

CERTIFICATE OF DISPOSITION OF MATERIALS

(All items MUST be completed, please print)

LICENSEE NAME AND ADDRESS <b>Camp. Dresser + McKee Inc ENVIRONMENTAL SCIENCES DIVISION 6182 W. FOND DU LAC AVE MILW. WIS. 53218 (old Address)</b>	LICENSE NUMBER <b>48-13266-02</b>
	LICENSE EXPIRATION DATE <b>02-28-85</b>

THE LICENSEE OR ANY INDIVIDUAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE LICENSEE CERTIFIES THAT: (Check and/or complete the appropriate item(s) below.)

A. MATERIALS DATA (Check one and complete, as necessary)

☐ 1. NO MATERIALS HAVE EVER BEEN POSSESSED OR PROCURED BY THE LICENSEE UNDER THIS LICENSE.

OR

☐ 2. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE	TO	WHICH HAS NRC LICENSE NUMBER

OR

☐ 3. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE	TO	WHICH HAS LICENSE NUMBER	ISSUED BY THE STATE OF

OR

☐ 4. AN AGREEMENT STATE PURSUANT TO SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED, AND THE ENERGY REORGANIZATION ACT OF 1974.

☒ 4. MATERIALS HAVE BEEN DISPOSED OF IN THE FOLLOWING MANNER. (Describe specific disposal procedures—if additional space is needed, use the reverse of this form, or provide attachments)

- **liquid scintillation VIALS disposed of by ADCO Services P.O. Box 35 Tinley Park Ill. 60477 ph. 312-424-1660 invoice # 42380 Destination U.S. Ecology site, Washington shipment No. 84060 (Vials deregulated because of activity)**
- **A C14 Quench series Transferred to Dr. Ralph Greenwald radiation section of UNIV. Wisc. Botany Dept Milw Wisc. during 4/28 for use in their Algal Productivity studies - MATERIAL under their license.**
- **9 AS chromatographs (Perkin Elmer 900 Model # GC 22529) Transferred with tritium lamps to CDM Wheatridge Co. Lab - under their license**

B. OTHER DATA

☒ 1. OUR LICENSE HAS NOT YET EXPIRED. PLEASE TERMINATE IT.

☐ 2. WAS A RADIATION SURVEY CONDUCTED TO CONFIRM THE ABSENCE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CONTAMINATION REMAINS ON THE PREMISES COVERED BY THE LICENSE? (Check one)

☐ NO

☒ YES, THE RESULTS (Check one)

☒ ARE ATTACHED, OR **Survey Performed 4/02/85 (note: This is new form Prepared to the First submitted on 1/28/85)**

☐ WERE FORWARDED TO NRC ON (Date)

3. THE PERSON TO BE CONTACTED REGARDING THE INFORMATION PROVIDED ON THIS FORM

NAME **DANIEL F BUSS**

TELEPHONE NUMBER

**(414) 781-4890**

4. MAIL ALL FUTURE CORRESPONDENCE REGARDING THIS LICENSE TO

**DANIEL F BUSS CDM 3489 N. 124th St Brookfield WI 53005**

RETURN TO

DIRECTOR, DIVISION OF FUEL CYCLE AND MATERIAL SAFETY  
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555

**8505220332 850503**

**REG3 LIC30**

**48-13266-02**

**PDR**

CERTIFYING OFFICIAL

SIGNATURE

**Daniel F Buss**

DATE

**4/30/85**

PRINTED NAME AND TITLE

**DANIEL F BUSS**



**HEALTH PHYSICS ASSOCIATES LTD.** CONSULTANTS IN RADIATION SAFETY

3304 COMMERCIAL AVENUE / NORTHBROOK, IL 60062 / PHONE 312/564-3330

**CLOSE OUT SURVEY FOR  
CAMP DRESSER & McKEE INC.  
Brookfield, Wisconsin**

**Performed By:**

Gerald Wicks, M.S., Radiation Physicist  
Health Physics Associates, Ltd.  
Northbrook, Illinois, 60062

**Date:**

April 2, 1985

**Instruments Used:**

**Surveys -** Ludlum Model 3 with Pancake Probe  
Model No. 44-9  
Window thickness of 2.0 mg/cm<sup>2</sup>  
**Wipes -** Nuclear Chicago  
Windowless Gas Flow Proportional Counter  
Model No. 480

**Calibration Dates and Standards:**

**Survey Meter Probe-** Cs-137 on April 1, 1985  
C-14 on April 1, 1985  
Pancake probe is 10% efficient for C-14 betas under 2 $\pi$  geometry with the window "open".

**Window Proportional Gas Flow Counter -** Efficiency for C-14 betas is 22% under 2 $\pi$  geometry  
Efficiency for H-3 betas is 0.2% under 2 $\pi$  geometry  
Sensitivity for C-14 is  $8.6 \times 10^{-7}$   $\mu$ Ci (1.9 dpm)  
Sensitivity for H-3 is  $9.5 \times 10^{-5}$   $\mu$ Ci (210 dpm)

continued



**HEALTH PHYSICS ASSOCIATES LTD. CONSULTANTS IN RADIATION SAFETY**

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**CLOSE OUT SURVEY FOR  
CAMP DRESSER & McKEE INC.**

**April 2, 1985**

**Method:**

Area surveys were performed with an "open" window pancake Geiger counter, sensitive to all beta particles with an energy above 35 KeV.

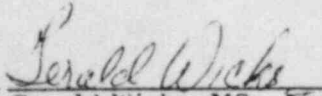
The probe was held in close proximity to the surfaces of the areas being surveyed for approximately 15 to 30 seconds at each randomly selected survey location.

Wipes with moistened filter papers were taken using moderate pressure. Approximately 50 cm<sup>2</sup> of surface area was sampled on each wipe taken. Analysis was performed with a windowless gas flow proportional counter.

**Results:**

All area surveys are consistent with background radiation levels. The pancake probe is sensitive to 0.1 mR/hr for Cs-137. An exposure rate of 0.2 mR/hr from Cs-137 gives a count rate of 1000 cpm with the pancake probe. Thus, the allowed average radiation level of 0.2 mrad/hr was not exceeded in any of the areas surveyed.

Wipe test results indicate that all wipe count rates were consistent with background radiation levels, (20 ± 4.2 at 3 sigma). Thus no conversion to dpm per 100 cm<sup>2</sup> is made. The limit of 1000 dpm per 100 cm<sup>2</sup> for removable contamination is therefore not exceeded in any of the areas wipe tested. (Instrumentation used to analyze the wipes is sensitive to 8.6 X 10<sup>-7</sup> µCi for C-14 and to 9.5 X 10<sup>-5</sup> µCi for H-3.)

  
\_\_\_\_\_  
Gerald Wicks, MS  
Radiation Physicist

GW:sk



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3304 COMMERCIAL AVENUE / NORTHBROOK, IL 60062 / PHONE 312/564-3330

**CAMP DRESSER & McKEE INC**  
Brookfield, Wisconsin

**CLOSE OUT SURVEY DATA**

**April 2, 1985**

<u>Location</u>	<u>Surface Survey</u>	<u>Wipe</u>
1	100 gross cpm	14 gross cpm
2	100 gross cpm	14 gross cpm
3	100 gross cpm	19 gross cpm
4	100 gross cpm	16 gross cpm
5	100 gross cpm	16 gross cpm
6	100 gross cpm	15 gross cpm
7	100 gross cpm	12 gross cpm
8	100 gross cpm	14 gross cpm
9	100 gross cpm	13 gross cpm
10	100 gross cpm	16 gross cpm
11	100 gross cpm	14 gross cpm
12	100 gross cpm	14 gross cpm
13	100 gross cpm	14 gross cpm
14	100 gross cpm	14 gross cpm
15	100 gross cpm	17 gross cpm
16	100 gross cpm	15 gross cpm
17	100 gross cpm	16 gross cpm
18	100 gross cpm	9 gross cpm
19	100 gross cpm	15 gross cpm
20	100 gross cpm	9 gross cpm
Background	100 cpm	20 cpm
Check Source	1000 cpm	-
Pre and Post Survey		

Item 3b-f

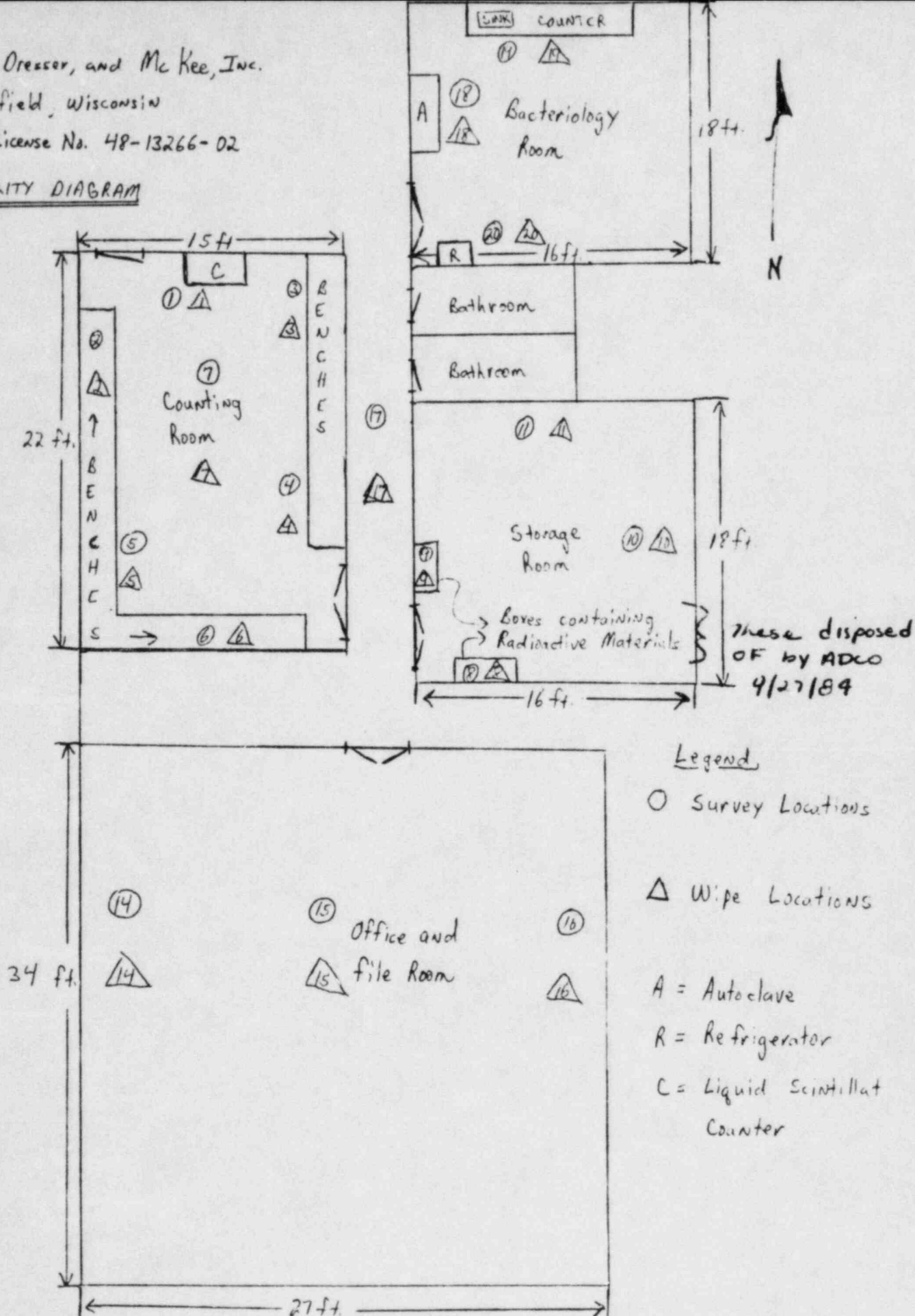


Camp, Oresser, and Mc Kee, Inc.

Brookfield, Wisconsin

NRC License No. 48-13266-02

FACILITY DIAGRAM





# CAMP DRESSER & McKEE, Inc.

## ENVIRONMENTAL SCIENCE DIVISION

6132 W. Fond du Lac Ave.  
Milwaukee, Wis. 53218  
(414) 461-9500

Purchase Order No. **12618**

ABOVE ORDER NO. MUST  
APPEAR ON ALL PAPERS  
AND PACKAGES RELATIVE  
TO THIS ORDER

TO

Health Physics Associates, Ltd  
3304 Commercial Avenue  
Northbrook, Illinois 60062

SHIP TO.

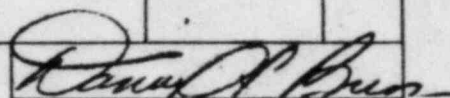
Gerald Wicks, MS  
Radiation Physicist

Date Needed	Terms	Customer Order No.	Date
			Apr 11 2, 1985

QUANTITY		PLEASE SUPPLY ITEMS LISTED BELOW		PRICE	TOTAL
ORDERED	RECEIVED	STOCK NUMBER	DESCRIPTION		
			Area Survey and Wipe Analysis		
			Estimate:	\$550.00	550 00
			Performed at 6132 W. Fond du Lac Ave. Milwaukee, WI 53218		

Please Notify if Not Shipped Complete

RECEIVING

  
AUTHORIZED SIGNATURE