remediation
-

12/6/90

Rec'd \$500⁰⁰ additional D/R

10-3-90

RWQCB
Mox CL

TPH = 10 ppm

B - 1.0 ppb
X - 1750 ppb
I = 100 ppb
E = 600 ppb

water }
0.3 ppm Soil

H₂O
monitor
will D. 5 ppm
Total cum
BTXE
50 ppb TPH

Kaiser 280 What MacArthur Blvd.

Manifests resid - how many lbs dispose off site - 480,000 lbs
How much?

Groundwater encountered
Sample & analysis Groundwater

3-4 wells - locations to be identified

- 1) Find if there is a significant threat to H₂O quality -
contain the problem & clean-up -
soil samples < 100 TPH but 7 in BTXE check for
H₂O quality

Request for detail / refund

2/28/90

Rec'd. Prop. 65 Notification
- Mineral Spirits (Stoddard Solvents) & Pentachlorophenol

3/12/90

Letter fr. Kaiser Notification
25 cubic soil contaminated w/ mineral spirits
40 gal pentachlorophenol released into soil
1300 ppm - 2600 ppm pentachlorophenol &
2,4,5 Trichlorophenol in soil (25 cubic)

3/14/90

Letter fr. Kaiser includes:

- ① - Report of initial soil sampling (11/30/89) to determine mineral spirits contamination from sewer line trench in mechanical bldg.
15 ppm - 8 ppm ^{mineral spirits} at 7.5 ft & 9.5 ft.
Diesel - 42 ppm & 29 ppm.
at 14.5 ft d.
- ② - Site Safety plan (PCP contamination)
- ③ - Lab. analysis confirming PCP
 - Tarans (HXCDF 31 ppm, HpCDF 160 ppm & OCDF 120 ppm)
 - Dixons - HXCDD 26 ppm, HpCDD 260 ppm
OCDD - 720 ppm
 - Pentachlorophenol - 300 ppm, 600 ppm
 - 2,4,5 Trichlorophenol - 1000 ppm, 2000 ppm

4/10/90

Letter out to Kaiser request to do preliminary investigation

4/23/90

Letter fr. Ken Ayre request for meeting May 2, 1990

5/18/98

Letter to Karen advising following
from May 2, 1998 meeting

- mural spake 7:15 pm - 9:00 pm
- mural spake 5-7 ft deep
- 2 mural spake in wall side
- 2 mechanical bags (18 m²)
- 100 containers 160 bags
- removed (36-90 to 4-4-98)
- will submit complete report
- \$500 @ check paid.
- Paid workers temp. insurance.

5/19/98
5/18/98

Letter to Karen

- changed disposal to Rocker
- to Nevada Physical Science
- Paid for PPH (8240)
- LC9-C13

5/29/98

Letter out prepared to verify on remediation
of mural spake

8/6/98

Letter to Karen - disposal site for PCP
contaminated soil - Thermo Form
m.s. container & other materials
copy of report attached to PHS

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



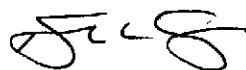
December 6, 1990

Ms. Susan Hugo
Alameda County
Department of Environmental Health
80 Swan Way, Room #200
Oakland, CA 94621

Dear Susan,

Enclosed is a check for \$500.00 as deposit for the Department of Environmental Health's oversight of the hazardous materials clean-up project at Kaiser Permanente Medical Center in Oakland. Please let me know if you have any questions or require anything further from us. Thank you.

Sincerely,



Kenneth U. Ayers
Safety Director

KUA:gm1
enclosure

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief

596 - 6203



October 25, 1990

Ms. Susan Hugo
Division of Hazardous Materials
80 Swan Way, Room 200
Oakland, CA 94621

Dear Susan,

Enclosed is a check for \$500.00 for deposit with your department for your oversight of the hazardous materials remediation that is ongoing at the Kaiser Permanente Medical in Oakland. Please let me know if you require anything further. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth U. Ayers".

Kenneth U. Ayers
Safety Coordinator

KUA:gm1
enclosure

CHECK NUMBER

3137835



KAISER PERMANENTE
Kaiser Foundation Health Plan, Inc.
P.O. Box 12912
Oakland, California 94604-2916

DISBURSING AGENT FOR

KAISER FOUNDATION
HEALTH PLAN, INC.

KAISER FOUNDATION
HOSPITALS

THE PERMANENTE MEDICAL
GROUP, INC.

62-20
311

CHECK NO. 3137835

3137835

PAY FIVE HUNDRED AND NO/100 DOLLARS *****

| CHECK DATE | AMOUNT |
|------------|----------------|
| 10 12 90 | \$ *****500.00 |

Citibank Delaware
A Subsidiary of Citicorp

TO
THE
ORDER
OF

COUNTY OF ALAMEDA
333 FIFTH STREET
OAKLAND

CA 94607

GENERAL ACCOUNT
KAISER FOUNDATION HEALTH PLAN, INC.

⑆ 3 1 3 7 8 3 5 ⑆

⑆ 0 3 1 1 0 0 2 0 9 ⑆

3 8 7 3 5 6 5 1 ⑆

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



October 9, 1990

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Mr. Kenneth Ayers
Safety Coordinator
Kaiser Permanente Medical Center
280 West MacArthur Blvd.
Oakland, California 94611

Dear Mr. Ayers:

As we had discussed during our meeting on October 4, 1990, the Alameda County Department of Environmental Health, Hazardous Materials Division has exhausted its deposit for the oversight of remediation at Kaiser Permanente Medical Center on 280 West MacArthur Boulevard in Oakland. Please submit an additional deposit of \$500, made payable to Alameda County, for our continued oversight of this case. We will draw upon these funds at a given hourly rate whenever a Hazardous Materials Specialist works on the case.

If you have any question about the Division's deposit/refund system, please contact me at 271-4320.

Sincerely,

Susan L. Hugo
Hazardous Materials Specialist

cc: Rafat A. Shahid, Asst. Agency Director, Department of
Environmental Health
✓ Files

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



KAISER PERMANENTE

September 25, 1990

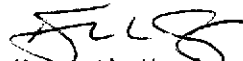
Ms. Susan Hugo
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Dear Susan,

As agreed upon during our recent telephone conversation, I have scheduled a meeting at the Oakland Medical Center for Thursday, ~~October 10, 1990 at~~ *Oct 4, 1990 10:00 AM* 10:00 am in the Engineering Conference Room. We'd like to discuss a change in our remediation plan for the mineral spirits contaminated soils.

Please feel free to call me at 596-6603 if you have any questions.
Thank you.

Sincerely,


Kenneth U. Ayers
Safety Coordinator

KUA:gm1

cc: J. Adams
T. Graf
S. Rohlfing, RN
T. Wilkes

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



September 21, 1990

Ms. Susan Hugo
Hazardous Materials Specialist
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

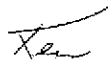
Dear Susan,

Enclosed are photostatic copies of the hazardous waste manifests for the pentachlorophenol contaminated soils that were removed from the Broadway construction site at the Kaiser Permanente Medical Center - Oakland.

The soil was transported to ThermakEM, Inc. in South Carolina for disposal. We have been informed by ThermakEM that all of the soil has subsequently been incinerated.

If you have any questions, please call me at 596-6603. Thank you.

Sincerely,



Ken Ayers
Safety Coordinator

KA:gm1
enclosures



South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2500 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

PLEASE PRINT or TYPE (Form designed for use on elite (12-onc) typewriter) Form Approved OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. C A D 9 8 1 4 2 7 1 3 1 Manifest Document No. 0 0 0 0 3 1

2. Page 1 of 1 Information in the shaded areas is not required by Federal law, but is by State law.

1. Generator's Name and Mailing Address
KAISER PERMANENTE MEDICAL CENTER
280 W. McARTHUR BOULEVARD
OAKLAND, CA 94609
4. Generator's Phone (415) 596-6603

5. Transporter 1 Company Name
Jim Chism Trucking

6. U.S. EPA ID Number
C A D 9 8 0 5 8 4 8 8 7

7. Transporter 2 Company Name

8. U.S. EPA ID Number

9. Designated Facility Name and Site Address
ThermalKEM Inc.
2324 Veresdale Road
Rock Hill, SC 29730

10. U.S. EPA ID Number
S I C I D 0 4 4 4 4 2 3 1 3 1 3

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone (209) 867-4854

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone
803-324-5310

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
|--|--------------------|------|--------------------|-----------------|------------------|
| HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | | D, T | 22 | T | 7,7,7,7 |
| <i>HAZARDOUS MATERIAL SOLID N.O.S.</i> <i>ORM-E NA9188</i> | | 100M | 3 | T | 7,7,7,7 |
| | | | | | |
| | | | | | |

J. Additional Descriptions for Materials Listed Above

a. SIT-0,0,0,0,6-3,6,1,2 c. SIT- - - - -

b. SIT-0,0,0,0,6-3,6,1,2 d. SIT- - - - -

K. Handling Codes for Wastes Listed Above

W9

15. Special Handling Instructions and Additional Information
As of 9-25-90, this will be classified as D037 & D041
SAN 9 4 1 4 7

EMERGENCY & BILLING CONTACT
HAZARDOUS MATERIAL SERVICES
P. O. BOX 705
COALINGA, CA 93210
(209) 935-1508 **#10036**

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding this burden estimate, including suggestions for reducing the burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: KENNETH U. AYERS Signature: *[Signature]* Month Day Year: 10 8 25 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Fred Christian Signature: *[Signature]* Month Day Year: 10 8 25 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: _____ Signature: _____ Month Day Year: _____

19. Discrepancy Indication Space

a. 44000 lbs c. _____ lbs

b. 6000 lbs d. _____ lbs

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name: Samuel Dushan Signature: *[Signature]* Month Day Year: 0 8 30 90



South Carolina Department of Health and Environmental Control

2500 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite (12-pin) typewriter) Form Approved, OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. C1A1D981427181 Manifest Document No. 1000014

2. Page 1 of 1 Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
KAISER PERMANENTE MEDICAL CENTER
280 W. McARTHUR BOULEVARD
OAKLAND, CA

A. State Manifest Document Number
B. State Generator's ID

4. Generator's Phone (415) 596-6603

5. Transporter 1 Company Name
Jim Chism Trucking

6. U.S. EPA ID Number
C1A1D9810584817

C. State Transporter's ID
D. Transporter's Phone (209) 867-4854

7. Transporter 2 Company Name

8. U.S. EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
ThermalKEM Inc.
2324 Veresdale Road
Rock Hill, SC 29730

10. U.S. EPA ID Number
S1C1D104444421313

G. State Facility's ID
H. Facility's Phone 803-324-5310

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No., Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
|--|--------------------------|--------------------|-----------------|------------------|
| a. HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | 1, D, T | 25 | T | 71717 |
| b. | | | | |
| c. | | | | |
| d. | | | | |

2. Additional Descriptions for Materials Listed Above
a. S1T - 0100006 - 31612
b. S1T - -
c. S1T - -
d. S1T - -

K. Handling Codes for Wastes Listed Above
909

15. Special Handling Instructions and Additional Information
As of 9-25-90, this will be classified as D037 & D041
SAN 94148

EMERGENCY & BILLING CONTACT
HAZARDOUS MATERIAL SERVICES
P. O. BOX 705
COALINGA, CA 93210 #10035
(209) 935-1508

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: KENNETH U. AYERS Signature: [Signature] Month Day Year: 10.02.90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Joe Hernandez Signature: [Signature] Month Day Year: 10.02.90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: _____ Signature: _____ Month Day Year: _____

13. Discrepancy Indication Space
a. 50000 lbs. c. _____ lbs.
b. _____ lbs. d. _____ lbs.

19. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in item 13.
Printed/Typed Name: Robert Simpson Signature: [Signature] Month Day Year: 08-30-90



South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite (12-pitch) typewriter) Form Approved, OMB No. 2050-0039 Expires 5-30-91

| | | | | |
|---|---|----------------------------|----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator's U.S. EPA ID No. C1A1D19181421711311000051 | Manifest Document No. 1 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is by State law. |
|---|---|----------------------------|----------------|--|

| | |
|--|---------------------------------------|
| 3. Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA | A. State Manifest Document Number |
| 4. Generator's Phone (415) 596-6603 | B. State Generator's ID |
| 5. Transporter 1 Company Name STAMCO, INC. | C. State Transporter's ID |
| 6. U.S. EPA ID Number C1A1D1016131514171916 | D. Transporter's Phone (800) 759-4211 |
| 7. Transporter 2 Company Name | E. State Transporter's ID |
| 8. U.S. EPA ID Number | F. Transporter's Phone |
| 9. Designated Facility Name and Site Address ThermalKEM Inc. 2324 Veresdale Road Rock Hill, SC 29730 | G. State Facility's ID |
| 10. U.S. EPA ID Number S1C1D101414141412131313 | H. Facility's Phone 803-324-5310 |

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
|--|--------------------|--------------------|-----------------|------------------|
| a. HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | 1 | 2.5 | T | 1717171 |
| b. | | | | |
| c. | | | | |
| d. | | | | |

| | |
|---|---|
| J. Additional Descriptions for Materials Listed Above | K. Handling Codes for Wastes Listed Above |
| a. S1T-10101016-316112 | 409 |
| b. S1T- - - - - | |

| | | |
|---|--|--|
| 15. Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 SAN 9 4 1 4 9 | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 #10030 (209) 935-1508 | Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. |
|---|--|--|

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

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| | | |
|---|---------------------------------|----------------------------|
| Printed/Typed Name KENNETH U. Ayers | Signature <i>[Signature]</i> | Month Day Year 08/25/90 |
|---|---------------------------------|----------------------------|

| | | |
|---|---------------------------------|----------------------------|
| 17. Transporter 1 Acknowledgement of Receipt of Materials | Signature <i>[Signature]</i> | Month Day Year 08/25/90 |
|---|---------------------------------|----------------------------|

| | | |
|---|-----------|----------------|
| 18. Transporter 2 Acknowledgement of Receipt of Materials | Signature | Month Day Year |
|---|-----------|----------------|

| | | |
|----------------------------------|--------------|--------|
| 19. Discrepancy Indication Space | a. 50000 lbs | c. lbs |
| | b. lbs | d. lbs |

| | | |
|--|---------------------------------|----------------------------|
| 20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | Signature <i>[Signature]</i> | Month Day Year 08/29/90 |
|--|---------------------------------|----------------------------|



and Environmental Control

Phone: (803) 734-5200
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter)

Form Approved. OMB No. 2050-0039 Expires 9-30-97

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No.
C A D 9 8 1 4 2 7 1 3 1 0 0 0 0 6

Manifest Document No.
0 0 0 0 6

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
KAISER PERMANENTE MEDICAL CENTER
280 W. McARTHUR BOULEVARD
OAKLAND, CA

4. Generator's Phone (415) 596-6603

5. Transporter 1 Company Name
STAMCO, INC.

6. U.S. EPA ID Number
G A D Q 6 3 5 4 7 9 9 6

7. Transporter 2 Company Name

8. U.S. EPA ID Number

9. Designated Facility Name and Site Address
ThermaIKEM Inc.
2324 Veresdale Road
Rock Hill, SC 29730

10. U.S. EPA ID Number

S C D 0 4 4 4 4 2 3 3 3

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone (800) 759-4211

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone
803-324-5310

11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

15. Waste Number

a. HAZARDOUS MATERIAL SOLID, N.O.S.
ORM-E, NA9188

1 1 D T

2.5 T

7 7 7 7

J. Additional Descriptions for Materials Listed Above

a. S1T - 0 0 0 0 6 - 3 6 1 2

b. S1T -

c. S1T -

d. S1T -

K. Handling Codes for Wastes Listed Above

TO 9

15. Special Handling Instructions and Additional Information
As of 9-25-90 this will be classified as D037 & D041

EMERGENCY & BILLING CONTACT
HAZARDOUS MATERIAL SERVICES
P. O. BOX 705
COALINGA, CA 93210
(209) 935-1508 #10033

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding this burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

SAN 9 4 1 5 0

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: KENNETH U. AYERS
Signature: [Signature]
Month Day Year: 10 8 26 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: AARON ASMAN
Signature: [Signature]
Month Day Year: 10 8 25 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: _____
Signature: _____
Month Day Year: _____

19. Discrepancy Indication Space
a. 5000 lbs. c. _____ lbs.
b. _____ lbs. d. _____ lbs.

20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Samuel Dushman
Signature: Samuel Dushman
Month Day Year: 08 30 90



South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite (12-pitch) typewriter) Form Approved, OMB No. 2050-0039 Expires 9-30-97

| | | | | | | | |
|--|--|---|--|--|--------------------|--|------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's U.S. EPA ID No. C, A, D, 9, 8, 1, 4, 2, 7, 1, 3, 1, 0, 0, 0, 0, 7 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law, but is by State law. | |
| 3. Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA | | | | A. State Manifest Document Number | | | |
| 4. Generator's Phone (415) 596-6603 | | | | B. State Generator's ID | | | |
| 5. Transporter 1 Company Name STAMCO, INC. | | 6. U.S. EPA ID Number C, A, D, 0, 6, 3, 5, 4, 7, 9, 9, 6 | | C. State Transporter's ID | | D. Transporter's Phone (800) 759-4211 | |
| 7. Transporter 2 Company Name | | 8. U.S. EPA ID Number | | E. State Transporter's ID | | F. Transporter's Phone | |
| 9. Designated Facility Name and Site Address ThermalKEM Inc. 2324 Varnesdale Road Rock Hill, SC 29730 | | 10. U.S. EPA ID Number S, C, D, 0, 4, 4, 4, 4, 2, 3, 3, 3 | | G. State Facility's ID | | H. Facility's Phone 803-324-5310 | |
| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | | | | 12. Containers No. | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
| a. HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | | | | 1 | 26 | T | 7, 7, 7, 7 |
| b. | | | | | | | |
| c. | | | | | | | |
| d. | | | | | | | |
| J. Additional Descriptions for Materials Listed Above | | | | K. Handling Codes for Wastes Listed Above | | | |
| a. S, T - 0, 0, 0, 0, 6 - 3, 6, 1, 2 | | | | 709 | | | |
| b. S, T - | | | | | | | |
| c. S, T - | | | | | | | |
| d. S, T - | | | | | | | |
| 15. Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 SAN 9 4 1 5 | | | | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 (209) 935-1508 #10038 | | Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | |
| Printed/Typed Name KENNETH U. AYERS | | | | Signature <i>[Signature]</i> | | Month Day Year 10, 8, 2, 6, 9, 0 | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | Signature <i>[Signature]</i> | | Month Day Year 08, 2, 6, 9, 0 | |
| Printed/Typed Name VIRGIL GIBSON | | | | Signature <i>[Signature]</i> | | Month Day Year | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | Signature | | Month Day Year | |
| Printed/Typed Name | | | | Signature | | Month Day Year | |
| 19. Discrepancy Indication Space | | | | a. 50000 lbs. | | c. lbs. | |
| | | | | b. lbs. | | d. lbs. | |
| 20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. | | | | | | | |
| Printed/Typed Name Samuel Dushkin | | | | Signature <i>[Signature]</i> | | Month Day Year 08, 3, 0, 9, 0 | |



South Carolina Department of Health and Environmental Control

2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved, OMB No. 2050-0039 Expires 9-30-91

| | | | | |
|---|---|-----------------------------|----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator's U.S. EPA ID No. C, A, D, 9, 8, 1, 4, 2, 7, 1, 3, 1, 0, 0, 0, 0, 8 | Manifest Document No. 81 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is by State law. |
|---|---|-----------------------------|----------------|--|

| | |
|--|---------------------------------------|
| 3. Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA | A. State Manifest Document Number |
| 4. Generator's Phone (415) 596-6603 | B. State Generator's ID |
| 5. Transporter 1 Company Name STAMCO, INC. | C. State Transporter's ID |
| 6. U.S. EPA ID Number G A D Q 6 3 5 4 7 9 9 6 | D. Transporter's Phone (800) 759-4211 |
| 7. Transporter 2 Company Name | E. State Transporter's ID |
| 8. U.S. EPA ID Number | F. Transporter's Phone |
| 9. Designated Facility Name and Site Address ThermalKEM Inc. 2324 Verdesdale Road Rock Hill, SC 29730 | G. State Facility's ID |
| 10. U.S. EPA ID Number S I C I D 0 4 4 4 4 2 3 3 3 | H. Facility's Phone 803-324-5310 |

| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
|--|--------------------|--------------------|-----------------|------------------|
| a. HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | 1 D T | 2.5 | T | 7777 |
| b. | | | | |
| c. | | | | |
| d. | | | | |

| | |
|--|---|
| J. Additional Descriptions for Materials Listed Above | K. Handling Codes for Wastes Listed Above |
| a. [S] [T] - [0,0,0,0,6] - [3,6,1,2] c. [S] [T] - [] - [] | 709 |
| b. [S] [T] - [] - [] d. [S] [T] - [] - [] | |

| | | |
|---|--|---|
| 15. Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 SAN 9 4 1 5 2 | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 #10049 (209) 935-1508 | Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 15 minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. |
|---|--|---|

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

| | | |
|---|---------------------------------|----------------------------|
| Printed/Typed Name Kenneth U. Ayers | Signature <i>[Signature]</i> | Month Day Year 08 26 90 |
|---|---------------------------------|----------------------------|

| | | |
|---|---------------------------------|----------------------------|
| 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name James Hutchison | Signature <i>[Signature]</i> | Month Day Year 08 26 90 |
|---|---------------------------------|----------------------------|

| | | |
|---|-----------|----------------|
| 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name | Signature | Month Day Year |
|---|-----------|----------------|

| | | | | |
|----------------------------------|-----------------|-------------|-------------|-------------|
| 19. Discrepancy Indication Space | a. [50000] lbs. | c. [] lbs. | b. [] lbs. | d. [] lbs. |
|----------------------------------|-----------------|-------------|-------------|-------------|

| | | |
|--|---------------------------------|----------------------------|
| 20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. | | |
| Printed/Typed Name Samuel D. ... | Signature <i>[Signature]</i> | Month Day Year 08 31 90 |



South Carolina Department of Health and Environmental Control

2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved. OMB No. 2050-0039 Expires 9-30-91

| | | | | |
|---|---|--------------------------------------|----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator's U.S. EPA ID No. C A D 9 8 1 4 2 7 1 3 1 0 0 0 0 0 | Manifest Document No. 0 0 0 0 0 0 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is by State law. |
|---|---|--------------------------------------|----------------|--|

| | |
|--|---------------------------------------|
| Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA Generator's Phone (415) 596-6603 | A. State Manifest Document Number |
| Transporter 1 Company Name STAMCO, INC. | B. State Generator's ID |
| Transporter 2 Company Name | C. State Transporter's ID |
| Designated Facility Name and Site Address ThermaikEM Inc. 2324 Veresdale Road Rock Hill, SC 29730 | D. Transporter's Phone (800) 759-4211 |
| | E. State Transporter's ID |
| | F. Transporter's Phone |
| | G. State Facility's ID |
| | H. Facility's Phone 803-324-5310 |

| U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number |
|--|--------------------|------|--------------------|-----------------|------------------|
| HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | 1 | D, T | 2.5 | T | 17171717 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | |
|---|--|
| Additional Descriptions for Materials Listed Above SIT - 00006 - 3612 SIT - - - - - | K. Handling Codes for Wastes Listed Above 409 |
|---|--|

| | |
|--|--|
| Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 AN 9 4 1 5 3 | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 #10050 (209) 935-1508 |
|--|--|

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

| | | |
|---|---------------------------------|---------------------------------|
| Printed/Typed Name KENNETH U. AYLES | Signature <i>[Signature]</i> | Month Day Year 10 8 12 19 90 |
| Transporter 1 Acknowledgement of Receipt of Materials | | |
| Printed/Typed Name <i>[Signature]</i> | Signature <i>[Signature]</i> | Month Day Year 10 8 12 19 90 |
| Transporter 2 Acknowledgement of Receipt of Materials | | |
| Printed/Typed Name | Signature | Month Day Year |

19. Discrepancy Indication Space

a. 150000 lbs. c. _____ lbs.
b. _____ lbs. d. _____ lbs.

20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

| | | |
|--------------------------------------|---------------------------------|----------------------------|
| Printed/Typed Name Samuel Dushain | Signature <i>[Signature]</i> | Month Day Year 08 31 90 |
|--------------------------------------|---------------------------------|----------------------------|



South Carolina Department of Health and Environmental Control

2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

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| | | | | | | | | |
|---|--|---|--|-----------------------------------|--|---|--|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's U.S. EPA ID No. G A D 9 8 1 4 2 7 1 3 1 1 0 0 0 1 0 | Manifest Document No. 1 0 1 0 1 0 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but is by State law. | | | |
| 3. Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA | | 6. U.S. EPA ID Number I G A D 0 6 3 5 4 7 9 1 9 6 | | A. State Manifest Document Number | | B. State Generator's ID | | |
| 4. Generator's Phone (415) 596-6603 | | 8. U.S. EPA ID Number | | C. State Transporter's ID | | D. Transporter's Phone (800) 759-4211 | | |
| 5. Transporter 1 Company Name STAMCO, INC. | | 10. U.S. EPA ID Number | | E. State Transporter's ID | | F. Transporter's Phone | | |
| 7. Transporter 2 Company Name | | 10. U.S. EPA ID Number | | G. State Facility's ID | | H. Facility's Phone | | |
| 9. Designated Facility Name and Site Address ThermaKEM Inc. 2324 Verdesdale Road Rock Hill, SC 29730 | | 10. U.S. EPA ID Number S I C I D 0 4 4 4 4 2 3 3 3 | | 803-324-5310 | | | | |
| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | | | 12. Containers No. Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste Number | | |
| a. HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | | | 1, 1 D T | 90,017 | T | 717171 | | |
| b. | | | | | | | | |
| c. | | | | | | | | |
| d. | | | | | | | | |
| J. Additional Descriptions for Materials Listed Above | | | K. Handling Codes for Wastes Listed Above | | | | | |
| a. S I T - 0 0 0 0 6 - 3 6 1 2 | | | 709 | | | | | |
| b. S I T - | | | | | | | | |
| c. S I T - | | | | | | | | |
| d. S I T - | | | | | | | | |
| 15. Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 SAN 9 4 1 5 4 | | | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 (209) 935-1508 #10047 | | | Public reporting burden for this collection of information is estimated to average 27 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding this burden estimate, including suggestions for reducing this burden, to Chief, Information Policy Branch, PH-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | |
| Printed/Typed Name KENDETH U. AYERS | | | Signature <i>[Signature]</i> | | | Month Day Year 10 8 26 90 | | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | Signature | | | Month Day Year | | |
| Printed/Typed Name | | | Signature | | | Month Day Year | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | Signature | | | Month Day Year | | |
| Printed/Typed Name MICHAEL WALSH | | | Signature <i>[Signature]</i> | | | Month Day Year 10 8 26 90 | | |
| 19. Discrepancy Indication Space | | | a. 34000 lbs. b. lbs. d. lbs. | | | | | |
| 20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. | | | | | | | | |
| Printed/Typed Name SAMUEL DUNHAM | | | Signature <i>[Signature]</i> | | | Month Day Year 08 31 90 | | |



South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2500 Bull Street Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved. OMS No. 2050-0039 Expires 5-30-91

| | | | | | | | | | |
|---|--|---|--|---|--|---|--|--|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's U.S. EPA ID No. C A D 9 8 1 4 2 7 1 3 1 1 | | Manifest Document No. 0 0 0 0 1 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law, but is by State law. | |
| 3. Generator's Name and Mailing Address KAISER PERMANENTE MEDICAL CENTER 280 W. McARTHUR BOULEVARD OAKLAND, CA | | | | 6. U.S. EPA ID Number C A D 0 6 3 5 4 7 9 9 6 | | A. State Manifest Document Number | | B. State Generator's ID | |
| 4. Generator's Phone (415) 596-6603 | | | | 8. U.S. EPA ID Number | | C. State Transporter's ID | | D. Transporter's Phone (800) 759-4211 | |
| 5. Transporter 1 Company Name STAMCO, INC. | | | | 10. U.S. EPA ID Number S C D 0 4 4 4 4 2 3 3 3 | | E. State Transporter's ID | | F. Transporter's Phone | |
| 7. Transporter 2 Company Name | | | | 12. Containers No. Type 15 D, M | | G. State Facility's ID | | H. Facility's Phone 803-324-5310 | |
| 9. Designated Facility Name and Site Address ThermalKEM Inc. 2324 Veresdale Road Rock Hill, SC 29730 | | | | 13. Total Quantity | | 14. Unit Wt/Vol T | | L. Waste Number 7 7 7 7 | |
| 11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) HAZARDOUS MATERIAL SOLID, N.O.S. ORM-E, NA9188 | | | | 15. Special Handling Instructions and Additional Information As of 9-25-90 this will be classified as D037 & D041 SAN 9 4 1 5 5 | | EMERGENCY & BILLING CONTACT HAZARDOUS MATERIAL SERVICES P. O. BOX 705 COALINGA, CA 93210 (209) 935-1508 #10034 | | K. Handling Codes for Wastes Listed Above D09 | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | 17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: John Perry Signature: [Signature] Month Day Year: 08 24 90 | | 18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name: [Blank] Signature: [Blank] Month Day Year: [Blank] | | 19. Discrepancy Indication Space a. [Blank] lbs. c. [Blank] lbs. b. [Blank] lbs. d. [Blank] lbs. | |
| 20. Facility Owner or Operator, Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name: [Blank] Signature: [Signature] Month Day Year: 08 30 90 | | | | | | | | | |



South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt.
2600 Bull Street, Columbia, SC 29201
Phone: (803) 734-5200
Emergency & Holidays: (803) 253-6488

PLEASE PRINT or TYPE (Form designed for use on site (12-oz) typewriter)

Form Approved, OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. C, A, D, 9, 8, 1, 4, 2, 7, 1, 3, 1
 Manifest Document No. 0, 0, 0, 0, 2, 1

2. Page 1 of 1
 Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
KAISER PERMANENTE MEDICAL CENTER
 280 W. McARTHUR BOULEVARD
 OAKLAND, CA ⁹⁴⁶⁰⁹
 4. Generator's Phone (415) 596-6603

A. State Manifest Document Number
 B. State Generator's ID

5. Transporter 1 Company Name
Jim Chism Trucking

6. U.S. EPA ID Number C, A, D, 9, 8, 0, 5, 8, 4, 8, 1, 7
 C. State Transporter's ID
 D. Transporter's Phone (209) 867-4854

7. Transporter 2 Company Name

8. U.S. EPA ID Number
 E. State Transporter's ID
 F. Transporter's Phone

9. Designated Facility Name and Site Address

ThermalKEM Inc.
 2324 Veresdale Road
 Rock Hill, SC 29730

10. U.S. EPA ID Number S, C, D, 0, 4, 4, 4, 4, 2, 3, 3, 3
 G. State Facility's ID
 H. Facility's Phone 803-324-5310

11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type
 13. Total Quantity
 14. Unit Wt/Vol
 1. Waste Number

HAZARDOUS MATERIAL SOLID, N.O.S.
ORM-E, NA9188

1, 1, 1, 1, 1
 2, 5 T
 7, 7, 7, 7

4. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

1. S1T - 0, 0, 0, 0, 6 - 3, 6, 1, 2
 2. S1T -
 3. S1T -
 4. S1T -

709

5. Special Handling Instructions and Additional Information
 As of 9-25-90, this will be classified as D037 & D041

EMERGENCY & BILLING CONTACT
HAZARDOUS MATERIAL SERVICES
 P. O. BOX 705
 COALINGA, CA 93210
 (209) 935-1508 #10032

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimates, including suggestions for reducing the burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

6. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal, currently available to me which minimizes the present and future threat to human health and the environment OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name KENNETH U. AYERS Signature [Signature] Month Day Year 0, 8, 2, 5, 9, 0

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name Gene Wells Signature [Signature] Month Day Year 0, 8, 2, 5, 1, 9, 0

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name _____ Signature _____ Month Day Year _____

13. Discrepancy Indication Space
 a. 520000 lbs. c. _____ lbs.
 b. _____ lbs. d. _____ lbs.

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name Robert L. Simpson Signature [Signature] Month Day Year 09-30-90

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief

5M-6203



KAISER PERMANENTE

August 6, 1990

Certified Return Receipt Requested

Ms. Susan Hugo
Hazardous Materials Specialist
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Rm. 200
Oakland, CA 94621

Dear Susan,

We recently have located a disposal facility in South Carolina that is able to accept the pentachlorophenol contaminated soil from our construction site on Broadway. The name and address of the firm is:

ThermoKem
454 S. Anderson Rd.
BTC 532
Rockhill, South Carolina 29730

We anticipate that we will be starting the packaging process of the soils for transport on or about August 18, 1990 and that the process will take approximately five (5) days. The firm of Crosby and Overton will be handling the project for us and will be taking the required safety precautions. Shipments of the waste will be manifested and copies of the manifest provided to you.

I trust that this process is acceptable to your office. Please notify me if otherwise or if I can answer any questions.

Thank you.

KUA:gm1

Sincerely,

Kenneth U. Ayers
Safety Coordinator

** Confirmed of Ken Ayers regarding disposal
9-4-90*

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

May 29, 1990

Mr. Kenneth Ayers
Kaiser Permanente Medical Center
280 West MacArthur Blvd.
Oakland, California 94611

**RE: Review of Remediation Plan for Soil Affected by Mineral
Spirits at 280 W. MacArthur Blvd., Oakland 94611**

Dear Mr. Ayers:

We have reviewed the report entitled "Site Characterization - Mineral Spirits in Soil, Kaiser Permanente Medical Center, 280 W. MacArthur Boulevard, Oakland, California", prepared by Geomatrix Consultants dated May 8, 1990. Per our telephone conversation of May 17, 1990, the proposed Phase I excavation plan is acceptable to us and may be carried out provided the following items are done:

1. Submit to our office a letter documenting that the disposal site of the excavated soil has been changed from Forward, Inc., to Nevada Hydrocarbons in Sparks, Nevada.
2. A site safety plan is submitted to our office and a copy of this site safety plan must be kept onsite at all times during the work.
3. Provide our office with a copy of the Workers' Compensation Insurance.
4. Soil sampling must be collected at a minimum of one sample per 200 square feet from the base and sidewalls of the excavation for confirmation analysis by a certified laboratory.

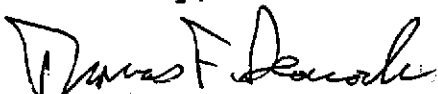
We have received all these documents including a copy of the analytical results (EPA Method 8240) of soil samples taken from the proposed Phase I excavation.

Mr. Kenneth Ayers
Kaiser Permanente Medical Center
280 West MacArthur Blvd.
Oakland, CA 94611
Page 2 of 2

Per our telephone conversation of May 22, 1990, you have our approval to proceed with the proposed Phase I soil excavation affected by mineral spirits.

Should you have any questions, please contact Susan Hugo, Hazardous Materials Specialist at (415) 271-4320.

Sincerely,



for Edgar B. Howell III, Chief
Hazardous Materials Division

EBH:SH:sh

cc: N. Debra Favre, Geomatrix Consultants, Inc.
Lester Feldman, Regional Water Quality Control Board,
San Francisco Bay Region
Howard Hatamaya, State Department of Health Services
Gil Jensen, Alameda County District Attorney, Consumer
and Environmental Protection
Rafat Shahid, Director, Alameda County Environmental
Health Department
Files

DEPARTMENT OF HEALTH SERVICES
TOXIC SUBSTANCES CONTROL DIVISION
2151 BERKELEY WAY, ANNEX 7
BERKELEY, CA 94704



May 10, 1990

*Karen Hoop-
OPK.
Just Spec*

Debra Favre
Geomatrix Consultants, Inc
One Market Plaza
Spear Street Tower, Suite 717
San Francisco, CA 94105

Dear Ms. Favre:

STORAGE EXTENSION REQUEST BEYOND THE 90 DAY STORAGE LIMIT

On April 13, this office received your letter dated April 9, 1990, requesting a storage extension beyond the 90 day storage limit in order to locate a treatment facility for contaminated soil.

The request is for the storage of a 120 cubic yards of soil contaminated with pentachlorophenol (PCP) and 2,4,5-trichlorophenol. You mentioned that dioxins were also detected. The contaminated soil is identified as EPA Hazardous Waste No. F027.

In accordance with Section 66508(b), Title 22, California Code of Regulations (CCR), your request is hereby granted under the following conditions:

1. This extension expires on June 29, 1990.
2. A legible photocopy of the manifest showing that the waste was removed within the allotted time shall be submitted to this Department by July 9, 1990.

RCRA waste No. F027, under the Code of Federal Regulations, Title 40, Section 268.31, is restricted from land disposal. This office is not aware of a known facility in the United States that will accept F027 for treatment. Therefore, you may not be able to resolve your problem within the 30 day extension. The Department suggests that you contact the EPA for a resolution on this matter. The person to speak to is Jim Breitlow, chief. His address is listed below and his number is (415) 744-1795.

A storage extension application, outlining our policies for granting extensions is enclosed for future requests.

Debra Favre
Page 2
May 10, 1990

If you have further questions, please contact Daisy Lee at (415) 540-3933.

Sincerely,



Michael R. James, Chief
Facility Permitting Unit
Region 2
Toxic Substances Control Program

cc: Jim Breitlow
U.S. EPA, Region IX
1235 Mission Street, H-3-2
San Francisco, CA 94105

Rafat Shahid
Environmental Health Director
Alameda County Hazardous Waste Program
80 Swan Way, Room 200
Oakland, CA 94621

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



May 9, 1990

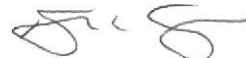
Ms. Susan Hugo
Division of Hazardous Materials
Department of Environmental Health
Alameda County Department of Health Services
80 Swan Way, Suite 200
Oakland, CA 94621

Dear Susan:

Enclosed is a check for \$500.00, payable to the County of Alameda; Health Care Services Agency. The check is to cover your departments' costs for overseeing and reviewing reports and proposals concerning the contamination soils remediation project at the Kaiser Permanente Medical Center in Oakland.

The final remediation plan for the site has been sent to you under separate cover. Please call me at 415-596-6603 if I can be of further assistance. Thank you.

Sincerely,



Kenneth U. Ayers
Safety Coordinator

KUA:gm1
enclosure

cc: J. Adams
• S. Rohlifing, RN

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



May 8, 1990

Ms. Susan L. Hugo
Division of Hazardous Materials
Department of Environmental Health
Alameda County Department of Health Services
80 Swan Way, Room 200
Oakland, CA 94621

Subject: Remediation Plan for Soil Affected by Mineral Spirits
Kaiser Permanente Medical Center
Oakland, California

Dear Susan:

This letter transmits our report entitled "Site Characterization - Mineral Spirits in Soil, Kaiser Permanente Medical Center, Oakland, California" prepared by our consultants, Geomatrix Consultants, Inc. (Geomatrix). The report summarizes Geomatrix's work to define the limits of soil affected by mineral spirits at the hospital construction site behind the main hospital building on Broadway. The results of Geomatrix's work were discussed with you at our meeting on May 2, 1990.

Based on the results of site characterization, we have chosen a plan for remediating the site involving removal of soil affected by mineral spirits greater than 10 mg/kg, the limit of detection. Other options involving limited excavation and in situ treatment were evaluated; however, even though the soil affected by mineral spirits did not appear to significantly endanger the environment, excavation proved to be the most practical option based on our development plans for the site. As we discussed in our meeting, the area affected by mineral spirits adjacent to the existing mechanical building and paint shed has been excavated to allow construction of the basement and foundation of a new mechanical building. The removal of soil was documented by the collection of samples from the excavation floor and side walls.

The remaining areas affected by mineral spirits will be removed in two phases to accommodate our building construction schedule. Phase I of our excavation plan covers only the portion of the entire area affected by mineral spirits, shown on Figure 1, immediately impacting building foundation construction. We are scheduled to begin excavation of the soil identified for Phase I in one month, pending your approval. Results of our investigation in the Phase I proposed excavation area indicate that concentrations of mineral spirits in soil are expected to be in the range of 100 to 500 parts per million (ppm) and extend only to approximately 5 to 7 feet deep as shown on Figure 2.

As currently planned, the excavation will be monitored by Geomatrix to document removal of the affected soil. Geomatrix will sample the excavation bottom and sidewalls to document such removal.

As discussed in our May 2, 1990 meeting, Phase II will involve excavation of the remaining soil affected by mineral spirits on the hillside and beneath the existing mechanical building. We are scheduled to initiate the Phase II excavation in 10 months, pending your approval.

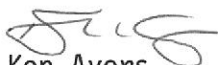
If the soil affected by mineral spirits has an average concentration less than 1,000 ppm, the soil will be transported to Forward, Inc. landfill in Stockton, California. At the landfill, the soil will either be aerated and disposed as Class III, or directly disposed of as Class II. If concentrations are greater than 1,000 ppm, the limit set by San Joaquin County, the soil will either be aerated and disposed at Forward under special permit, or aerated on-site and Class II disposal will be considered.

Geomatrix will monitor vapor concentrations during excavation with a photo ionization detector (PID). Vapor control measures such as limiting extent of excavation, or covering of soil, will be implemented if PID results indicate elevated vapor concentrations above the excavation. Additionally, a health and Safety Plan for excavating soil affected by mineral spirits has been prepared and is on file for your review.

The proposed excavation area is outside of the zone affected by pentachlorophenol (PCP). Based on the work performed by Geomatrix, the area affected by PCP was limited to the area within the hillside adjacent to the drum location as shown on Figure 3. Excavation of the PCP affected soil began on March 6, 1990 and was completed on April 4, 1990. Approximately 160 cubic yards of soil were removed and samples were collected from the excavation floor and sides to document the removal. With Geomatrix's assistance, we are currently identifying the available options for disposal of the PCP affected soil. A report summarizing the characterization of PCP affected soil, its removal, and a plan for disposal is currently being prepared and will be submitted for your review.

If you have any additional questions, please feel free to contact me. Otherwise, we hope to receive your approval of our remediation plan at your earliest convenience.

Sincerely,



Ken Ayers
Safety Coordinator

KA:gm1
Enclosure

cc: Lester Feldman, California Regional Water Quality Control Board
Thomas DeMartino, Medical Center Administrator
Sandra K. Rohlifing, RN, Assistant Medical Center Administrator
John Adams, Project Manager

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief



April 23, 1990

Ms. Susan Hugo
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Dear Ms. Hugo:

This letter confirms our telephone conversation on April 19, 1990 regarding the hazardous materials soil contamination issue at the Kaiser Permanente Medical Center - Oakland. Previously, I received a letter from your department requesting that a written investigation/remediation plan for your review and approval be submitted to your office within 15 days. During our telephone conversation, we agreed to meet with our consultant and our project manager to verbally discuss and review the investigation/remediation plan. I have scheduled a meeting at the Oakland Medical Center for Wednesday, May 2, 1990, at 1:00 p.m in room #1161. As discussed, the intent of the meeting is to update you on our plans for remediation, to answer any questions you may have and to acquire verbal approval of those plans. I believe you will find that our investigation/remediation plan is not only comprehensive but acceptable to your department.

If I can provide further information, please call me at (415) 596-6603. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Ayers".

Kenneth U. Ayers
Safety Coordinator

KUA:gm1

cc: J. Adams
T. DeMartino
T. Graf
S. Rohlfing, R.N.
T. Wilkes

Certified Mailer

April 10, 1990

Mr. Kenneth Ayers
Safety Coordinator
Kaiser Permanente Medical Center
280 West MacArthur Blvd.
Oakland, CA 94611

RE: Hazardous Materials Soil Contamination at
280 West MacArthur Blvd., Oakland

Dear Mr. Ayers:

This letter confirms the telephone conversation you had with Susan Hugo of this office on April 6, 1990 regarding the mineral spirits and pentachlorophenol soil contamination at the above shown facility. Previously, we received a letter dated March 12, 1990 from your office which provided additional information concerning the Section 304 Emergency Release Follow-Up Notice reports you submitted to OES. Another letter dated March 14, 1990 with three attached documents pertaining to the soil contamination issue at the above site was received by this office.

We have reviewed all these documents. Before any additional work is to commence, you have to submit to this office a plan of correction for our approval. Your investigation - remediation plan must include, but shall not be limited to:

1. Background history on the site.
2. Methods that will be used to determine the lateral and vertical extent of contamination.
3. Contaminates that will be tested for by the laboratory.
4. Name of your hazardous waste hauler.
5. Name of your disposal site.
6. Schedule of the investigation - remediation and the estimated date of completion.

Kaiser Permanente Medical Center
April 10, 1990
Page 2 of 2

All proposals, reports and analytical results pertaining to this investigation and remediation must be sent to this office and to:

Lester Feldman
Regional Water Quality Control Board, San Francisco Bay Region
1800 Harrison Street, Suite 700
Oakland, California 94612
(415) 464-1255

You should be aware that this Division is working in conjunction with the SFRWQCB.

Please submit your plan of correction for the above site within 15 days upon receipt of this letter along with a \$500 fee to cover our costs for overseeing and reviewing reports and proposals. Should you have any further questions, please call Susan Hugo at (415) 271-4320.

Sincerely,

Edgar B. Howell III, Chief
Hazardous Materials Division

EBH:SH:sh

cc: Rafat A. Shahid, Assistant Director, Alameda County
Department of Environmental Health
Gil Jensen, Alameda County District Attorney, Consumer and
Environmental Protection Division
Lester Feldman, Regional Water Quality Control Board
San Francisco Bay Region
Howard Hatamaya, State Department of Health Services

Files

Kaiser Permanente Medical Center
280 West MacArthur Boulevard
Oakland, California 94611-5693
(415) 596-1000

Thomas DeMartino
Administrator

Robert S. Klein, M.D.
Physician-in-Chief

90 MAR 14 PM 4:29



KAISER PERMANENTE

March 12, 1990

CERTIFIED MAIL

Chemical Emergency Planning
and Response Commission (CEPRC)
Local Emergency Planning Committee (LEPC)
Attn: Section 304 Reports
2800 Meadowview Road
Sacramento, CA 95832

To Whom It May Concern:

Enclosed is the Section 304 Emergency Release Follow-up Notice to the verbal notice given to the National Response Center, the State Office of Emergency Services; the Regional Water Quality Board; and the Alameda County Health Department, Toxics Division of a release of hazardous materials which was reported on February 28, 1990, with a supplemental follow-up report on March 5, 1990. This letter is to provide additional background information.

During soils testing of a planned construction site on Kaiser Permanente property, an area of soils contamination was noted. Follow-up laboratory analysis indicated the contaminant to be mineral spirits. Core sampling undertaken to determine the extent of the contamination determined that only a small area of approximately **twenty five cubic yards** of soil was involved and that there was no threat to ground water. A firm was contracted to excavate and haul the expected twenty five yards of soil to a Class I landfill. During this excavation, the extent was found to be larger than expected. Additionally, on February 28, 1990, at approximately 1240 hours, a fifty five (55) gallon drum of an unknown liquid was found. The drum ruptured and released approximately **forty (40) gallons** of liquid into the soil. Believing that we might have a reportable situation, the release of mineral spirits and the unknown liquid was reported immediately.

Samples of the unknown liquid were taken for immediate laboratory analysis which identified the substance as pentachlorophenol (PCP) and 2,4,5-trichlorophenol. Sample concentrations ranged from 1300 mg/kg to 2600 mg/kg. This information was communicated orally on March 5, 1990.

Clean-up of the pentachlorophenol tainted soil has been undertaken by Crosby and Overton, a hazardous materials clean-up firm, under the direction of Geomatrix. All workers involved in the clean-up are fully protected from exposure utilizing personal protective equipment. Exposure and environmental monitoring is being conducted by an on-site Industrial Hygienist. There have been no known significant exposures and no harm to human health or the

Chemical Emergency Planning & Response Commission

March 12, 1990

Page 2

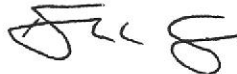
environment is anticipated as a result of the release.

Disposal of the excavated soil containing pentachlorophenol is pending. Disposal options are being investigated and any disposal will be through appropriate means. Thus far approximately 25 cubic yards of PCP contaminated soils have been contained.

Characterization of the area for mineral spirits is continuing. Thus far, approximately 300 cubic yards of soils tainted with mineral spirits have been identified.

If additional information is required, please contact me at (415) 596-6603.
Thank you.

Respectfully yours,

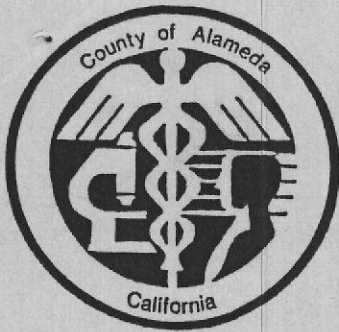


Kenneth U. Ayers
Safety Coordinator

KUA:pt

Enclosure

cc: Alameda County Health Agency: Hazardous Materials Division
Tom DeMartino



ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
415/271-4320

- HAZARDOUS MATERIALS RELEASE AND NOTIFICATION REPORT (H&SC 25180.7)
 EMERGENCY RESPONSE

1. INFORMATION RECEIVED BY: Ken Ayers.
DATE: 02/28/90 TIME: 3:00 pm
2. INCIDENT LOCATION: 280 W. MacArthur Blvd
CITY: Oakland ZIP CODE: 94611
3. DATE OF INCIDENT: 02/28/90 TIME OF INCIDENT: 12:40
4. REPORTED BY: Ken Ayers. AGENCY: Kaiser Hospital
ADDRESS: 280 W MacArthur CITY, ZIP: Oakland, Ca
TELEPHONE: 596-6603 CONTACT: Same
PHONE: _____
5. TYPE OF DISCHARGE:
 Discharge from vehicle License Plate No. _____
Manifest/Shipping Information: _____
 Abandoned Material Fixed Facility
Name: _____ Address: _____
City: _____ Zip Code: _____
 Other (specify) _____
6. ESTIMATED QUANTITY DISCHARGED: _____
QUANTITY THREATENED TO BE RELEASED: _____
7. NATURE OF MATERIAL:
 Solid Liquid Gas Powder Granular
 Radioactive Other
Chemical Name: Unknown Common Name: _____
part is mineral spirits
8. HAZARDOUS PROPERTIES: Corrosive Ignitable Toxic
 Reactive Other
9. HAZARDOUS MATERIAL WAS RELEASED TO:
 Air Storm Drain San Francisco Bay Sanitary Sewer
 Other Natural Waterway (creek, lake, reservoir) Groundwater
 Groundsurface (soil, road, etc.) Other (specify) close to
groundwater
10. WEATHER CONDITIONS: _____
11. NUMBER OF INJURED PERSONS REQUIRING HOSPITALIZATION: _____
NAMES AND ADDRESSES OF HOSPITALS UTILIZED:

12. PERSONS PRESENT AT SCENE:

NAME: Geo Matrix AFFILIATION: Haz Mat. Firm - Sherry Young PHONE NO.: 957-9557.

13. RESPONSIBLE PARTY:

NAME: Kaiser Hospital PHONE NO.: _____
ADDRESS: 280 W. MacArthur

14. EVIDENCE COLLECTED (SAMPLES, PHOTOGRAPHS, ETC.)

Soil Samples, coarse & Bulk.

15. CLEAN-UP ACTIONS: Hauling to Class I Landfill - Kittleman Halls Treatment Fac

NAMES AND ADDRESSES OF PERSONS DOING CLEAN-UP:

Geo Matrix
Kaiser Hosp

DESCRIPTION OF CLEAN-UP ACTIONS:

Hauling, excavation

16. TIME INCIDENT CLOSED: _____

17. ELAPSED TIME: Unknown maybe 3 mos.

18. DISCHARGE NOT TO BE NOTIFIED:

Unlikely to Cause Substantial Injury to Public Health & Safety
 Public knowledge possible ongoing criminal investigations
 Permitted Discharge Other (undergoing investigations)

19. DISCHARGE TO BE NOTIFIED:

FACTORS DETERMINING THAT THIS HAZARDOUS WASTE DISCHARGE OR POTENTIAL DISCHARGE IS LIKELY TO CAUSE SUBSTANTIAL INJURY TO THE PUBLIC HEALTH OR SAFETY:

20. NOTIFICATION:

- Board of Supervisors
- Health Officer
- Alameda County Press Room
- California Department of Health Services
- Reporting Agency or Individual

By copy of this report to the above listed agencies and officials, we are hereby submitting this information on behalf of all designated employees of the Department of Environmental Health, according to Section 25180.7, Health & Safety Code. The information submitted in this report is based upon the best available information at the time the report was completed.

Inspector's Name: SUSAN L. HUGO Date: 3/2/90
Inspector's Signature: Susan L. Hugo

TITLE III - SECTION 304 EMERGENCY RELEASE NOTICE REPORTING FORM

| | | | |
|----------|--|---|--|
| A | BUSINESS NAME KAISER PERMANENTE MEDICAL CENTER | FACILITY EMERGENCY CONTACT & PHONE NUMBER Ken Ayers (415) 596-6603 | |
| B | INCIDENT MO DAY YR. DATE 01248910 | TIME OES NOTIFIED 11440 (use 24 hr time) | OES CONTROL NO 004311 |
| C | INCIDENT ADDRESS LOCATION 280 W. MacArthur Blvd. | CITY/COMMUNITY Oakland | COUNTY ZIP Alameda 94611 |
| D | CHEMICAL OR TRADE NAME (print or type) Mineral Spirits (Stoddard Solvents) | | CAS NO. 8052413 |
| | CHECK IF CHEMICAL IS ON 302 LIST <input type="checkbox"/> | CHECK IF RELEASE IS REPORTABLE UNDER CERCLA 103 (A) <input type="checkbox"/> | |
| | PHYSICAL STATE CONTAINED 1 SOLID 2 LIQUID 3 GAS | PHYSICAL STATE RELEASED 1 SOLID 2 LIQUID 3 GAS | QUANTITY RELEASED unknown |
| | ENVIRONMENTAL CONTAMINATION 1 AIR 3 WATER 7 GROUND 9 OTHER | TIME OF RELEASE | DURATION OF RELEASE DAYS HOURS MINUTES |
| E | ACTIONS TAKEN (Check one or more) | | |
| | 41 <input checked="" type="checkbox"/> REMOVE HAZARD | 47 <input type="checkbox"/> DECONTAMINATE AREA | 73 <input type="checkbox"/> SHUT DOWN SYSTEM |
| | 42 <input checked="" type="checkbox"/> ID OF HAZMAT | 81 <input checked="" type="checkbox"/> CROWD CONTROL | 82 <input checked="" type="checkbox"/> SECURE PROPERTY |
| | 31 <input type="checkbox"/> RESCUE | 43 <input type="checkbox"/> EVACUATION | 62 <input type="checkbox"/> TRAFFIC CONTROL |
| | 33 <input type="checkbox"/> EMERGENCY MEDICAL SERVICE | 44 <input checked="" type="checkbox"/> ESTABLISH SAFE AREA | 63 <input checked="" type="checkbox"/> NOTIFY OTHER AGENCY |
| | 35 <input type="checkbox"/> SEARCH | 45 <input type="checkbox"/> MONITOR | 84 <input type="checkbox"/> PROVIDE PUBLIC INFO |
| | 36 <input checked="" type="checkbox"/> TRANSPORT | 48 <input type="checkbox"/> DECONTAMINATE PERSON/EQUIP | 71 <input checked="" type="checkbox"/> INVESTIGATE |
| F | KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for additional information) | | |
| | 1 <input checked="" type="checkbox"/> ACUTE OR IMMEDIATE (explain) Dizziness, irritant to eyes, nose and throat | | |
| | 2 <input type="checkbox"/> CHRONIC OR DELAYED (explain) | | |
| | 3 <input type="checkbox"/> NOT KNOWN (explain) | | |
| G | ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS (Use the comments section for additional information) | | |
| H | COMMENTS INDICATE SECTION (A-G) AND NUMBER WITH COMMENTS OR ADDITIONAL INFORMATION | | |
| | D - Ground water not to be significantly impacted but further investigation will be performed | | |
| | E-41 - Approximately 84 yds ³ removed to Class I landfill. | | |
| | E-71 - Investigation into extent of contamination continuing. | | |
| | F-1 - No personnel exposure to significant levels known or anticipated. | | |
| I | CERTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted information is true, accurate, and complete. | | |
| | REPORTING FACILITY REPRESENTATIVE (print or type) Kenneth U. Ayers | | |
| | SIGNATURE OF REPORTING FACILITY REPRESENTATIVE | | DATE: MAR 12, 1990 |

| | | | |
|----------|--|---|---|
| A | BUSINESS NAME Kaiser Permanente Medical Center | FACILITY EMERGENCY CONTACT & PHONE NUMBER Ken Ayers (415) 596-6603 | |
| B | INCIDENT MO DAY YR. DATE 01/22/90 | TIME OES NOTIFIED 11:44 (use 24 hr time) | OES CONTROL NO 0064311 |
| C | INCIDENT ADDRESS LOCATION 280 W. MacArthur Blvd. | CITY/COMMUNITY Oakland | COUNTY ZIP Alameda 94611 |
| D | CHEMICAL OR TRADE NAME (print or type) Pentachloro phenol | | CAS NO. 87865 |
| | CHECK IF CHEMICAL IS ON 302 LIST <input type="checkbox"/> | CHECK IF RELEASE IS REPORTABLE UNDER CERCLA 103 (A) <input type="checkbox"/> | |
| | PHYSICAL STATE CONTAINED 1 SOLID 2 LIQUID 3 GAS | PHYSICAL STATE RELEASED 1 SOLID 2 LIQUID 3 GAS | QUANTITY RELEASED 1 lbs. 2 35 gal. 3 cu.ft. |
| | ENVIRONMENTAL CONTAMINATION 1 AIR 3 WATER 7 GROUND 9 OTHER | TIME OF RELEASE 1/24/90 | DURATION OF RELEASE DAYS HOURS MINUTES |
| E | ACTIONS TAKEN (Check one or more) | | |
| | 31 RESCUE | 41 X REMOVE HAZARD | 47 DECONTAMINATE AREA |
| | 33 EMERGENCY MEDICAL SERVICE | 42 X ID OF HAZMAT | 49 DECONTAMINATE PERSON/EQUIP |
| | 35 SEARCH | 43 EVACUATION | 51 X CROWD CONTROL |
| | 36 TRANSPORT | 44 X ESTABLISH SAFE AREA | 52 X TRAFFIC CONTROL |
| | | 45 X MONITOR | 53 X NOTIFY OTHER AGENCY |
| | | 46 DECONTAMINATE PERSON/EQUIP | 54 PROVIDE PUBLIC INFO |
| | | 47 DECONTAMINATE AREA | 55 NO ACTION TAKEN |
| | | 48 DECONTAMINATE PERSON/EQUIP | 56 X OTHER |
| F | KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for additional information) | | |
| | 1 X ACUTE OR IMMEDIATE (explain) Respiratory symptoms; dizziness | | |
| | 2 X CHRONIC OR DELAYED (explain) CNS & CVS involvement | | |
| | 3 NOT KNOWN (explain) | | |
| G | ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS (Use the comments section for additional information) | | |
| H | COMMENTS INDICATE SECTION (A-G) AND NUMBER WITH COMMENTS OR ADDITIONAL INFORMATION | | |
| | D - originally reported as an unknown substance; subsequently identified and reported orally. | | |
| | E-71 - Investigation of extent of contamination continuing. | | |
| | E-99 - Area secured & spill contained | | |
| | F-142 - No personnel exposure known or anticipated. Symptoms specified are health effects as reported in the literature for PCP. | | |
| I | CERTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted information is true, accurate, and complete. | | |
| | REPORTING FACILITY REPRESENTATIVE (print or type) Kenneth U. Ayers | SIGNATURE OF REPORTING FACILITY REPRESENTATIVE | |
| | | DATE: MAR 12, 1990 | |

Please print or type. (Form designed for *dot-matrix* (12-pitch typewriter).

| | | | | | | | | | | | | | | | |
|--|--|--|--|------------------------------------|--|--|--|---|--|---|--|---|--|-----------------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. CAD98142713122377 | | Manifest Document No. 77 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | | | | | |
| 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122377 | | | | | | | | | |
| 4. Generator's Phone (415 596-6603) ATTN: KEN AYERS | | | | | | B. State Generator's ID HYHQ36008957 | | | | | | | | | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | | 6. US EPA ID Number CAD009466392 | | | C. State Transporter's ID 001412 | | D. Transporter's Phone 415 235-1393 | | | | | | | |
| 7. Transporter 2 Company Name | | | | | | E. State Transporter's ID | | | | | | | | | |
| 8. US EPA ID Number | | | | | | F. Transporter's Phone | | | | | | | | | |
| 9. Designated Facility Name and Site Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | | | | | 10. US EPA ID Number CAT000646117 | | | | | | | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | | | 12. Containers No. | | 13. Total Quantity | | 14. Unit Wt/Vol | | 15. Waste No. | | | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATED WASTE ONLY | | | | | | 1 | | 1 | | 1 | | State 611 EPA/Other NON - RCRA | | | |
| b. | | | | | | | | | | | | State EPA/Other | | | |
| c. | | | | | | | | | | | | State EPA/Other | | | |
| d. | | | | | | | | | | | | State EPA/Other | | | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | | | K. Handling Codes for Wastes Listed Above | | | | | | | | | |
| 15. Special Handling Instructions and Additional Information <i>Chem waste W-8 # 013 Oil waste P-101 # 02140</i> | | | | | | a. b. c. d. | | | | | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | | | Printed/Typed Name <i>Ken Ayers</i> | | Signature <i>[Signature]</i> | | Month Day Year 02 23 90 | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | | | | | | | Printed/Typed Name <i>Michael Kant</i> | | Signature <i>[Signature]</i> | | Month Day Year 02 23 90 | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | | | | | | | Printed/Typed Name | | Signature | | Month Day Year | |
| 19. Discrepancy Indication Space | | | | | | | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | | | | | | | Printed/Typed Name | | Signature | | Month Day Year | |

8 8122377
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550
 GENERATOR
 TRANSPORTER
 FACILITY

| | | | | | | | | | | | | | |
|---|--|---|--|--|--|--|--|---|----|-----------------|--|-----------------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. CAD981427131 | | Manifest Document No. 22484 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | | | |
| 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122484 | | | | | | | |
| 4. Generator's Phone (415) 596-6603 ATTN: KEN AYERS | | | | | | B. State Generator's ID HYHQ36008957 | | | | | | | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | | | 6. US EPA ID Number CAD009466392 | | C. State Transporter's ID 116 | | | | | | | |
| 7. Transporter 2 Company Name | | | | | | D. Transporter's Phone 415-235-1393 | | | | | | | |
| 8. US EPA ID Number | | | | | | E. State Transporter's ID | | | | | | | |
| 9. Designated Facility Name and Site Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | | | | | 10. US EPA ID Number CAT000646117 | | | | | | | |
| | | | | | | F. Transporter's Phone | | | | | | | |
| | | | | | | G. State Facility's ID | | | | | | | |
| | | | | | | H. Facility's Phone 209 386-9711 | | | | | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | | | 12. Containers | | 13. Total Quantity | | 14. Unit Wt/Vol | | 15. Waste No. | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATE WASTE ONLY | | | | | | No. Type | | | | Y | | State 611 | |
| b. | | | | | | | | | | | | EPA/Other NON - RCRA | |
| c. | | | | | | | | | | | | State | |
| d. | | | | | | | | | | | | EPA/Other | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | | | K. Handling Codes for Wastes Listed Above | | | | | | | |
| | | | | | | a. | | | b. | | | | |
| | | | | | | c. | | | d. | | | | |
| 15. Special Handling Instructions and Additional Information CHEM WASTE W.O. # 013 CHEM WASTE PROFILE # K21240 | | | | | | | | | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | | | | | | |
| Printed/Typed Name KENNETH U. AYERS | | | | | | Signature | | | | | | Month Day Year 02 23 90 | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | | | | | | | | | | |
| Printed/Typed Name W. H. K... | | | | | | Signature | | | | | | Month Day Year 02 23 90 | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | | | | | | | | | | |
| Printed/Typed Name | | | | | | Signature | | | | | | Month Day Year | |
| 19. Discrepancy Indication Space | | | | | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | | | | | | | | | | |
| Printed/Typed Name | | | | | | Signature | | | | | | Month Day Year | |

8 8122484
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

GENERATOR

TRANSPORTER

FACILITY

P.B. 2/23/90

Please print or type. (Form designed for use *lite* (12-pitch typewriter).)

86144373
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

| | | | | | | | | | |
|--|--|--|--|--|--------------------|--|-----------------|---|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. CAD98142713122373 | | Manifest Document No. 22373 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | |
| 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122373 | | | |
| 4. Generator's Phone (415 596-6603) ATTN: KEN AYERS | | | | | | B. State Generator's ID HYHQ36008957 | | | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | | | 6. US EPA ID Number CAD009466392 | | C. State Transporter's ID 00198 | | D. Transporter's Phone 415 235-1393 | |
| 7. Transporter 2 Company Name | | | | | | E. State Transporter's ID | | F. Transporter's Phone | |
| 9. Designated Facility Name and Site Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | | | | | 10. US EPA ID Number CAT000646117 | | G. State Facility's ID | |
| | | | | | | H. Facility's Phone 209 386-9711 | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | | 12. Containers No. | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No. | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATED WASTE ONLY | | | | | | | | State 611 EPA/Other NON - RCRA | |
| b. | | | | | | | | State EPA/Other | |
| c. | | | | | | | | State EPA/Other | |
| d. | | | | | | | | State EPA/Other | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | | | K. Handling Codes for Wastes Listed Above | | | |
| | | | | | | a. | | b. | |
| | | | | | | c. | | d. | |
| 15. Special Handling Instructions and Additional Information <i>Oil waste DOT # 013 Oil waste DOT # 121200</i> | | | | | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | | | | |
| Printed/Typed Name <i>Ken Ayers</i> | | | | Signature <i>[Signature]</i> | | Month Day Year 10 21 90 | | | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | | | | | | |
| Printed/Typed Name <i>R. H. Darr</i> | | | | Signature <i>[Signature]</i> | | Month Day Year 10 21 90 | | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | | | | | | |
| Printed/Typed Name | | | | Signature | | Month Day Year | | | |
| 19. Discrepancy Indication Space | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | | | | | | |
| Printed/Typed Name | | | | Signature | | Month Day Year | | | |

PB 2/21

8 8122374
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

| | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|---|----------------|-----------------|--|---|--|--|--|--|--|-----------------------------------|--|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. CAD98142713122374 | | Manifest Document No. 122374 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | | | | | | | | | | |
| 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122374 | | | | | | | | | | | | | | |
| 4. Generator's Phone (415 596-6603) ATTN: KEN AYERS | | | | | | B. State Generator's ID HYHQ36008957 | | | | | | | | | | | | | | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | | 6. US EPA ID Number CAD009466392 | | | C. State Transporter's ID 011398 | | | | | | | | | | | | | | |
| 7. Transporter 2 Company Name | | | 8. US EPA ID Number | | | D. Transporter's Phone 415 235-1393 | | | | | | | | | | | | | | |
| 9. Designated Facility Name and Site Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | | | | | 10. US EPA ID Number CAT000646117 | | | | | | | | | | | | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | | | 12. Containers | | 13. Total Quantity | | 14. Unit Wt/Vol | | 15. Waste No. | | | | | | | | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATED WASTE ONLY b. c. d. | | | | | | No. | | Type | | | | State | | | | | | | | |
| | | | | | | | | | | | | EPA/Other | | | | | | | | |
| | | | | | | | | | | | | State | | | | | | | | |
| | | | | | | | | | | | | EPA/Other | | | | | | | | |
| | | | | | | | | | | | | State | | | | | | | | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | | | K. Handling Codes for Wastes Listed Above | | | | | | | | | | | | | | |
| 15. Special Handling Instructions and Additional Information <i>Chemical waste - see SDS containing asbestos & lead</i> | | | | | | a. | | | b. | | | | | | | | | | | |
| | | | | | | c. | | | d. | | | | | | | | | | | |
| | | | | | | 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | Printed/Typed Name <i>Ken Ayers</i> | | | Signature <i>[Signature]</i> | | | Month Day Year <i>10/22/90</i> | | |
| | | | | | | | | | | | | 17. Transporter 1 Acknowledgement of Receipt of Materials | | | Printed/Typed Name <i>Ken Ayers</i> | | | Signature <i>[Signature]</i> | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | Printed/Typed Name | | | Signature | | | Month Day Year | | | | | | | | | | | |
| 19. Discrepancy Indication Space | | | | | | | | | | | | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | | | | | | | | | | | | | | | | | |
| Printed/Typed Name | | | | | | Signature | | | | | | Month Day Year | | | | | | | | |

PB 2/21

Please print or type. (Form designed for use on a dot matrix printer (12-pitch typewriter).)

8 8122375
IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

| | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|---|--|------------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. C A D 9 8 1 4 2 7 1 3 1 | | Manifest Document No. 2 2 3 7 5 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | |
| | | 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122375 | | | |
| 4. Generator's Phone (415) 596-6603 ATTN: KEN AYERS | | | | | | B. State Generator's ID H Y H Q 3 6 0 0 8 9 5 7 | | | | | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | 6. US EPA ID Number C A D 0 0 9 4 6 6 3 9 2 | | C. State Transporter's ID 001387 | | D. Transporter's Phone 415 235-1393 | | | | | |
| 7. Transporter 2 Company Name | | 8. US EPA ID Number | | E. State Transporter's ID | | F. Transporter's Phone | | | | | |
| 9. Destination Name and Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | US EPA ID Number C A T 0 0 0 6 4 6 1 1 7 | | G. State Facility's ID | | H. Facility's Phone 209-386-9711 | | | | | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | 12. Containers | | 13. Total Quantity | | 14. Unit | | | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATED WASTE ONLY b. c. d. | | | | No. | | Type | | Wt/Vol | | | |
| | | | | | | 1 CM | | 14 Y | | State 611 | |
| | | | | | | | | | | EPA/Other NON-RCRA | |
| | | | | | | | | | | State | |
| | | | | | | | | | | EPA/Other | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | K. Handling Codes for Wastes Listed Above | | | | | | | |
| 15. Special Handling Instructions and Additional Information <i>Chemical waste... 012</i> <i>013</i> | | | | a. | | b. | | | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | Printed/Typed Name | | Signature | | Month Day Year | | | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | Printed/Typed Name PAUL JACOBO | | Signature <i>Paul Jacobo</i> | | Month Day Year 02 21 90 | | | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | Printed/Typed Name | | Signature | | Month Day Year | | | |
| 19. Discrepancy Indication Space | | | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | Printed/Typed Name | | Signature | | Month Day Year | | | |

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

P.B 2/21

Please print or type. (Form designed for use on a dot-matrix (12-pitch typewriter).)

8 8122376
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

GENERATOR
 TRANSPORTER
 FACILITY

| | | | | | | | | | | | |
|--|--|--|--|---|--|--|--|---|--|---|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. C A D 9 8 1 4 2 7 1 3 1 2 2 3 1 7 6 | | Manifest Document No. 2 2 3 1 7 6 | | 2. Page 1 of 1 | | Information in the shaded areas is not required by Federal law. | | | |
| | | 3. Generator's Name and Mailing Address KAISER FOUNDATION HOSPITAL 280 W. MacARTHUR BLVD., OAKLAND, CA 94611 | | | | | | A. State Manifest Document Number 88122376 | | B. State Generator's ID HYH036 008987 | |
| 4. Generator's Phone (415) 596-6603 ATTN: KEN AYERS | | | | | | 6. US EPA ID Number Q A D 0 0 9 4 6 6 3 9 2 | | C. State Transporter's ID 001389 | | D. Transporter's Phone 415 235-1393 | |
| 5. Transporter 1 Company Name ERICKSON, INC. | | | | | | 8. US EPA ID Number | | E. State Transporter's ID | | F. Transporter's Phone | |
| 7. Transporter 2 Company Name | | | | | | 10. US EPA ID Number | | G. State Facility's ID | | H. Facility's Phone | |
| 9. Designated Facility Name and Site Address KETTLEMAN HILLS TREATMENT FACILITY 35251 OLD SKYLINE RD. KETTLEMAN HILLS, CA | | | | | | 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | 12. Containers No. Type | | 13. Total Quantity | |
| | | | | | | | | | | 14. Unit Wt./Vol | |
| | | | | | | | | | | I. Waste No. | |
| | | | | | | | | | | State 611 | |
| | | | | | | | | | | EPA/Other NON - RCRA | |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | | | | | | 12. Containers No. Type | | 13. Total Quantity | | 14. Unit Wt./Vol | |
| a. WASTE HYDROCARBON CONTAMINATED SOIL: CALIFORNIA REGULATED WASTE ONLY | | | | | | 1 | | CM | | 14 Y | |
| b. | | | | | | | | | | State | |
| c. | | | | | | | | | | EPA/Other | |
| d. | | | | | | | | | | State | |
| J. Additional Descriptions for Materials Listed Above MINERAL SPIRITS AND DIESEL CONTAMINATED SOIL | | | | | | K. Handling Codes for Wastes Listed Above | | a. | | b. | |
| 15. Special Handling Instructions and Additional Information UNM WASTE TO BE OIS UNM WASTE PISOL 2 221240 | | | | | | c. | | d. | | | |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. | | | | | | Printed/Typed Name Ken Ayers | | Signature | | Month Day Year 10 2 21 19 90 | |
| 17. Transporter 1 Acknowledgement of Receipt of Materials | | | | | | Printed/Typed Name Paul Jacobs | | Signature | | Month Day Year 10 2 21 19 90 | |
| 18. Transporter 2 Acknowledgement of Receipt of Materials | | | | | | Printed/Typed Name | | Signature | | Month Day Year | |
| 19. Discrepancy Indication Space | | | | | | | | | | | |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | | | | | | Printed/Typed Name | | Signature | | Month Day Year | |

P.B. 2/21

HAZARD REVIEW

800-233-3360

HEALTH INFORMATION FOR
HAZARDOUS MATERIALS EMERGENCIES VOLUME 3 NUMBER 1, 1986

PENTACHLOROPHENOL (PCP)

Frank J. Mycroft, Ph.D. and Robert Schlag, M.Sc.

Chemical Formula

C_6Cl_5OH

Physical Properties

Molecular Weight

266.3

Appearance: When pure, pentachlorophenol is a white crystalline solid with a characteristic and pungent phenolic odor. Technical grade PCP is dark-grey to brown in color. Warning properties: PCP dusts are irritating to the eyes and nose at concentrations above 1 mg/m³.

IUPAC Name:

Pentachlorophenol

Vapor Pressure: 0.00017 mmHg at 20°C (68°)
0.12 mmHg at 100°C (212°F)
40.0 mmHg at 211°C (412°F)

Chemical Abstracts Serial (CAS) # 87-86-5
NIOSH Registry of Toxic Effects (RTECS) # SM6300000
United Nations Identification (UN) # 2020

Concentration in saturated air at 20°C: 0.22 ppm (2.5 mg/m³)

Specific density of solid: 2.0

Melting point: 190°C (374°F)

Boiling point: 310°C (590°F, decomposes)

Auto-ignition temperature: Not combustible.

Water solubility: 14 ppm at 20°C. Note that the sodium salt of pentachlorophenol is highly water soluble, up to 33 g/100 g.

Conversion factor: 1 mg/m³ = 0.088 ppm

Synonyms

PCP
Penta
2,3,4,5,6-pentachlorophenol
Pentachlorohydroxybenzene
Penchlorol

Physical Description

NOTE: As PCP is a weak acid, it reacts with bases to form salts. The related wood preservative sodium pentachlorophenate is derived from the reaction of PCP with sodium hydroxide.

Pure pentachlorophenol is a white crystalline substance at room temperature. Depending upon the degree of purity, technical grades of the material may have a gray to brown color. The characteristic odor and irritant properties of PCP are sufficient to warn of an acute overexposure. Despite a very low vapor pressure, PCP vapors can approach and exceed the permissible exposure levels set by Cal/OSHA. At 20°C, the saturating air concentration of PCP is 2.5 mg/m³ (0.22 ppm)(1,2).

Pentachlorophenol is commercially available in technical grades. It is available in flakes, pellets, and 5-30% solutions made with a variety of organic solvents. The usual working concentration is about 5%. Technical PCP is typically composed of PCP (88.4%), tetrachlorophenol (4.4%), trichlorophenol (< 0.1%), and higher chlorinated phenoxyphenols (6.2%). Chlorinated dibenzofurans and dibenzodioxins are also found in commercial grades of PCP. The levels of these contaminants vary with the manufacturing process and from batch to batch. The chlorinated dioxins which are usually found in commercial grades of PCP are the hexa-, the hepta-, and the octa-chlorodibenzo-p-dioxins. The chlorinated

Tradenames

| | | | |
|------------|--------------|--------------|-----------|
| Chem-Tol | Dowicide G | Penta-Kil | Weedone |
| Chlorophen | Penchlorol | Pentamol | Woodlife |
| Dowicide 7 | Pentachlorol | Santophen 20 | Woodtreat |

Exposure Guidelines

Cal/OSHA Permissible Exposure Level (PEL): 0.5 mg/m³
ACGIH Threshold Limit Value (TLV): 0.5 mg/m³
California Drinking Water Action Level: 30 ug/l

Hazard REVIEW

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A service of the San Francisco Bay Area Regional
Poison Control Center; Kent R. Olson, MD, Director
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Supported by the Department of Health Services, State of California
Richard Jackson, MD, Project Coordinator

furans usually found are the tetra-, penta-, hexa-, hepta-, and octa-chlorodibenzofurans. The dioxin precursor hydroxy-chlorodiphenylether is also present in amounts reported to range from 1 to 5 percent. However, the highly toxic 2,3,7,8-isomers of tetrachlorodibenzodioxin and tetrachlorodibenzofuran have **not** been found in commercially available grades of PCP (1,3,4,5).

These highly chlorinated dibenzofuran and dibenzodioxin contaminants are potent experimental carcinogens and teratogens. In a recent regulatory decision, the Environmental Protection Agency has set limits on the amounts of these compounds that may occur as contaminants in PCP. The maximum amount of the total hexachlorodibenzo-p-dioxin contaminants permitted has been set at 1 ppm. No contamination with the more highly toxic 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is allowed (6,7).

Hazardous Chemical Properties

Pentachlorophenol itself has little chemical reactivity. Being a weak acid, it reacts with strong bases to yield the corresponding water-soluble salts. It is decomposed by strong oxidizing agents and, when in solution, by ultraviolet light or sunlight. The chemical stability of PCP makes it a relatively persistent environmental pollutant (8).

Pentachlorophenol is nonflammable. However, it is often formulated as a liquid by mixing it with flammable hydrocarbon solvents such as mineral spirits, No. 2 fuel oil, and kerosene. Isopropyl ether may be used as a co-solvent. These mixtures are flammable. PCP-treated materials should not be burned. In a fire, they have the potential to generate a toxic smoke laden with volatilized PCP, its contaminants, and their combustion products. When heated to moderately high temperatures (200°C), PCP can react to form octachlorodibenzodioxin. The reaction proceeds through an intermediate phenoxyphenol, or "predioxin", which is present in technical grades of PCP. Polymeric phenylene ethers may also be formed. Results of experiments show that octachlorodibenzodioxin can be formed when treated wood and paper products are burned. Hydrochloric acid, chlorine, and chlorinated hydrocarbons are also released (2,3,8,9).

Sources of Human Exposure

There is a large potential for workers and the public to be exposed to PCP. Since its introduction in the 1930's as a timber preservative, PCP has become one of the most widely used pesticides. In 1980, 50 million pounds of PCP were produced in the United States. Pentachlorophenol and its sodium salt are used as wood preservatives, contact herbicides, fungicides, insecticides, antimicrobial agents, and molluscicides. PCP is the second most commonly used wood preservative in the United States. Together with creosote and arsenic, PCP accounts for 97% of the wood preservatives used. In contrast to arsenic and creosote treated lumber, wood treated with PCP retains its natural appearance, possesses little residual odor, and can be painted as readily as natural wood. In California, sales of PCP have more than doubled since 1980 (Table 1). Pentachlorophenol is not a naturally occurring substance (3,7,8).

Table 1: Amounts of Pentachlorophenol Sold in California.

| Year | Quantity (Pounds) | (10) |
|------|-------------------|------|
| 1980 | 771,794 | |
| 1981 | 613,095 | |
| 1982 | 1,719,545 | |
| 1983 | 2,006,017 | |
| 1984 | 1,880,166 | |

Occupational Exposures. Workers are the population at greatest risk of overexposure. The uses of PCP provide an indication of those industries in which opportunities for worker exposure exist. About 80% of the PCP produced is consumed in treating wood and wood products such as pulp and paper. The remaining 20% is used as a control for algae and fungi in cooling towers at electricity generating plants; a preservative in paints, adhesives, and photographic solutions; a mold and fungus control agent in leather tanning operations; a water-proofing agent for plywood and fiberboard; and a preservative for rope, twine, burlap, cable coverings, and canvas in the textile industry. In 1980, the United States Department of Agriculture estimated that approximately 3 to 6 million applicators were exposed each year to PCP (3,8).

There are two major processes for treating wood with PCP. The first process involves immersing the wood in a PCP solution within a pressure chamber. This process achieves a deep penetration of the treated wood and extends its useful life at least five-fold. Railroad ties, construction lumber, plywood, timbers, foundation materials, fence posts, and utility poles, as well as landscape materials are often treated in this way. The non-pressure processes involve surface application of PCP by spraying, brushing, dipping, or soaking of the treated wood and provide a less durable protection. These latter processes were often used to treat lumber used around the home, yard, and farm such as wooden fences, millwork, decks, playground equipment, and lawn furniture (8).

As PCP is a toxic substance, its use is regulated by federal and state agencies responsible for protecting the public and workers. Federal and state laws require that pesticides be used in accordance with their labeling which describes the allowed uses and some of the mandatory safety precautions. The California Department of Food and Agriculture, Cal/OSHA, and the EPA require that workers handling PCP be trained in safe work practices. State law further requires that physicians report all cases of suspected pesticide related illness to their local health officer within 24 hours. Of well over 10,000 total pesticide cases reported from 1975-1984, only 116 were PCP related (Table 2). The moderate volatility and high skin penetration of PCP makes both inhalation and skin contact important routes for exposure. The maximum average air concentration to which a worker can be legally exposed over an eight hour shift is 0.5 mg/m³. Personal protective gear must also be worn to protect workers when eye or skin contact is possible (2,11).

Table 2: Summary of Pentachlorophenol Associated Occupational Illnesses Reported to the California Department of Food and Agriculture by Physicians (11).

| Year | Type of Injury | | | | Total |
|----------------|----------------|-----|------|----------|-------|
| | Systemic | Eye | Skin | Eye/skin | |
| 1975 | 1 | 8 | 3 | - | 12 |
| 1976 | 3 | 7 | 2 | 1 | 13 |
| 1977 | 2 | 3 | 2 | 0 | 7 |
| 1978 | 11 | 5 | 6 | 1 | 23 |
| 1979 | 1 | 6 | 3 | 1 | 11 |
| 1980 | 4 | 7 | 1 | 0 | 12 |
| 1981 | 4 | 6 | 1 | 0 | 11 |
| 1982 | 9 | 3 | 4 | 1 | 17 |
| 1983 | 1 | 3 | 2 | 0 | 6 |
| 1984 | 1 | 2 | 1 | 0 | 4 |
| 10 Year Totals | 37 | 50 | 25 | 4 | 116 |

Consumer exposures. In the past, PCP was widely available to consumers. As PCP readily evaporates from treated materials, its excessive use in the home can lead to serious overexposures. In 1984, the EPA proposed to restrict the use of PCP to certified applicators. The EPA also proposed to further restrict its domestic uses: PCP should not be applied indoors or to wood whose intended use is in interiors. If PCP is applied to wood intended for use where it will contact bare skin, two coats of an appropriate sealer should be applied. Urethane, shellac, latex epoxy enamel, and varnish are acceptable sealers for PCP-treated wood. The application of PCP to logs for construction of log homes is prohibited (6,7).

Environmental Contamination. Widespread use and improper disposal have made pentachlorophenol an occasional contaminant of ground water supplies. In one federal survey, PCP was reported to occur in low ppb (parts per billion) levels in 2 out of the 105 water systems investigated. In California, the highest domestic well water concentration reported was 370 ppb. The contamination is persistent since this pollutant has a long half-time in groundwater. The health hazards associated with drinking contaminated groundwater are dependent upon both the concentration of PCP in the drinking water and its intrinsic toxicity. The taste threshold for PCP in drinking water is around 30 ppb. The California drinking water standard (Action Level) for PCP is also 30 ppb. This standard is set on the basis of toxicity (12).

Adverse Health Effects

Pentachlorophenol is a metabolic poison that has also been found to adversely affect the developing fetus in test animals. It is a very toxic substance. The minimum lethal oral dose for humans is estimated to be 29 mg/kg. For a 22 pound child, this is equivalent to 1/100th of an ounce of the pure compound (13).

The likelihood and severity of any injury from exposure to PCP is dependent upon the route, duration, and level of exposure. PCP can be toxic if it is inhaled, ingested, or comes into contact with the skin. PCP is so well absorbed through the skin that dermal exposure is frequently implicated in cases of systemic poisoning (2,13).

Contact organ toxicity. Pentachlorophenol is a strong irritant of the eyes, skin, nose, throat, and lungs. In unacclimated individuals, sneezing, cough, and tearing of the eyes can result from PCP exposures as low as 1.0 mg/m³. In the eye, severe PCP exposures can cause an inflammation that may progress to permanent corneal injury. Skin contact with even dilute solutions of PCP can cause dermatitis or chemical burns. Repeated or prolonged exposures can result in chloracne, a persistent acneform dermatitis which is thought to be due to the impurities present in commercial grades of PCP (2,13).

Systemic toxicity. Pentachlorophenol stimulates cellular oxidative metabolism by uncoupling oxidative phosphorylation in mitochondria. This effect of PCP greatly increases tissue oxygen demand and short-circuits the process by which the body harnesses the vital energy produced by catabolism. The lost energy appears as heat. The signs and symptoms of PCP poisoning are attributable to both the loss of this usable energy and the production of heat. Intoxication with PCP is characterized by profuse sweating; other common symptoms are headache, intense thirst, weakness, nausea, and vomiting. Fever is usually, but not always, present. Metabolic acidosis is accompanied by rapid breathing and shortness of breath. Fast heart rate, anoxia, and chest pain are often prominent. Restlessness, seizures, and coma can occur early following severe poisoning. The body temperature is frequently extremely high in fatal cases. There can be a rapid progression in symptoms. Death, usually due to cardiovascular collapse, has occurred as early as three hours after the

onset of symptoms. The risk of poisoning is increased during hot weather. Persons with impaired liver or kidney function are more susceptible to the effects of PCP. Chronic exposure to PCP can itself cause liver and kidney injury (13-19).

Weightloss is secondary to the effect of PCP on basal metabolism and can result from chronic poisonings. The dibenzo-p-dioxin and dibenzofuran contaminants in commercial grades of PCP do not importantly contribute to the acute toxicity of PCP. They may contribute, however, to the chronic toxicity of commercial grades of PCP and may account for the neurologic lesions and the increased susceptibility to infection reported in some workers with prolonged exposure to PCP (19,20).

Carcinogenicity. Insufficient information is available to allow an unequivocal evaluation of PCP's potential to cause cancer. While the results of several cancer tests have been negative or ambiguous, they were each inadequate in some aspect of their study design (too few animals used, too short duration, or uncertain purity of the tested material). These studies provide assurance only that PCP is not a potent carcinogen. The National Toxicology Program is currently testing PCP for its carcinogenic potential in the mouse. The results of the NTP cancer bioassays are expected to be released later this year. Commercial grades of PCP are contaminated with small amounts of such recognized carcinogens as trichlorophenol (0.1%) and the higher chlorinated dibenzo-p-dioxins and dibenzofurans (1,21).

Mutagenicity. PCP produces weak responses in some tests used to detect mutagens. It was weakly positive in the bacteria *Bacillus subtilis*, the yeast *Saccharomyces cerevisiae*, and cultured human lymphocytes. It was negative in a number of other test systems (12,22,23,24).

Reproductive Toxicity. PCP is toxic to the developing fetus in test animals. Schwetz found both pure and commercial grades of PCP to have adverse developmental effects on the offspring of treated rats. At a 5 mg/kg/day dose, PCP delayed ossification of the skull bones. At higher doses, the incidence of fetal resorptions, subcutaneous edema, dilated ureters, and skeletal abnormalities was increased. Other researchers have reported adverse effects of PCP on the reproduction of test animals. Hexachlorodibenzodioxin, a contaminant of commercial grades of PCP is a potent teratogen and fetotoxin in animals. The EPA requires that labels for all PCP products include a warning that exposure to women during pregnancy should be avoided because pentachlorophenol has been shown to cause defects in the offspring of laboratory rodents (3,6,7,25,26).

Disposition in Man. PCP is rapidly absorbed upon inhalation, dermal, and oral exposure. Fatal amounts can be absorbed through intact skin. Once absorbed, PCP is distributed throughout the body and accumulates in the liver, kidneys, brain, spleen, and fat. PCP undergoes enterohepatic recirculation and is highly protein bound in plasma. It is only slowly excreted. In one human study, an average of 74% of a single test dose was eliminated in the urine as free PCP and 12% was eliminated as conjugated PCP over a 7 day period. The half-lives for the urinary excretion of PCP and conjugated PCP in that study were 33 and 13 hours respectively. Studies on exposed workers suggest that the corresponding half-times can be much greater, up to 20 days, in chronically exposed persons (27,28).

Emergency First Aid Instructions

For immediate assistance call the TOXIC-INFO CENTER (800) 233-3360 or your regional poison control center.

Management of severe poisoning requires aggressive supportive therapy, preferably in a well equipped Emergency Department or Intensive Care Unit. There is no specific

Emergency First Aid. Continued

antidote. Remove the victim from exposure immediately and seek medical attention (13).

Eye exposure. Immediately flush eyes with running water for 15 minutes. If eye irritation persists after washing seek prompt medical attention including a fluorescein exam of the corneal surface.

Skin exposure. Remove all contaminated clothing promptly and dispose of clothing in a well-ventilated area, preferably outdoors or in doubled, secured plastic bags. Wash skin immediately with soap or mild detergent and water. Seek medical attention.

Inhalation. Remove to fresh air, give oxygen, and assist breathing if needed. Get medical attention if symptoms are present.

Ingestion. Seek medical help immediately. If person is awake and alert, induce vomiting by giving syrup of ipecac (30 cc orally) or by lavaging the stomach. Follow with activated charcoal (50-100 gm orally).

Personal Protection Information

Protective gear and clothing should be selected and used in consultation with a trained industrial hygienist to ensure that they are adequate and used safely. Users of pesticides should also consult and follow product labels (2).

Eye protection. Dust- and splash-proof safety goggles are required where PCP or PCP-treated materials such as saw dust from pressure-treated lumber might contact the eye. Contact lenses should not be worn.

Skin protection. Impervious clothing, aprons, gloves, coveralls, and face shields should be worn to prevent frequent or prolonged contact with PCP and PCP-contaminated surfaces. Polyvinyl chloride is a recommended material for gloves. Use gloves when handling and dust masks and coveralls when sawing PCP pressure-treated wood. Wash contaminated work clothes separately from other household laundry (2,29).

Respiratory protection. Respirators are required in situations where the PEL is exceeded. The type of respirator required depends upon the actual PCP air concentration. Work environments should be designed so as to not require the routine use of a respirator.

For further information call

Toxic-Info Center. (800) 233-3360

Worker Health and Safety Unit, California Department of Food and Agriculture. (916) 445-8474

Hazard Evaluation System and Information Service (HESIS) (415) 540-3014. Call collect with questions regarding occupational exposures.

Cal/OSHA (800) 652-1476

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alkylene.⁷⁵⁴⁴ Trademark for biodegradable detergent alkylates made from straight-chain hydrocarbons. Available in molecular-weight ranges to replace branch-chain dodecylbenzene or tridecylbenzene; the linear alkylbenzenes sulfonate readily with SO_3 or oleum by batch or continuous processes to form low-viscosity "soft" sulfonic acid; neutralization gives soft LAS slurries.

alorphine (N-allylnormorphine). $\text{C}_{19}\text{H}_{21}\text{NO}_3$. The allyl ($-\text{CH}_2-\text{CH}=\text{CH}_2$) derivative of morphine. It is able to "antagonize" or neutralize most of the effects of narcotic drugs (morphine, codeine), but not those of other types of depressants. Nalorphine is used as a biochemical research tool for studying the mechanism of narcotic action; also as an antidote for acute morphine poisoning. See also narcotic.

MBT. See sodium MBT.

meplate. The officially rated capacity of a chemical plant, as opposed to effective or actual maximum.

me reaction. A chemical reaction, usually organic, that is commonly identified by the name of its discoverer(s), for example, Friedel-Crafts, Fischer-Tropsch, Claisen, Clemmensen, Willegerodt, Diels-Alder, etc. Some 400 of these are described in the *Merck Index*. Many have important industrial applications. For details, see specific name.

no-. Prefix meaning 10^{-9} unit (symbol n). 1 ng = 1 nanogram = 0.000000001 gram; 1 nanometer = 1 millimicron.

Nanograde.⁷⁵²⁹ Trademark for a grade of chemical purity. Impurities guaranteed to be no more than ten parts per trillion.

nanometer (nm). One billionth (10^{-9}) meter, equal to 1 millimicron or 10 Angstrom units.

Nap-All.⁷⁴⁸⁰ Trademark for liquid naphthenates of calcium, cobalt, copper, iron, lead, manganese, and zinc.

Uses: Drier for paint and printing inks.

napalm. An aluminum soap of a mixture of oleic, naphthenic and coconut fatty acids.

Properties: Granular powder; mixed with gasoline, it forms a sticky gel that is stable from -40° to 100°C .

Hazard: Flammable, dangerous fire risk.

Uses: Incendiary agent.

naphtha *naphtha*
(1) *petroleum* (petroleum ether). A generic term applied to refined, partly refined, or unrefined, petroleum products and liquid products of natural gas not less than 10 percent of which distil below 347°F (175°C), and not less than 95 percent of which distil below 464°F (240°C) when subjected to distillation in accordance with the Standard Method of Test for Distillation of Gasoline, Naphtha, Kerosine, and Similar Petroleum Products (ASTM D 86). F.p. -73°C ; b.p. $30-60^\circ\text{C}$; flash point -57°F

(-50°C); autoignition temp. 550°F (287°C). sp. gr. 0.6.

Hazard: Flammable, dangerous fire risk. Explosive limits in air 1 to 6%.

Uses: Source (by various cracking processes) of gasoline, special naphthas, petroleum chemicals, especially ethylene. Cracking for ethylene also produces propylene, butadiene, pyrolysis gasoline and fuel oil; source of synthetic natural gas (q.v.).

Shipping regulations: (Rail, Air) Flammable Liquid label.

(a) *V. M. & P* (Varnish makers and Painters); (petroleum spirits; petroleum thinner).

Any of a number of narrow-boiling-range fractions of petroleum with boiling points of about 93 to 204°C , according to the specific use; distillation range 119 to 143°C ; sp. gr. 0.7543; density 6.280 lb/gal; pour point below -70°F (-56°C); flash point 20°F (-6.6°C) (TCC). Autoignition temp. 450°F (232°C).

Hazard: Flammable, dangerous fire risk.

Uses: Thinners in paints and varnish.

Shipping regulations: (Rail, Air) Flammable Liquid label.

(b) *blending.* A petroleum fraction with volatility similar to the higher boiling fractions of gasoline. It is used primarily in blending with natural gasoline to produce a finished gasoline of specified volatility.

(c) *cleaners.* A dry-cleaning fluid derived from petroleum and similar to Stoddard solvent (q.v.), but not necessarily meeting all its specifications. Flash point 100°F (37.7°C).

(2) *coal-tar*

(a) *heavy* (high-flash naphtha)

Properties: Deep amber to dark red liquid; a mixture of xylene and higher homologs; sp. gr. 0.885-0.970; b.p. $160-220^\circ\text{C}$ (about 90% at 200°C); flash point 100°F (37.7°C); evaporation 303 minutes.

Derivation: From coal-tar by fractional distillation. Containers: Drums; tank cars.

Hazard: Toxic by ingestion, inhalation, and skin absorption. Moderate fire risk.

Uses: Coumarone resins; solvent for asphalts, road tars, pitches, etc.; cleansing compositions; process engraving and lithography; rubber cements (solvent); naphtha soaps; mfg. of ethylene and acetic acid.

(b) *solvent* (160° benzol). *naphtha solvent*
Properties: A mixture of small percentages of benzene and toluene with xylene and higher homologs from coal-tar. (a) Crude: dark straw-colored liquid. (b) Refined: water-white liquid. Sp. gr. (a) 0.862-0.892, (b) 0.862-0.872; b.p. (a) about 160°C (80%), (b) about 160°C (90%); flash point (a) and (b) about 78°F (25.5°C).

Derivation: From coal-tar by fractional distillation. Grades: Dark straw; water-white.

Containers: Drums; tank cars.

Hazard: Flammable, dangerous fire risk.

Uses: Solvent; xylene, cumene; nitrated, for incorporation in dynamite.

Shipping regulations: (Rail, Air) Flammable Liquid label.

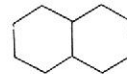
naphthacene (tetracene; rubene) $\text{C}_{18}\text{H}_{12}$. The nucleus consists of four fused benzene rings.

Properties: Orange solid; sp. gr. 1.35; m.p. a 350°C ; not easily soluble; slight green fluorescence in daylight.

Occurrence: In commercial anthracene and coal. Hazard: Explodes when shocked; reacts with oxidizing materials.

Uses: Organic synthesis.

naphthalene (tar camphor) C_{10}H_8 .



Properties: White crystalline, volatile flakes; strong coal-tar odor. Soluble in benzene, absolute alcohol and ether; insoluble in water. Sp. gr. 1.145 (20/4°C); m.p. 80.2°C ; b.p. 217.96°C ; flash point 80°C . Sublimes at room temperature. Autoignition temp. 979°F (526°C). Combustible.

Derivation: (a) From coal-tar oils boiling between 200 to 250°C (middle oil) by crystallization and distillation. (b) From petroleum fractions by various catalytic processing operations.

Grades: By melting point, 74°C min (crude) to 79°C (refined); scintillation ($80-81^\circ\text{C}$).

Forms: Flakes, cubes, spheres, powder.

Containers: Cans; drums; tank cars.

Hazard: Toxic by inhalation. Tolerance, 10 mg/m³ air.

Uses: Intermediate (phthalic anhydride, naphthalene, "Tertralin," "Decalin," chlorinated naphthalene and naphthol derivatives, dyes), repellent; fungicide; smokeless powder; cutting lubricant; synthetic resins; synthetic tannin; preservative; textile chemicals; emulsion breakers; radiation counters; antiseptic.

Shipping regulations: (Air) Crude or refined naphthalene Solid label.

alpha-naphthaleneacetic acid (1-naphthylacetic acid) $\text{C}_{10}\text{H}_7\text{CH}_2\text{COOH}$. A plant growth regulator.

Properties: White crystals, odorless; m.p. 132°C . Soluble in acetone, ether, and chloroform; insoluble in water and alcohol.

Grades: Usually supplied in dilute form, either as powder or liquid solution ready for use.

Containers: Powder; fiber cans or multiwall sacks; solution: glass bottles and carboys.

Hazard: Moderately toxic; skin irritant.

Uses: Inducing rooting of plant cuttings; spraying apple trees to prevent early drop; fruit thinning.

alpha-naphthaleneacetic acid, methyl ester (1-naphthylacetic acid, methyl ester) $\text{C}_{10}\text{H}_7\text{CH}_2\text{COOCH}_3$. A plant growth regulator for delaying sprouting of potatoes, weed thinning of peaches, etc.

naphthalene, chlorinated. See chlorinated naphthalene.

naphthalenediamine. See naphthylenediamine.

SH

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

- 1. Show to whom delivered, date, and addressee's address. (Extra charge)
- 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 MR. KENNETH AYERS
 SAFETY COORDINATOR
 KAISER PERMANENTE
 280 W. MAC ARTHUR BLVD
 OAKLAND, CA 94611

4. Article Number
 P 062 127 920

- Type of Service:
- Registered
 - Certified
 - Express Mail
 - Insured
 - COD
 - Return Receipt for Merchandise

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Address
 X

6. Signature - Agent
 X *AKW*

7. Date of Delivery
 4-13-90

8. Addressee's Address (ONLY if requested and fee paid)

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS

SELF-INSURANCE PLANS
2848 ARDEN WAY, SUITE 105
SACRAMENTO, CALIFORNIA 95825
(916) 924-4866



ADDRESS REPLY TO:
2848 Arden Way, Suite 105
Sacramento, CA 95825

Ms. Florence Green
KAISER FOUNDATION HOSPITALS
Regional Workers' Compensation
P.O. Box 12927
Oakland, California 94604

**CERTIFICATE OF SELF-INSURANCE
OF
WORKERS' COMPENSATION**

To whom it may concern:

THIS CERTIFIES THAT CERTIFICATE OF CONSENT TO SELF-INSURE No. 1054
WAS ISSUED TO:

----- KAISER FOUNDATION HOSPITALS -----
UNDER THE PROVISIONS OF SECTION 3700, LABOR CODE OF CALIFORNIA, ON
JANUARY 1, 1965, AND SAID CERTIFICATE IS NOW AND HAS
BEEN IN FULL FORCE AND EFFECT SINCE THAT DATE.

DATED AT SACRAMENTO, CALIFORNIA

THIS 24th DAY OF September, 1987

Mark B. Ashcraft

MANAGER, SELF-INSURANCE PLANS
MARK B. ASHCRAFT

idt

SEP 25 9 53 AM '87
CONSTRUCTION SERVICES



KAISER PERMANENTE

Kaiser Foundation Hospitals

TO: Susan Hugo

AT: Alameda County Health Dept

FAX#: 568-3706

FROM: Ken Myers - Oak. Kaiser Hosp.

CONSTRUCTION SERVICES
280 WEST MACARTHUR
OAKLAND, CA. 94611

FAX#: (415) 596-6832

PHONE#: (415) 596-6831

MESSAGE:

