UniTech Services Group
A SUBSIDIARY OF UNIFIRST CORPORATION

February 18, 2008

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Ms. Marie Miller
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 2007

Dear Ms. Miller:

In accordance with License Condition No. 16, enclosed is the quarterly report for the referenced period for discharges made pursuant to License Condition No. 15. 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 9.64×10^{-3} millirem and a 2007 total annual adult CEDE of 4.26×10^{-2} millirem.

If you have questions regarding this information, please contact me at your earliest convenience. I may be reached at 610-948-9700, extension 19 or by email at GRoberts@UniTech.ws.

Sincerely,

UniTech Services Group, Inc.

Glenn Roberts
Health Physicist

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

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UniTech Table 1

Royersford Concentrations and Volumes

2007 - ROYERSFORD WASTEWATER CONCENTRATIONS (uCi/ml)												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
GALLONS	384,356	384,987	1,226,892	701,954	496,970	462,021	375,091	504,251	600,583	754,750	569,336	482,231
H-3	3.38E-03	9.24E-03	4.37E-04	1.23E-04	2.18E-04	2.07E-04	6.75E-05	6.75E-05	6.75E-05	9.48E-05	9.48E-05	9.48E-05
C-14	1.85E-08	1.85E-08	1.85E-08	5.82E-08	5.82E-08	5.82E-08	6.19E-09	6.19E-09	6.19E-09	9.33E-08	9.33E-08	9.33E-08
K-40	NF	NF	2.58E-07	2.51E-07	NF	NF	NF	NF	NF	NF	NF	NF
Cr-51	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Mn-54	1.74E-07	6.72E-08	3.52E-07	4.52E-08	7.36E-08	2.69E-08	4.32E-08	3.08E-08	2.40E-07	2.67E-07	2.15E-07	6.54E-08
Mn-56	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Fe-55	9.85E-08	9.85E-08	9.85E-08	9.84E-07	9.84E-07	9.84E-07	2.98E-06	2.98E-06	2.98E-06	1.74E-07	1.74E-07	1.74E-07
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	3.83E-08	1.50E-08	9.21E-08	1.24E-07	5.40E-08	4.77E-08	2.91E-08	NF	NF	8.61E-08	2.84E-07	8.52E-08
Co-60	7.37E-07	2.62E-07	1.56E-06	1.65E-07	3.08E-07	1.71E-07	2.15E-07	1.33E-07	1.27E-06	1.37E-06	1.09E-06	3.50E-07
Ni-59	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Ni-63	5.35E-07	5.35E-07	5.35E-07	<MDA	<MDA	<MDA	3.34E-08	3.34E-08	3.34E-08	1.44E-07	1.44E-07	1.44E-07
Zn-65	4.87E-08	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Sr-89	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Sr-90	1.51E-08	1.51E-08	1.51E-08	2.47E-08	2.47E-08	2.47E-08	1.20E-08	1.20E-08	1.20E-08	1.25E-08	1.25E-08	1.25E-08
Zr-95	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Nb-95	NF	NF	2.51E-08	NF	NF	NF	NF	NF	NF	NF	NF	NF
Tc-99	2.98E-07	2.98E-07	2.98E-07	1.39E-08	1.39E-08	1.39E-08	1.05E-08	1.05E-08	1.05E-08	<MDA	<MDA	<MDA
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	6.21E-08	3.27E-08	1.08E-07	2.41E-08	2.74E-08	NF	NF	2.45E-08	NF	NF	NF	NF
Cs-137	4.58E-07	5.74E-07	5.72E-07	3.20E-07	3.30E-07	2.06E-07	1.43E-07	1.61E-07	2.81E-07	2.32E-07	3.52E-07	1.52E-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	2.51E-10	2.51E-10	2.51E-10
Th-230	3.94E-10	3.94E-10	3.94E-10	<MDA	<MDA	<MDA	3.92E-10	3.92E-10	3.92E-10	2.43E-10	2.43E-10	2.43E-10
Th-231	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Th-232	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	1.56E-10	1.56E-10	1.56E-10
Th-234	NF	4.16E-07	NF	3.17E-07	NF	2.28E-07	NF	3.01E-07	3.22E-07	NF	NF	NF
U-234	3.93E-10	3.93E-10	3.93E-10	5.64E-10	5.64E-10	5.64E-10	5.18E-10	5.18E-10	5.18E-10	7.10E-10	7.10E-10	7.10E-10
U-235	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	2.33E-08	<MDA
U-236	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
U-238	2.90E-10	2.90E-10	2.90E-10	<MDA	<MDA	<MDA	6.12E-10	6.12E-10	6.12E-10	<MDA	<MDA	<MDA
Pu-238	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	1.94E-10	1.94E-10	1.94E-10
Pu-239	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	3.88E-10	3.88E-10	3.88E-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	6.95E-10	6.95E-10	6.95E-10	4.85E-10	4.85E-10	4.85E-10	5.62E-10	5.62E-10	5.62E-10	1.25E-09	1.25E-09	1.25E-09
Cm-244	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Total	3.38E-03	9.24E-03	4.41E-04	1.25E-04	2.20E-04	2.09E-04	7.10E-05	7.12E-05	7.27E-05	9.72E-05	9.72E-05	9.59E-05

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

March K-40 result reported at MDA value. Not used in pathway dose calculation.

Nov. U-235 Gamma Spec result does not correlate with radiochemistry results but, regardless, is used in the dose calculation.

UniTech Table 2

Royersford Activities for Pathway Input

2007 - ROYERSFORD WASTEWATER ACTIVITIES (mCi)												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
Gallons	384356	384987	1226892	701954	496970	462021	375091	504251	600583	754750	569336	482231
H-3	4.92E+03	1.35E+04	2.03E+03	3.27E+02	4.10E+02	3.62E+02	9.58E+01	1.29E+02	1.53E+02	2.71E+02	2.04E+02	1.73E+02
C-14	2.69E-02	2.70E-02	8.59E-02	1.55E-01	1.09E-01	1.02E-01	8.79E-03	1.18E-02	1.41E-02	2.67E-01	2.01E-01	1.70E-01
K-40			1.20E+00	6.68E-01								
Cr-51												
Mn-54	2.54E-01	9.79E-02	1.64E+00	1.20E-01	1.38E-01	4.71E-02	6.14E-02	5.87E-02	5.46E-01	7.62E-01	4.64E-01	1.19E-01
Mn-56												
Fe-55	1.43E-01	1.44E-01	4.57E-01	2.61E+00	1.85E+00	1.72E+00	4.23E+00	5.69E+00	6.77E+00	4.97E-01	3.75E-01	3.18E-01
Fe-59												
Co-57												
Co-58	5.57E-02	2.18E-02	4.28E-01	3.29E-01	1.02E-01	8.35E-02	4.14E-02			2.46E-01	6.12E-01	1.56E-01
Co-60	1.07E+00	3.82E-01	7.22E+00	4.39E-01	5.79E-01	2.99E-01	3.06E-01	2.54E-01	2.88E+00	3.90E+00	2.35E+00	6.38E-01
Ni-59												
Ni-63	7.78E-01	7.80E-01	2.48E+00				4.74E-02	6.37E-02	7.59E-02	4.11E-01	3.10E-01	2.63E-01
Zn-65	7.08E-02											
Sr-89												
Sr-90	2.20E-02	2.20E-02	7.01E-02	6.56E-02	4.65E-02	4.32E-02	1.70E-02	2.29E-02	2.73E-02	3.57E-02	2.69E-02	2.28E-02
Zr-95												
Nb-95			1.16E-01									
Tc-99	4.34E-01	4.34E-01	1.38E+00	3.69E-02	2.61E-02	2.43E-02	1.49E-02	2.00E-02	2.39E-02			
Ag-110m												
Sn-113												
Sb-125												
I-125												
I-129												
Cs-134	9.04E-02	4.76E-02	5.00E-01	6.41E-02	5.16E-02			4.68E-02				
Cs-137	6.66E-01	8.36E-01	2.66E+00	8.49E-01	6.21E-01	3.61E-01	2.02E-01	3.07E-01	6.39E-01	6.64E-01	7.58E-01	2.77E-01
Eu-152												
Eu-154												
Eu-155												
Pb-212												
Pb-214												
Ra-226												
Ac-228												
Th-228										7.17E-04	5.41E-04	4.58E-04
Th-230	5.73E-04	5.74E-04	1.83E-03				5.57E-04	7.48E-04	8.91E-04	6.94E-04	5.24E-04	4.44E-04
Th-231												
Th-232										4.46E-04	3.36E-04	2.85E-04
Th-234		6.06E-01		8.43E-01		3.99E-01		5.74E-01	7.32E-01			
U-234	5.72E-04	5.73E-04	1.83E-03	1.50E-03	1.06E-03	9.86E-04	7.35E-04	9.89E-04	1.18E-03	2.03E-03	1.53E-03	1.30E-03
U-235											5.02E-02	
U-236												
U-238	4.22E-04	4.23E-04	1.35E-03				8.69E-04	1.17E-03	1.39E-03			
Pu-238										5.54E-04	4.18E-04	3.54E-04
Pu-239										1.11E-03	8.36E-04	7.08E-04
Pu-241												
Np-237												
Am-241	1.01E-03	1.01E-03	3.23E-03	1.29E-03	9.12E-04	8.48E-04	7.98E-04	1.07E-03	1.28E-03	3.57E-03	2.69E-03	2.28E-03
Cm-244												
TOTAL	4.92E+03	1.35E+04	2.05E+03	3.33E+02	4.14E+02	3.65E+02	1.01E+02	1.36E+02	1.65E+02	2.78E+02	2.09E+02	1.75E+02