



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

May 9, 2005

Docket No. 03020934

License No. 37-23341-01

Dale Jakoby
Superintendent, Wastewater Treatment Facility
Borough of Royersford
300 Main Street
Royersford, PA 19468

SUBJECT: REPORT OF 2004 TLD MONITORING RESULTS

Dear Mr. Jakoby:

Enclosed are the results of the environmental TLD monitoring performed by the NRC at the Royersford Wastewater Treatment Facility (RWTF) during calendar year 2004.

The first quarter environmental TLD monitoring used dosimeters from Landauer, Inc. over the period of January 7 through April 7, 2004 (first quarter 2004). No environmental monitoring was performed during the second quarter 2004, when a new contract was issued and the dosimeter supplier changed from Landauer, Inc. to Proxtronic, Inc. (Proxtronic).

The third quarter TLD monitoring period was July 9 through October 4, 2004. The fourth quarter TLD monitoring period was October 4, 2004 through January 13, 2005. During this period, some Proxtronic dosimeter holders were observed to contain water or other evidence of moisture, but the supplier confirmed that the dosimeters were not damaged by the moisture and radiation measurements from the dosimeters are valid.

As of January 30, 2004, UniTech Services Group, Inc. (UniTech) discontinued release of effluents containing radioactive material to the RWTF. During the spring and summer 2004, we understand that you cleaned your waste processing system attempting to remove residual radioactive materials received with UniTech effluent. In particular, we understand that you removed all sludges from both the primary digester and the secondary digester, and cleaned those facilities. The reedbeds, formerly used for drying sludge after treatment in the secondary digester, were not cleaned and still contain residual radioactive materials. As a result, the ambient radiation levels at the RWTF decreased each quarter in 2004. We expect the radiation levels to continue to decrease as the residual radioactive material in the reedbeds continues to decay.

If you have any questions about the information provided with this letter, please contact me at (610) 337-5040.

D. Jakoby
Borough of Royersford

2

Thank you for your cooperation.

Sincerely,

Original signed by Elizabeth Ullrich

Betsy Ullrich
Senior Health Physicist
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

enclosure:
2004 TLD Monitoring Results

cc w/ enclosure:
Daniel R. Neeley, UniTech
Michael Fuller, UniTech
David Allard, PADEP
George Karron, PADEP

D. Jakoby
Borough of Royersford

3

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Enclosure: 2004 TLD Monitoring Results

Period: January 7 through April 7, 2004

<u>Location</u>	<u>Gross Exposure, Standard Calendar Quarter (millirem)</u>
1. Reed Bed #1, Cell A	996.5
2. Reed Bed #2, Cell B	611.5
3. Fence by Reed Bed #1 (east)	51.1
4. Settling tanks rail - by Reed Bed #1	153.1
5. Settling tanks rail - by Secondary Digester/Trickling Filters	45.8
6. Rear Fence (north)	33.0
7. Fence by Reed Bed #2 (west)	30.5
8. Light Switch of Storage Building	28.0
9. Secondary Digester - center of west side	34.6
10. 2 nd Story rail by Office back door	31.1
11. Front fence (south)	32.5
12. Support rail of stairway to Office back door	32.5
13. Primary Digester - top of ladder	81.3
14. Secondary Digester - center of east side	88.5
15. Settling tanks rail - path to Laboratory Building	34.2
16. Office	28.7
xx. Deploy dosimeter	27.5
xx. Transit dosimeter	28.1

Period: July 9 through October 4, 2004

<u>Location</u>	<u>Gross Exposure, Standard Calendar Quarter (millirem)</u>
1. Reed Bed #1, Cell A	439.0
2. Reed Bed #2, Cell B	345.5
3. Fence by Reed Bed #1 (east)	29.9
4. Settling tanks rail - by Reed Bed #1	83.3
5. Settling tanks rail - by Secondary Digester/Trickling Filters	32.0
6. Rear Fence (north)	17.0
7. Fence by Reed Bed #2 (west)	16.8
8. Light Switch of Storage Building	19.7
9. Secondary Digester - center of west side	26.7
10. 2 nd Story rail by Office back door	19.9
11. Front fence (south)	21.1
12. Support rail of stairway to Office back door	20.7
13. Primary Digester - top of ladder	17.7
14. Secondary Digester - center of east side	59.0
15. Settling tanks rail - path to Laboratory Building	19.9
16. Office	16.7
xx. Control dosimeter	13.9

Period: October 4, 2004 through January 13, 2005

<u>Location</u>	<u>Gross Exposure, Standard Calendar Quarter (millirem)</u>
1. Reed Bed #1, Cell A	422.9
2. Reed Bed #2, Cell B	366.2
3. Fence by Reed Bed #1 (east)	38.4
4. Settling tanks rail - by Reed Bed #1	85.7
5. Settling tanks rail - by Secondary Digester/Trickling Filters	35.9
6. Rear Fence (north)	35.1
7. Fence by Reed Bed #2 (west)	22.3
8. Light Switch of Storage Building	21.0
9. Secondary Digester - center of west side	26.1
10. 2 nd Story rail by Office back door	26.1
11. Front fence (south)	25.4
12. Support rail of stairway to Office back door	25.9
13. Primary Digester - top of ladder	22.6
14. Secondary Digester - center of east side	62.4
15. Settling tanks rail - path to Laboratory Building	24.8
16. Office	20.2
xx. Control dosimeter	19.5