

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

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

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA,
PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR
WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR
WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA,
NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH,
OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON,
AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS
TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

☐ A. NEW LICENSE

☐ B. AMENDMENT TO LICENSE NUMBER

☒ C. RENEWAL OF LICENSE NUMBER 20-11120-01

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

Procter & Gamble Mfg. Co.
780 Washington Street
Quincy, MA 02169

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Procter & Gamble Mfg. Co.
780 Washington Street
Quincy, MA 02169

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Richard B. Doyon

TELEPHONE NUMBER

(617) 847-3608

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2 x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT

10. RADIATION SAFETY PROGRAM

11. WASTE MANAGEMENT

12. LICENSEE FEES (See 10 CFR 170 and Section 170.37)

FEE CATEGORY 1J

AMOUNT ENCLOSED \$120

13. CERTIFICATION: (Must be completed by applicant) THE APPLICANT UNDERTAKES THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE SHADING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT THE INFORMATION CONTAINED THEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

"OFFICIAL RECORD COPY"

SIGNATURE—CERTIFYING OFFICER

Tom Trautwein

TYPED/PRINTED NAME

Tom Trautwein

TITLE

Plant Engineer

DATE

8-7-87

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

| | |
|-------------|-----------|
| < \$250K | \$1M-3.5M |
| \$250K-500K | \$3.5M-7M |
| \$500K-750K | \$7M-10M |
| \$750K-1M | > \$10M |

b. NUMBER OF EMPLOYEES (Rate for entire facility, excluding outside contractors)

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (dollar and/or staff hours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)

☐ YES

10 AUG 1987

☐ NO

ML1B

FOR NRC USE ONLY

TYPE OF FEE

REN

FEE LOG

Aug 12

FEE CATEGORY

3P

COMMENTS

AMOUNT RECEIVED

8/20

CHECK NUMBER

5041

8804140242 870928

REG1 LIC30

20-11120-01

DCD

APPROVED BY

107695

DATE

8/28/87

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45324 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

NRC FORM 313 ATTACHMENT

ITEM 5

| <u>SOURCE #</u> | <u>MATERIAL</u> | <u>FORM</u> | <u>AMOUNT</u> |
|-----------------|-----------------|---|-----------------|
| 1 | CESIUM 137 | OHMART SEALED SOURCE MODEL A5771 | 35 Millicuries |
| 2 | CADMIUM 109 | NEW ENG. NUCLEAR SEALED SOURCE MODEL NER-465 | 4 Millicuries |
| 3 | CESIUM 137 | OHMART SEALED SOURCE MODEL SHLM-8 | 100 Millicuries |

NRC FORM 313 ATTACHMENT

ITEM #6

SOURCE #1 is part of an Ohmart "Ray Weight Scale" used to measure the amount of detergent passing by on a belt conveyor and ultimately to control the addition of minor ingredients to the product.

SOURCE #2 is part of a Princeton Gamma-Tech zinc analyzer used in an analytical laboratory to measure zinc content in process samples.

SOURCE #3 is part of an Ohmart interface level detector used to control the oil/water interface in a process vessel.

NRC FORM 313 ATTACHMENT

ITEM #7

The person responsible for the plant's radiation protection program is Richard B. Doyon.

Mr. Doyon received his initial training at Ohmart Corporation in March of 1974, where he successfully completed the Ohmart training course in the U.S. AEC Rules & Regulations, radiation safety, and the safe handling of radioactive materials as used in Ohmart nuclear gauges. The instructor was Mr. George Kelley of the Ohmart Corporation.

Mr. Doyon received his initial leak test training from Procter & Gamble's company radiation officer in Cincinnati, Ohio in April of 1974. Subsequent training was given by the former plant RPO, Mr. Chester Sventson.

Mr. Doyon is presently scheduled to attend a 20-hour updated course on radiation safety at Ohmart in September, and also a 20-hour course pertaining to Ohmart belt scales, density gauges, and level gauges.

Mr. Doyon presently is the "responsible person" for performing the leak tests at six (6) month intervals. Upon successful completion of the courses at Ohmart in September, he will perform operations such as installation, initial radiation surveys, gauge relocations, and removal from service.

NRC FORM 313 ATTACHMENT

ITEM #8

The word "users" in our application is not totally accurate in view of the fact that two of our gauges are in service in "process streams" and are normally left on at all times. Both source holders are in enclosures to prevent ready access.

The analytical instrument (source #2) is operated by lab technicians.

Mr. Doyon, upon successful completion of further Ohmart courses in September 1987, will train any personnel who would ever be required to work in close proximity to a gauge or who might be required to turn a gauge off. These would be instrument technicians who may have a need to calibrate a gauge in service. Two instrument technicians are presently on our film badge program in the event they ever do work near a gauge.

Training would be comprised of the fundamentals of radiation protection and safety practices. Use of radiation detection instruments and their measurement. Effects of exposure to radiation and reasons for minimizing exposure. Operation of the shutter of the particular gauge.

NRC FORM 313 ATTACHMENT

ITEM #9

Source #1, the gamma ray-weight scale, is mounted in an enclosure as shown in item 9 sketch "A".

Source #2, the zinc analyzer, sits on a lab table in the analytical lab in the process department.

Source #3, the interface level gauge is mounted as shown on item 9 prints "B", "C", "D", "E", & "F".

No gauge is subjected to any environmental conditions which would have a detrimental effect on the gauge.

Gauges #1 and #3, being installed in enclosures not readily accessible to personnel, will be checked when leak tests are performed and radiation reading on and about the gauges will be taken at this time and recorded.

NRC FORM 313 ATTACHMENT

ITEM #10

Although "maintenance" of the gauges on our premises performed by the "responsible person" is to be limited to leak testing, installation, initial radiation surveys, removal from service & storage or removal from service and return to the vendor, the plant does have a monthly film badge service. (From inception of the service in 1965 to date no recordable radiation has ever been noted.) Two instrument technicians are included in this service along with Mr. Doyon.

Mr. Doyon performs leak tests on all three sources on six month intervals (January & July of each year). The tests are taken by use of an LT-1 leak test kit supplied by ICN Health Physics Services and sent to them in Irvine, California for measurement.

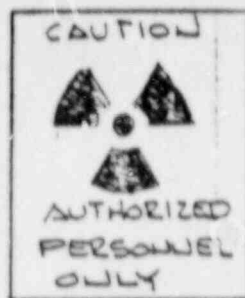
Lockout requirements are posted at the entrances to the vessel in which interface level control, Source #3, is located. Mr. Loyon has reviewed these procedures with personnel in the department. Source #2, the gamma ray-weight scale, is in a locked enclosure which prevents access by personnel. Mr. Doyon, the "responsible person" insures that these procedures are followed.

NRC FORM 313 ATTACHMENT

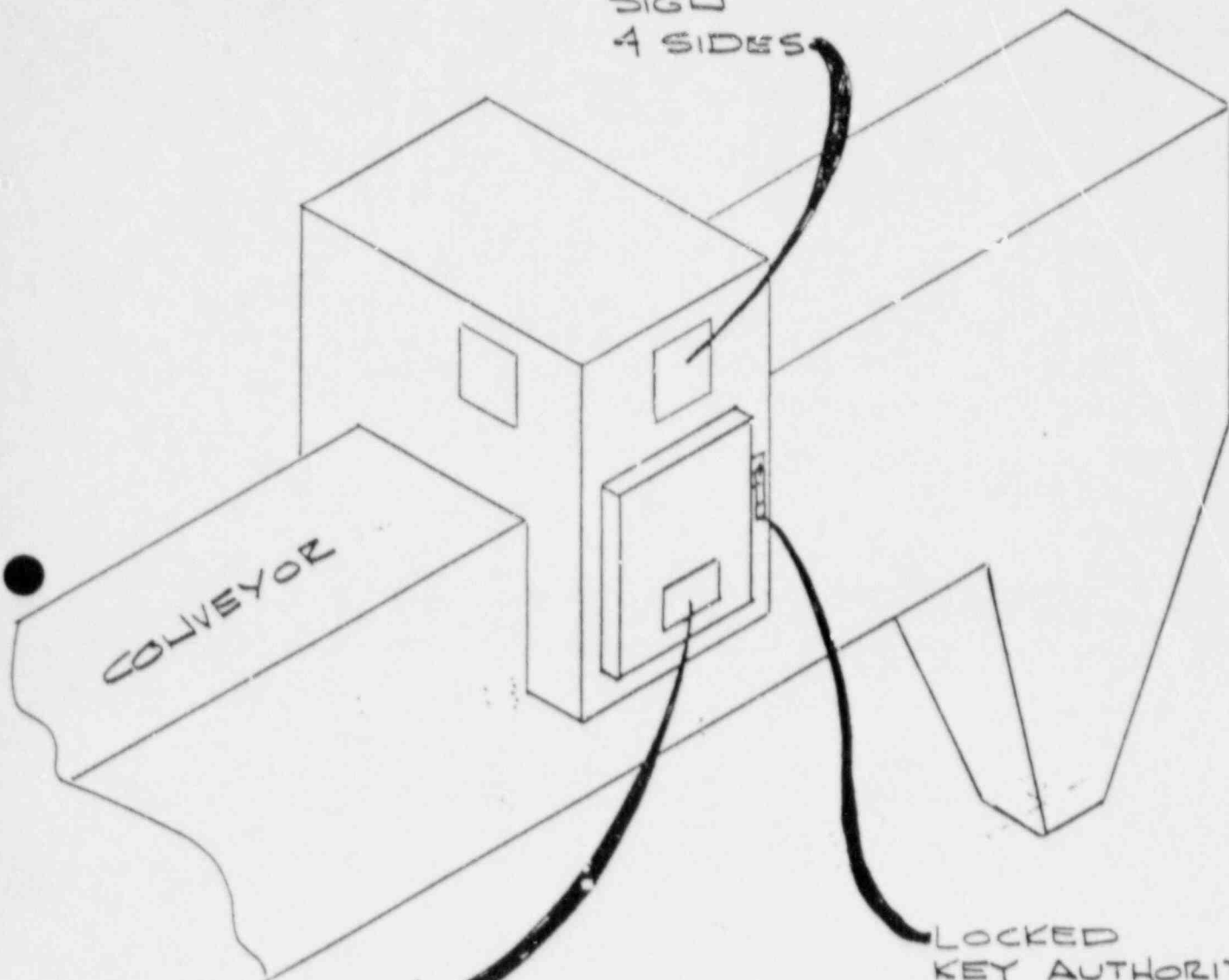
ITEM #11

If any gauge is to be taken out of service on a permanent basis it will be returned to the original manufacturer for disposal.

SKETCH "A"



SIGN
4 SIDES



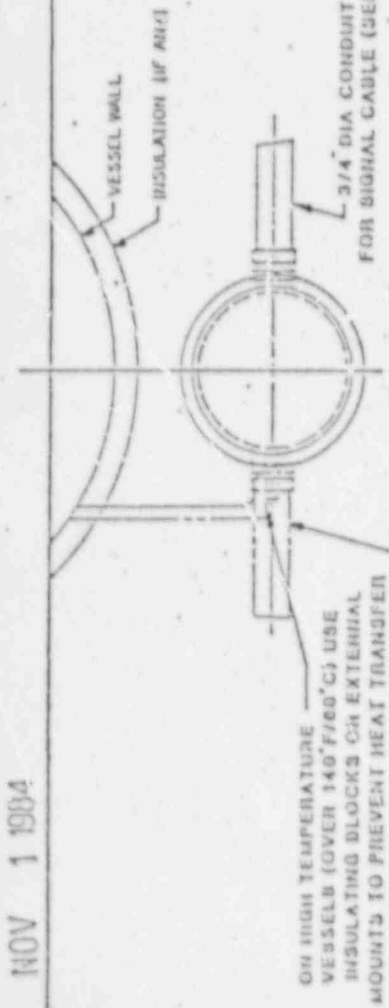
SIGN

LOCKED
KEY AUTHORITY
RADIATION OFFICER
& PLANT ENG

"IN CASE OF FIRE OR
OTHER EMERGENCY
AFFECTING THE RADIOACTIVE
SOURCE LOCATED IN THIS
ENCLOSURE IMMEDIATELY
NOTIFY PLANT RADIATION
OFFICE OR PLANT ENG

RAY-WEIGH SCALE ENCLOSURE

NOV 1 1984



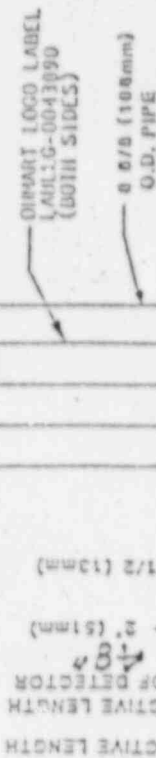
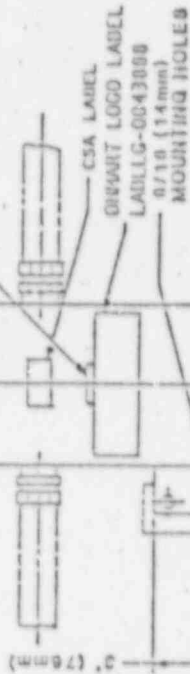
FOR SIGNAL CABLE (SEE INTERCONNECT)

3/4" DIA CONDUIT (BY USER)
FOR 115/220 V. 60/50 Hz A.C.
POWER (SEE INTERCONNECT)

CLEAR SPACE REQ'D FOR
INSTALLATION & SERVICING
30" (910mm) PREFERRED
24" (610mm) MINIMUM

Ø 1 1/2 (210mm) DIA

USER TAGGING



CERTIFIED DRAWING

ISSUED NOT FOR YOUR REVISION
MANUFACTURER PROCEEDING

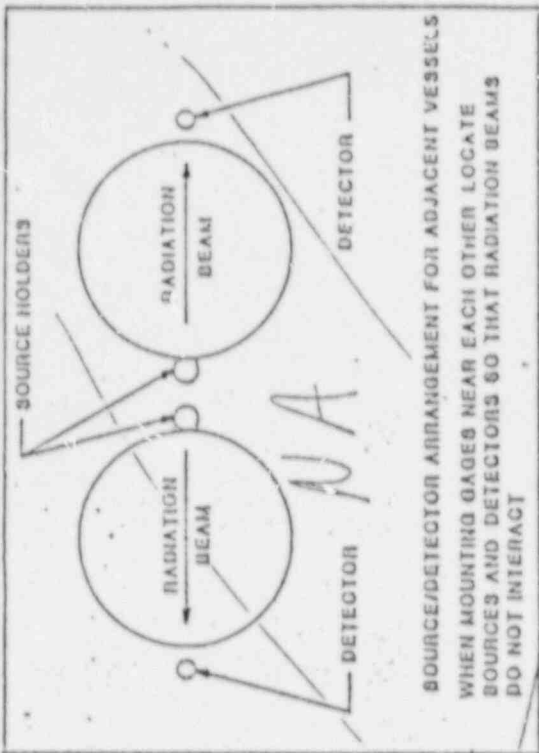
DATE *NGV 2/2/80*

De Gaudin

TAG: LT-H712

Page 06-0030932

| | |
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| THE OHMART CORPORATION | |
| DETECTOR OUTLINE (LJCOLN/IFA OR LEVELART SERIES 2000 - HEATED) | |
| DATE | REV |
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| 99 | 99 |
| 100 | 100 |



DETECTOR IS DESIGNED FOR CLASS I, GROUPS A, B, C & D, CLASS II, GROUPS E, F & G, HAZARDOUS AREA OPERATION TO 120, GROUPS C & D TO 234.

RECOMMENDED MAXIMUM OPERATING TEMPERATURE (WITHOUT ADDED COOLING) 140°F (60°C)

DETECTOR SHOULD BE MOUNTED AS CLOSE TO VESSEL AS POSSIBLE BUT OUTSIDE ANY INSULATION

DETECTORS ARE AVAILABLE WITH ACTIVE LENGTHS OF 12" (304mm) TO 72" (1828mm) IN 6" (152mm) INCREMENTS.

WEIGHT OF DETECTOR (1.75 x ACTIVE LENGTH IN INCHES) + 4.0 lb. (0.31 x ACTIVE LENGTH IN mm) + 18.2 kg.

PRINT "B"

PRINT "D"

Cell
brackets
outside 10'-6"
OF
PROCESS
VESSEL

2 - $\frac{9}{16}$ " DIA HOLES

SEE
DET.

410

6'-6" 18" SMA 80C $\frac{1}{4}$ "

T. L.

4 $\frac{7}{8}$ " REF.

18" 75"

V₁ V₂

415

435

440

445

450

G

1 3

210

SEE SHT NO. 9
FOR DETAILS

340 SEE
DET.

SEE
DET. 345

12'-6"

615

18" SMA 45E

DWG D-43185

SHEET 6

LEAR

PRINT F

ODD DOWNCOMERS

315° H

NAME PLT.

V
OF LIFTING LUGS

C W S A P

North

270° M1 M2 M3

DAVIT

DAVIT CLIP

225° S2 S6

210° T1 T2 T3 T5

202½° S1 S3 S5 S7

EVEN DOWNCOMERS

V B E
T11 F1 F2
F3 F4 F5

T4 T6 T8 T10 T12 157½°

T7 T9 J R 135°

VIEW A-A

DWG D-43185
SHEET 1

| | | | | |
|------------|---|-----|-----------|-------------|
| W | 1 | 12' | ST'D PIPE | |
| V | 2 | 3" | ST'D PIPE | |
| O | 1 | 24" | X S PIPE | |
| T6-12 | 7 | 1½" | 900" | R.F. W.I.N. |
| T1-5 | 5 | 1½" | | A |
| S1-7 | 7 | 1" | | |
| R | 1 | 2" | | |
| P | 1 | 1½" | 900" | |
| M1, M2, M3 | 3 | 23" | 600" | R.F. S.O. |
| J | 1 | 6" | | R.F. CAP |
| H | 1 | 6" | 600" | R.F. W.I.N. |
| G | 1 | 1½" | 150" | R.F. S.O. |
| F1-5 | 5 | 1½" | 900" | LARGE MALE |
| E | 1 | 1½" | | R.F. W.I.N. |
| D | 1 | 2" | | LARGE MALE |
| C | 1 | 2" | | A |

9/26/81 W V.P. ADDED GUSSETS TO 1" + 1½" CONN'S
7/19/85 W V.P. CONN'G PIPE WAS 4" - NOW 1½" WITH 4" 150" FLG

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee:

Application Dated:

Control No.:

License No.:

2. FEE ATTACHED

Amount:

Check No.:

3. COMMENTS

Signed

Date

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount:

2. Correct Fee Paid. Application may be processed for:

Amendment

Renewal

License

Signed

Date