UniTech Services Group
A SUBSIDIARY OF UNIFIRST CORPORATION

NMSB 3

March 6, 2007

Mr. John D. Kinneman
U.S. Nuclear Regulatory Commission
Division of Nuclear Material Safety
475 Allendale Road
King of Prussia, PA 19406-1415 03020934

RE: License No. 37-23341-01 Quarterly Report – 4th Quarter 2006

Dear Mr. Kinneman:

In accordance with License Condition No. 17, enclosed is the quarterly report for the referenced period for discharges made pursuant to License Condition No. 16. The resulting pathway analysis, calculated in the manner provided in UniTech's letter dated July 24, 1998, indicates a maximum potential quarterly adult Committed Effective Dose Equivalent (CEDE) of 1.22×10^{-2} millirem and a 2006 total annual adult CEDE of 3.72×10^{-2} millirem..

UniTech has temporarily increased the frequency of off-site radiochemistry vendor analysis for tritium, which is reflected in the attached tables. The projected dose consequence to the hypothetical maximally exposed individual remains indistinguishable from background; the Committed Effective Dose Equivalent (CEDE) is approximately 1/100th of a millirem for the 4th quarter's discharge. UniTech reconfirms its customer's non-routine work schedule, as discussed in our letter dated January 26, 2007. Currently, UniTech expects such work to be on schedule and should be completed within the next week or two.

If you have questions regarding this information, please contact me at your earliest convenience. I may be reached at 610-948-9700, extension 19.

Sincerely,

UniTech Services Group, Inc.

Glenn Roberts
Health Physicist

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cc: Dan Neely, Plant Manager/RSO
John Wudyka, QA Manager
Michael R. Fuller, Esq., Manager, Health Physics and Engineering

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NMSS/RGN1 MATERIALS-002

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UniTech Table 1

Royersford Concentrations and Volumes

2006 - ROYERSFORD WASTEWATER CONCENTRATIONS (uCi/ml)												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
GALLONS	311,384	400,069	1,071,875	522,347	274,825	230,472	195,094	344,469	615,067	1,039,664	533,180	401,636
H-3	3.93E-05	3.93E-05	3.93E-05	2.35E-06	2.35E-06	2.35E-06	1.23E-03	1.23E-03	1.23E-03	1.10E-03	6.05E-03	3.46E-03
C-14	<MDA	<MDA	<MDA	6.27E-08	6.27E-08	6.27E-08	1.51E-08	1.51E-08	1.51E-08	1.31E-07	1.31E-07	1.31E-07
K-40	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Cr-51	NF	NF	NF	NF	NF	4.46E-07	NF	NF	NF	NF	NF	NF
Mn-54	4.06E-07	1.78E-07	1.73E-07	1.62E-07	4.28E-07	4.16E-07	1.39E-07	9.65E-08	4.07E-07	8.64E-08	2.39E-07	2.08E-07
Mn-56	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Fe-55	5.63E-07	5.63E-07	5.63E-07	5.36E-06	5.36E-06	5.36E-06	4.22E-07	4.22E-07	4.22E-07	2.84E-06	2.84E-06	2.84E-06
Fe-59	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Co-57	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Co-58	2.34E-07	1.26E-07	1.12E-07	1.13E-07	1.55E-07	1.79E-07	7.27E-08	5.38E-08	5.90E-08	NF	4.36E-08	9.43E-08
Co-60	1.33E-06	7.25E-07	4.60E-07	3.43E-07	1.33E-06	2.32E-06	5.28E-07	3.86E-07	1.49E-06	1.38E-07	1.22E-06	7.02E-07
Ni-59	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Ni-63	1.04E-07	1.04E-07	1.04E-07	3.07E-07	3.07E-07	3.07E-07	2.67E-07	2.67E-07	2.67E-07	1.29E-07	1.29E-07	1.29E-07
Zn-65	7.45E-08	NF	NF	NF	6.45E-08	1.05E-07	NF	3.77E-08	7.37E-08	NF	3.15E-07	5.74E-08
Sr-89	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Sr-90	3.80E-09	3.80E-09	3.80E-09	<MDA	<MDA	<MDA	1.31E-08	1.31E-08	1.31E-08	1.44E-08	1.44E-08	1.44E-08
Zr-95	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Nb-95	NF	2.13E-08	NF	1.63E-08	3.16E-08	NF	NF	NF	NF	NF	NF	NF
Tc-99	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	4.20E-08	4.20E-08	4.20E-08	6.52E-08	6.52E-08	6.52E-08
Ag-110m	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Sn-113	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Sb-125	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
I-125	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
I-129	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Cs-134	4.56E-08	NF	7.89E-08	2.32E-08	NF	NF	NF	NF	3.87E-08	NF	NF	2.38E-08
Cs-137	3.74E-07	3.00E-07	4.15E-07	2.60E-07	2.02E-07	2.13E-07	2.83E-07	2.62E-07	5.86E-07	3.62E-07	3.96E-07	4.67E-07
Eu-152	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Eu-154	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Eu-155	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Pb-212	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Pb-214	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Ra-226	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Ac-228	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Th-228	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Th-230	2.75E-09	2.75E-09	2.75E-09	4.13E-10	4.13E-10	4.13E-10	3.63E-08	3.63E-08	3.63E-08	<MDA	<MDA	<MDA
Th-231	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Th-232	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	1.17E-08	1.17E-08	1.17E-08	<MDA	<MDA	<MDA
Th-234	3.74E-07	3.47E-07	NF	NF	4.30E-07	4.16E-07	NF	3.51E-07	NF	3.75E-07	NF	NF
U-234	6.46E-10	6.46E-10	6.46E-10	3.45E-10	3.45E-10	3.45E-10	1.76E-09	1.76E-09	1.76E-09	7.74E-10	7.74E-10	7.74E-10
U-235	<MDA	<MDA	<MDA	2.11E-08	<MDA	<MDA	3.75E-10	3.75E-10	3.75E-10	1.53E-08	<MDA	<MDA
U-236	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
U-238	3.55E-10	3.55E-10	3.55E-10	<MDA	<MDA	<MDA	7.10E-10	7.10E-10	7.10E-10	6.53E-10	6.53E-10	6.53E-10
Pu-238	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Pu-239	<MDA	<MDA	<MDA	1.94E-10	1.94E-10	1.94E-10	<MDA	<MDA	<MDA	2.26E-10	2.26E-10	2.26E-10
Pu-241	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Np-237	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Am-241	3.53E-10	3.53E-10	3.53E-10	<MDA	<MDA	<MDA	5.30E-10	5.30E-10	5.30E-10	7.36E-10	7.36E-10	7.36E-10
Cm-244	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Total	4.28E-05	4.17E-05	4.12E-05	9.02E-06	1.07E-05	1.22E-05	1.23E-03	1.23E-03	1.23E-03	1.10E-03	6.06E-03	3.46E-03

Notes: NF - Not found in gamma spectra search

<MDA - Less than minimum dection limit for analytical method.

Sr-89/90 analyzed and reported as total Sr unless >50 pCi/L. Conservatively assigned to Sr-90

UniTech Table 2

Royersford Activities for Pathway Input

2006 - ROYERSFORD WASTEWATER ACTIVITIES (mCi)												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
Gallons	311384	400069	1071875	522347	274825	230472	195094	344469	615067	1039664	533180	401636
H-3	4.63E+01	5.95E+01	1.59E+02	4.65E+00	2.44E+00	2.05E+00	9.08E+02	1.60E+03	2.86E+03	4.33E+03	1.22E+04	5.26E+03
C-14				1.24E-01	6.52E-02	5.47E-02	1.12E-02	1.97E-02	3.52E-02	5.16E-01	2.64E-01	1.99E-01
K-40												
Cr-51						3.89E-01						
Mn-54	4.79E-01	2.70E-01	7.00E-01	3.21E-01	4.45E-01	3.63E-01	1.03E-01	1.26E-01	9.48E-01	3.40E-01	4.82E-01	3.17E-01
Mn-56												
Fe-55	6.64E-01	8.53E-01	2.28E+00	1.06E+01	5.58E+00	4.68E+00	3.12E-01	5.50E-01	9.82E-01	1.12E+01	5.73E+00	4.32E+00
Fe-59												
Co-57												
Co-58	2.76E-01	1.90E-01	4.55E-01	2.24E-01	1.62E-01	1.56E-01	5.37E-02	7.01E-02	1.37E-01		8.79E-02	1.43E-01
Co-60	1.56E+00	1.10E+00	1.87E+00	6.78E-01	1.38E+00	2.03E+00	3.90E-01	5.04E-01	3.46E+00	5.41E-01	2.46E+00	1.07E+00
Ni-59												
Ni-63	1.23E-01	1.57E-01	4.22E-01	6.07E-01	3.19E-01	2.68E-01	1.97E-01	3.48E-01	6.22E-01	5.08E-01	2.60E-01	1.96E-01
Zn-65	8.78E-02				6.71E-02	9.18E-02		4.91E-02	1.72E-01		6.36E-01	8.72E-02
Sr-89												
Sr-90	4.48E-03	5.75E-03	1.54E-02				9.67E-03	1.71E-02	3.05E-02	5.67E-02	2.91E-02	2.19E-02
Zr-95												
Nb-95		3.23E-02		3.23E-02	3.28E-02							
Tc-99							3.10E-02	5.48E-02	9.78E-02	2.57E-01	1.32E-01	9.91E-02
Ag-110m												
Sn-113												
Sb-125												
I-125												
I-129												
Cs-134	5.38E-02		3.20E-01	4.58E-02					9.00E-02			3.62E-02
Cs-137	4.40E-01	4.54E-01	1.68E+00	5.13E-01	2.10E-01	1.86E-01	2.09E-01	3.41E-01	1.36E+00	1.42E+00	7.98E-01	7.10E-01
Eu-152												
Eu-154												
Eu-155												
Pb-212												
Pb-214												
Ra-226												
Ac-228												
Th-228												
Th-230	3.24E-03	4.16E-03	1.12E-02	8.17E-04	4.30E-04	3.60E-04	2.68E-02	4.73E-02	8.45E-02			
Th-231												
Th-232							8.64E-03	1.53E-02	2.72E-02			
Th-234	4.41E-01	5.25E-01			4.47E-01	3.63E-01		4.57E-01		1.48E+00		
U-234	7.61E-04	9.78E-04	2.62E-03	6.82E-04	3.59E-04	3.01E-04	1.30E-03	2.29E-03	4.10E-03	3.05E-03	1.56E-03	1.18E-03
U-235				4.18E-02			2.77E-04	4.89E-04	8.73E-04	6.03E-02		
U-236												
U-238	4.18E-04	5.38E-04	1.44E-03				5.24E-04	9.26E-04	1.65E-03	2.57E-03	1.32E-03	9.93E-04
Pu-238												
Pu-239				3.84E-04	2.02E-04	1.69E-04				8.89E-04	4.56E-04	3.44E-04
Pu-241												
Np-237												
Am-241	4.16E-04	5.35E-04	1.43E-03				3.91E-04	6.91E-04	1.23E-03	2.90E-03	1.49E-03	1.12E-03
Cm-244												
TOTAL	5.05E+01	6.31E+01	1.67E+02	1.78E+01	1.11E+01	1.06E+01	9.10E+02	1.61E+03	2.87E+03	4.35E+03	1.22E+04	5.27E+03

This is to acknowledge the receipt of your letter/application dated

3/6/2007, and to inform you that the initial processing which includes an administrative review has been performed.

NOTIFICATION 37-23341-01

[✓] There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

[ ] Please provide to this office within 30 days of your receipt of this card

_____.

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 140183.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader