



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 4, 1979

Ohmart Corporation
ATTN: Mr. H. L. Cook
4241 Allendorf Drive
Cincinnati, Ohio 46209

Gentlemen:

This refers to your letter dated January 26, 1979, and March 9, 1979 requesting evaluation of your Model NMG-2 moisture gauge.

We have reviewed the design information and test data provided in your letters and find that the Model NMG-2 gauge with the Models SHN and SHWA source holders is acceptable for licensing purposes. It is our understanding that this device will use a 50 millicurie cesium-137 source and a 2.5 microgram californium-252 neutron source. The device will be distributed to specific licensees only.

Please note that a leak test frequency of at least once every six (6) months is required for the californium-252 source in this device. Prior to approval of the source for extended leak test periods, we need test data which verifies that the californium-252 sealed source, used in the Model NMG-2 gauge under operational conditions, has not leaked radioactive material in excess of 0.005 microcuries over a three year period. (Leak test should be taken at six (6) month intervals on a sufficient number of sources to insure statistical reliability).

If you have any questions, please contact me on (301) 427-4240.

Sincerely,

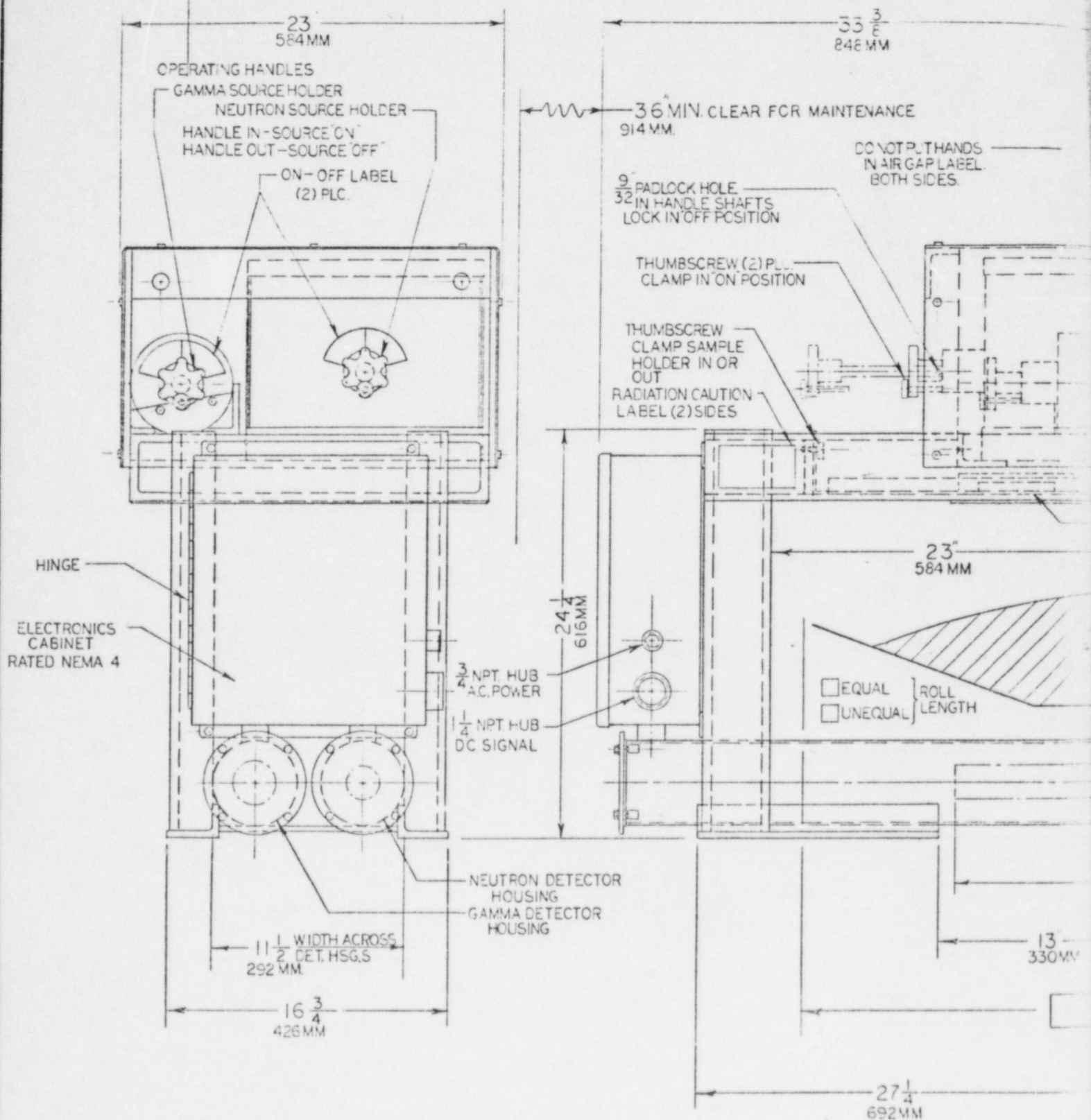
A handwritten signature in cursive script, reading "Earl G. Wright", is written over the typed name.

Earl G. Wright
Procedures and Certification Branch
Division of Fuel Cycle and
Material Safety

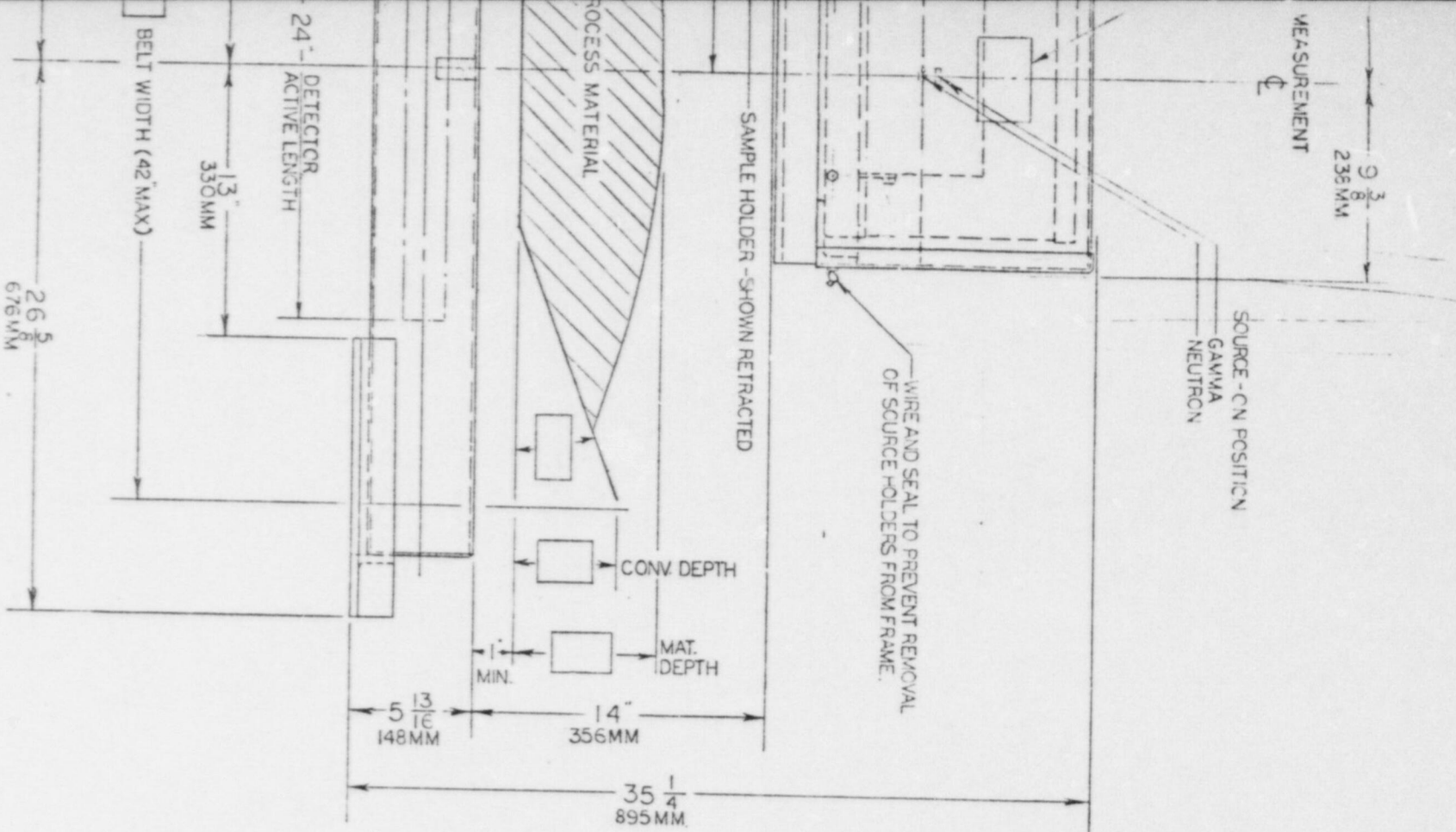
Enclosure: Certificate
of Registration

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REG3 LIC30
34-06188-08 PDR

SUPPLEMENTAL SHEET
Item 15 (cont'd)



SUPPLEMENTAL SHEET
Item 15 (cont'd)



NOTE:

- 1) FRAME WT. APPROX. 450 LB (205 KG)
- 2) MAX. AMBIENT 140°F (60°C)
- 3) RED STRIPE ON DETECTOR DEFINES
CENTER OF MEASURING AREA
- 4) USE PLASTIC SHEATH TO PROTECT
OPERATING ROD IN OFF POSITION.

THE OHMART CORPORATION
CINCINNATI, OHIO
NMG-2 MOISTURE GAGE
OUTLINE
CINCINNATI, OHIO
1970

DATE: 10/1/70
BY: J. L. H. / J. L. H.
CHECKED: J. L. H. / J. L. H.
APPROVED: J. L. H. / J. L. H.

THE OHMART CORPORATION CINCINNATI, OHIO	
NMG-2 MOISTURE GAGE OUTLINE	
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D. 2. 2. 2. 2	

SUPPLEMENTAL SHEET
Item 16

1. Wyman C. Rutledge

University of Michigan, 3 yrs. training, 1947-50,
both classroom and laboratory contract work on items
a-d, by Dr. James Cork, PhD - physics.

Argonne National Laboratory, by Dr. Samuel Burson,
1.5 years training a-d.

2. Douglas Marcero

Wayne State University, Radiation Health and Safety,
both classroom and laboratory work, items
a-d, M.S - environmental health.

3. Neal French

Ohio University, B.A., Chemistry
radioactive safety training by W.C. Rutledge,
1/2 day course, video tape review by D.H. Marcero.

4. William Bottenfield

Ohio State University, B.S., Chemical engineering,
radioactive safety training by W.C. Rutledge,
1/2 day course, video tape review by D.H. Marcero.

I. Wyman C. Rutledge -- Experience with radiation:

Isotope: Na²⁴, P³², S³⁵, K⁴⁰, Ca⁴⁵, Sc⁴⁶, Ch⁵¹, Fe⁵⁵, Co⁶⁰,
Se⁷⁵, Se^{79m}, Sr⁸⁹, Sr⁹⁰, Y⁹⁰, Cb⁹⁴, Me¹⁰¹, Ag¹¹⁰, Cd¹¹⁵,
I¹³¹, Ce¹³⁴, Cs¹³⁷, Yt¹⁷⁵, La¹⁴⁰, Sm¹⁴⁵, Hf¹⁸¹, Rh¹⁸⁸,
Ta¹⁶⁰, Ho¹⁶⁵, Pt¹⁹⁷, Au¹⁹⁸, Ra., Pr²³³, Th²⁸³, Se^{77m}, Se^{81m},
Se⁸³, Nd¹⁴⁷, Nd¹⁴⁹, Nd¹⁵⁸, Pm¹⁴⁹, Am²⁴¹, Pm¹⁴⁷, Sm¹⁵¹, Sm¹⁵³,
Sm¹⁵⁵, Eu¹⁵⁵, Tc¹⁰¹, Rb⁸⁶, Kr⁸⁵, Tl²⁰⁴, tritium.

Maximum Amount: 5 curies

Where Experience Was Gained: University of Michigan/PhD, Nuclear Physics
Argonne National Laboratory
The Mead Corporation

Duration of Experience: University of Michigan - 3 yrs. Formal course, on the job.
Argonne - 1-1/2 yrs. Formal course, on the job.
Mead - 22 yrs., on the job.

Type of Use: Research studies, Production Safety, Source wipe testing
and processing, Spectrograph, Life Time, Coincidence
studies, Tracer studies, density, weight, solids, Corporate
Safety Officer.

II. Douglas H. Marcero

Isotope: Hg²⁰³, Cd¹¹⁵, Am²⁴¹, Cs¹³⁷, Co⁶⁰, Te^{127m}, Po²¹⁰, Ni⁶³, Kr⁸⁵,
Tritium.

Maximum Amount: 20 curies

Where Experience Was Gained: Wayne State School of Medicine
Radiation Health and Safety
Dept. of Environmental Health, M.S.
General Electric, Lamp Division
The Mead Corporation

Duration of Experience: Wayne State - 2 yrs, Formal course, on the job.
General Electric - 5 yrs., on the job.
Mead Corporation - 1 yr., on the job.

Type of Use: Radioisotope Lab Supervisor, Radiation Safety Administrator,
Supervised source installation, checking, moving, wipe
testing, tracer studies, toxicological research studies,
safety and licensing. Environmental Health and Product
Safety Manager, Corporate Human and Environmental Protection
Department.

SUPPLEMENTAL SHEET
Item 17 (cont'd)

III. Neal French

Ohio University, Mead Corporation, 16 years,
4 curies Cs^{137} for level and density,
1 curie Kr^{85} for beta gauge.

IV. William Bottenfield

Ohio State University, Mead Corporation, 27 years,
4 curies Cs^{137} for level and density,
1 curie Kr^{85} for weight gauge (beta).