November 27, 2007

NMS84

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 – 3rd 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 5.83×10^{-3} 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
        John Wudyka, QA Manager
        Michael Fuller, Esq., Manager, Health Physics and Engineering

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UniTech Table 1
Royersford Concentrations and Volumes

MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
				2007 - ROYERSFORD WASTEWATER CONCENTRATIONS (uCi/ml)								
GALLONS	384,356	384,987	1,226,892	701,954	496,970	462,021	375,091	504,251	600,583			
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			
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			
K-40	NF	NF	2.58E-07	2.51E-07	NF	NF	NF	NF	NF			
Cr-51	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			
Mn-56	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			
Fe-59	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Co-57	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			
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			
Ni-59	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			
Zn-65	4.87E-08	NF	NF	NF	NF	NF	NF	NF	NF			
Sr-89	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			
Zr-95	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Nb-95	NF	NF	2.51E-08	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			
Ag-110m	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Sn-113	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Sb-125	NF	NF	NF	NF	NF	NF	NF	NF	NF			
I-125	NF	NF	NF	NF	NF	NF	NF	NF	NF			
I-129	<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			
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			
Eu-152	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Eu-154	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Eu-155	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Pb-212	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Pb-214	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Ra-226	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Ac-228	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Th-228	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
Th-230	3.94E-10	3.94E-10	3.94E-10	<MDA	<MDA	<MDA	3.92E-10	3.92E-10	3.92E-10			
Th-231	NF	NF	NF	NF	NF	NF	NF	NF	NF			
Th-232	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
Th-234	NF	4.16E-07	NF	3.17E-07	NF	2.28E-07	NF	3.01E-07	3.22E-07			
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			
U-235	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
U-236	<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			
Pu-238	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
Pu-239	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
Pu-241	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA			
Np-237	<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			
Cm-244	<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			

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.

UniTech Table 2
Royersford Activities for Pathway Input

MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
					2007 - ROYERSFORD WASTEWATER ACTIVITIES (mCi)							
Gallons	384356	384987	1226892	701954	496970	462021	375091	504251	600583	0	0	0
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			
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			
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			
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			
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					
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			
Ni-59												
Ni-63	7.78E-01	7.80E-01	2.48E+00				4.74E-02	6.37E-02	7.59E-02			
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			
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			
Eu-152												
Eu-154												
Eu-155												
Pb-212												
Pb-214												
Ra-226												
Ac-228												
Th-228												
Th-230	5.73E-04	5.74E-04	1.83E-03				5.57E-04	7.48E-04	8.91E-04			
Th-231												
Th-232												
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			
U-235												
U-236												
U-238	4.22E-04	4.23E-04	1.35E-03				8.69E-04	1.17E-03	1.39E-03			
Pu-238												
Pu-239												
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			
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			

3rd QTR REPORT

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

_____ *11/27/2007* _____, 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** _____ *14-1359* _____.
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