



A CMS Energy Company

135 West Trail Street  
Jackson, MI 48201

April 6, 2010

Attn: Michael G. Herr, CHP  
Materials Licensing Branch  
United States Nuclear Regulatory Commission  
2443 Warrenville Rd Suite 210  
Lisle, IL 60532-4352

JSM-02-10

RE: TERMINATION OF LICENSE 21-08606-10

Mr. Herr:

This fax is in response to additional information requested by you on March 19, 2010 for termination of license # 21-08606-10 (Control #318733).

Enclosed is the leak test data pertaining to Cs-137 sources 12237-C, E, G, and H.

Sincerely,

A handwritten signature in black ink, appearing to read "JSM", with a long horizontal flourish extending to the right.

John S. Merrill  
Radiation Safety Officer  
Consumers Energy  
(517) 788-7104 Office  
(517) 534-0650 Pager

## Sample Count Results

Eberline Model BC-4, SN 891

Leak Test sample No.	Counting date	Begin count time	A Blank count time minutes	B Blank counts	C Sample Count time minutes	D Sample counts	E Net count Rate sample cpm	F Efficiency Counter cpm/dpm	G Activity Bq	H Activity uCi	I MDA uCi	J 95% conf. level unc. uCi	K Reported result uCi
LT-09-16	7/9/09	1445	10	255	10	257	0.2	0.175	0.019	5.1x10-7	2.0x10-5	1.1x10-7	>MDA
LT-09-17	7/9/09	1500	10	255	10	244	<0	0.175	<0	<0	2.0x10-5	1.1x10-7	>MDA
LT-09-18	7/9/09	1510	10	255	10	274	1.9	0.175	0.181	4.9x10-6	2.0x10-5	1.2x10-7	>MDA
LT-09-19	7/9/09	1525	10	255	10	258	0.3	0.175	0.029	7.7x10-7	2.0x10-5	1.1x10-7	>MDA

**D (net count rate) = D/C-B/A**  
**G (activity Bq) = E/F/60**  
**H (activity uCi) = G/37000**  
**I (MDA in uCi) = (2.706 + 3.29\*(B/A\*C\*(1+C/A))^0.5)/(F\*C\*60\*37000)**  
**J (95% conf. Level unc.) = 1.96\*(D/C^2+B/A^2)/F/60/37000**  
**K reported result will either be less than the MDA (<MDA), <95% conf. Level unc., or H +J.**



**Michael G. Herr, CHP**  
**MATERIALS LICENSING BRANCH**  
**UNITED STATES NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE ROAD SUITE 210  
LISLE, ILLINOIS 60532-4352  
OFFICE: (830)-828-9752 FAX: (630) 515-1078

CONVERSATION RECORD	TIME	DATE
<b>ACTUALLY FAXED? YES.</b>	11:19AM -11:25AM C.T.	3/19/10
NAME OF PERSON(S) CONTACTED	ORGANIZATION	TELEPHONE NO.
John Merrill Radlotion Safety Officer	Consumers Energy Company Laboratory Services	O: (517) 788-7104 F.: (517) 788-1104

**SUBJECT**  
License No.: 21-08606-10 Control No.: 318733

**SUMMARY**  
At this time we were unable to approve the termination of your byproduct materials license as requested in your NRC Form 314 dated January 5, 2010. The information that you provide was insufficient to process you request. We find that we need additional information as follows:

1. **Leak test result attached to your NRC Form 314, dated January 5, 2010, do not include calculations showing the how counts per minute (cpm) to microcuries were achieved. Please provide calculations showing the conversion from cpm to microcuries. Include efficiencies of the instrument used in counting the smears in the calculations that you provide us.**

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically in the NRC Public Document Room or from the Publicly Available Record (PARS) component of NRC's document system (ADAMS) accessible from the NRC Website at <http://www.nrc.gov/reading-rem/adams.html>.

**ACTION REQUIRED**

Please submit the requested information within 7 calendar days (by March 26, 2010) by referencing control number 318733 to facilitate proper handling. As we cannot issue an amendment at this time we are voiding this request in order to enable you to prepare a quality application without time constraints. This is done without prejudice to the resubmission of your request at a later date. Upon receipt of your response we will resume our review.

# Laboratory Services

*Division of Consumers Energy*

135 West Trail Street

Jackson, MI 49201

**Our FAX Number is (517) 788-2533**

**PROPRIETARY INFORMATION  
IF THIS FAX IS NOT ADDRESSED TO YOU PLEASE DO NOT READ**

**TELECOPIER INFORMATION:**

**SEND TO:** Michael Herr

**COMPANY NAME:** NRC

**FAX NUMBER:** 630-515-1078

**FROM:** John Merrill, RSO **PHONE:** 517-788-7104

**NUMBER OF PAGES (Including this Page):** 4

**SPECIAL INSTRUCTIONS OR MESSAGE:** Control # 318733 (Leak Test Data)

## *Laboratory Services*

**For Chemistry Services – Steve Wellman (517) 788-0442**

Perform a wide range of chemical analysis, determinations of compliance to requirements of State and Federal regulatory agencies such as the EPA, DNR, OSHA, and the NRC.

**For Calibration & Instrument Services – Steve Wellman (517) 788-0442**

Perform instrument calibration and repair services and provide consultation on instrument selection and usage.

**For Nondestructive & Materials Testing Services – Steve Wellman (517) 788-0442**

Perform nondestructive testing, materials testing and metallurgical examinations for power plants, gas-electric distribution/transmission areas. Perform various onsite predictive maintenance services such as vibration analysis, balancing, sound level testing, and ground penetrating radar surveys.

**For System Maintenance & Construction Services – Terry Krummrey (517) 788-0530**

Perform maintenance, calibration, testing and evaluation of generating, transmission, distribution, protective relaying and control systems. (Electric Transmission and Network Services)