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Manuel Serrano  
Vice President, Operations

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Tel: 201-703-3141

Serrano@Fisherchem.com

March 9, 2006

Q-9

Ms. Elizabeth Ullrich  
Licensing Assistance Team  
Nuclear Materials Safety Branch  
US Nuclear Regulatory Commission, Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

**Re: Byproduct Material License Termination Request; License Number 29-10211-01**  
**Survey Results Follow-Up**

Mail Control No.: 138080; Docket No.: 03005379

Dear Ms. Ullrich:

You should have received our response dated 25 January 2006. Our response did not include the residual radiation levels and the levels of residual removable contamination. In our response, we did confirm that results would follow. This letter is to confirm that we conducted the required surveys. Attached is a copy of the Residual Radiation Levels as well as the swipe sample results indicating levels of residual removable contamination originally requested in your letter dated 5 January 2006.

I believe the above information fulfills your request. In the event, you need additional information, please contact me directly.

Sincerely,

Manuel Serrano  
Vice President, Operations

138080

NUCLEAR MATERIALS-002

Residual Radiation Levels-Completed 2/6/06		
Sample Area	Area to Geiger & Swipe with Filter Paper	Geiger Reading (mR/hr)
1	Radioactive Materials Storage Cabinet Shelf	0.04
2	Lab bench top underneath the radioactive materials storage cabinet shelf	0.04
3	Floor directly in front of the bench-top	0.04
4	Inside the scintillation counter	0.04
5	Lab bench top the scintillation counter sits on	0.04
6	Floor directly in front of the bench-top the scintillation counter sits on	0.04
7	Floor of doorway in Lab 3 heading out to hallway	0.03
8	Floor of doorway heading into Lab 2	0.04
9	Floor of doorway heading into Lab 1	0.03
10	Benchtop where solutions are made	0.03
11	Floor directly in front of bench top where solutions are made	0.04
12	Hood area where solutions are made	0.02
13	Floor directly in front of the hood where solutions are made	0.02
14	Benchtop where solutions are made	0.03
15	Floor directly in front of bench top where solutions are made	0.03
16	Floor of doorway between Lab 1 and 2	0.05
17	Floor in pathway	0.04
18	Floor in pathway	0.00
19	Floor in doorway between Lab 2 and 3	0.04
20	Blank	0.00
21	Blank	0.00
22	Yellow waste storage cabinet shelf	0.02
23	Floor in front of yellow waste storage cabinet	0.04
24	Floor of doorway into waste storage room	0.04
25	Floor in waste sink room	0.02
	*Background Avg=0.03mR/hr	
	**Instrument Information: Wm. B. Johnson & Association Inc. Model GSM-110, Serial No. 8267	
	Includes pancake wand Model HP-265, Serial No. 6891 Last Calibrated 10/10/05, +-5% accuracy	



**Antkowiak and Mahoney  
Enterprises, Inc.**

3 Valley Court  
Chester, NY 10918

845 406-1917

Jeanette DeGennaro  
Fisher Scientific  
1 Reagent Lane  
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The following samples have been analyzed by liquid scintillation counting. Channel 1 is set for optimum tritium efficiency (0-19 KeV). Channel 2 is set for optimum carbon-14 efficiency (19-156 KeV). Analysis has been made to NIST traceable standards.

### Results by Liquid Scintillation Counting

Sample ID	Channel 1 dpm/sample	Channel 2 dpm/sample	Channel 3 dpm/sample
1	<MDA	<MDA	<MDA
2	<MDA	<MDA	<MDA
3	<MDA	<MDA	<MDA
4	<MDA	<MDA	<MDA
5	<MDA	<MDA	<MDA
6	<MDA	<MDA	<MDA
7	<MDA	<MDA	<MDA
8	<MDA	<MDA	<MDA
9	<MDA	<MDA	<MDA
10	<MDA	<MDA	<MDA
11	<MDA	<MDA	<MDA
12	<MDA	<MDA	<MDA
13	<MDA	<MDA	<MDA
14	<MDA	<MDA	<MDA
15	<MDA	<MDA	<MDA
16	<MDA	<MDA	<MDA
17	<MDA	<MDA	<MDA
18	<MDA	<MDA	<MDA
19	<MDA	<MDA	<MDA



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Sample ID	Channel 1 dpm/sample	Channel 2 dpm/sample	Channel 3 dpm/sample
20	<MDA	<MDA	<MDA
21	<MDA	<MDA	<MDA
22	<MDA	<MDA	<MDA
23	<MDA	<MDA	<MDA
24	<MDA	<MDA	<MDA
25	<MDA	<MDA	<MDA

Analytical Equipment: Packard Model 1900TR

serial#: 401071

Positive results are reported with the 2 sigma counting error. Minimum Detectable Activity (MDA) is the smallest amount of radioactivity that can be detected at the 95% confidence level. Based on the efficiency, background, and count time, the following MDA's have been calculated for this procedure:

$^3\text{H}$  = 102 dpm/sample

$^{14}\text{C}$  = 43 dpm/sample

Higher energy emitters = 33 dpm/sample

**Joel Antkowiak**

Digitally signed by Joel Antkowiak  
DN: CN = Joel Antkowiak, C = US,  
O = AME, Inc.  
Date: 2006.02.20 15:19:56 -05'00'

Reviewed and Approved by: \_\_\_\_\_

Date: \_\_\_\_\_