

June 16, 1994

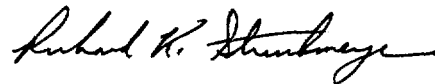
MEMORANDUM FOR: Mohamed M. Shanbaky, Chief, Research and Development Section,
NMSB, DRSS

FROM: Richard K. Struckmeyer, Sr. Radiation Specialist, Effluents
Radiation Protection Section, FRSSB, DRSS

SUBJECT: Corrected Results of Third and Fourth Quarter 1993 TLD Direct
Radiation Environmental Monitoring at the Royersford Wastewater
Treatment Facility

The attachment to this memo provides revised results for the subject monitoring for the third and fourth quarters of 1993, based on information provided in your memorandum dated June 15, 1994, to the Effluents Radiation Protection Section Chief. For the third quarter of 1993, our report (dated November 18, 1993) indicated that the TLD at location 16 was missing, while a TLD was present at location 15. Based on your memorandum of June 15, 1994, it is our understanding that a TLD was present at location 16 during the monitoring period, while the TLD at location 15 was missing. Therefore, the data previously attributed to location 15 have been reassigned to location 16, and the record for location 15 has been changed to indicate that this TLD was missing. For the fourth quarter of 1993, it is our understanding that the TLDs at locations 2 and 3 were inadvertently interchanged. Therefore, the data previously attributed to location 2 have been reassigned to location 3, and vice-versa.

Please do not hesitate to contact me if you have any questions.



Richard K. Struckmeyer
Sr. Radiation Specialist
Effluents Radiation Protection Section,
FRSSB

Attachment: As stated

cc:

J. Joyner, FRSSB
R. Bellamy, NMSB
E. Ullrich, NMSB

INS

TLD Direct Radiation Environmental Monitoring

For the period 930712-931027 108 Days

Field Time: 87 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	0 0.0	169.0 +- 5.1; 25.4	172.0 +- 5.3; 26.4	140.8 +- 38.7
2	0 0.0	186.2 +- 5.6; 27.9	189.7 +- 5.8; 29.0	151.7 +- 58.8
3	0 0.0	21.9 +- 0.7; 3.3	19.7 +- 0.7; 4.4	30.9 +- 41.3
4	0 0.0	38.4 +- 1.2; 5.8	36.8 +- 1.2; 6.6	34.5 +- 5.1
5	0 0.0	19.2 +- 0.6; 2.9	17.0 +- 0.7; 4.1	17.0 +- 2.1
6	0 0.0	20.2 +- 0.6; 3.0	18.0 +- 0.7; 4.2	18.5 +- 1.6
7	0 0.0	20.5 +- 0.6; 3.1	18.3 +- 0.7; 4.3	20.9 +- 4.9
8	0 0.0	Missing Dosimeter	No Net Data	21.9 +- 3.8
9	0 0.0	22.9 +- 0.7; 3.4	20.8 +- 0.8; 4.6	20.1 +- 2.5
10	0 0.0	19.4 +- 0.6; 2.9	17.1 +- 0.7; 4.1	18.2 +- 1.5
11	0 0.0	21.2 +- 0.6; 3.2	19.1 +- 0.7; 4.4	19.9 +- 2.9
12	0 0.0	28.9 +- 0.9; 4.3	27.0 +- 0.9; 5.3	27.6 +- 1.8
13	0 0.0	24.1 +- 0.7; 3.6	22.0 +- 0.8; 4.7	30.4 +- 10.9
14	0 0.0	31.3 +- 0.9; 4.7	29.5 +- 1.0; 5.6	27.9 +- 2.6
15	0 0.0	Missing Dosimeter	No Net Data	16.5 +- 1.9
16	0 0.0	23.2 +- 0.7; 3.5	21.1 +- 0.8; 4.6	20.9 +- 2.2

Transit Dose = 2.8 +- 0.3; 2.7

INS

For the period 930712-931027

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	44.9 +- 58.0	14
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	44.9 +- 58.0	14
2 - 5	No Data +- No Data	0
> 5	No Data +- No Data	0
Upwind Control	No Data +- No Data	0

INS

TLD Direct Radiation Environmental Monitoring

For the period 931006-940209 127 Days

Field Time: 121 Days

NRC Sta	Location Azimuth/Dist (Deg)/(Mi)	Gross Exposure (mR) +-Rdm; Tot.	Net Exposure Rate (mR/Std. Qtr.) +-Rdm; Tot.	Hist. Range Net Exp Rate +-1 Std Dev
1	0 0.0	194.7 +- 5.8; 29.2	144.8 +- 4.3; 21.9	140.8 +- 38.7
2	0 0.0	234.0 +- 7.0; 35.1	174.1 +- 5.2; 26.2	151.7 +- 58.8
3	0 0.0	27.0 +- 0.8; 4.1	20.1 +- 0.6; 4.0	30.9 +- 41.3
4	0 0.0	51.2 +- 1.5; 7.7	38.1 +- 1.2; 6.3	34.5 +- 5.1
5	0 0.0	23.7 +- 0.7; 3.6	17.7 +- 0.6; 3.7	17.0 +- 2.1
6	0 0.0	Damaged Dosimeter	No Net Data	18.5 +- 1.6
7	0 0.0	27.6 +- 0.8; 4.1	20.5 +- 0.7; 4.0	20.9 +- 4.9
8	0 0.0	Missing Dosimeter	No Net Data	21.9 +- 3.8
9	0 0.0	28.6 +- 0.9; 4.3	21.2 +- 0.7; 4.1	20.1 +- 2.5
10	0 0.0	24.7 +- 0.7; 3.7	18.3 +- 0.6; 3.8	18.2 +- 1.5
11	0 0.0	27.4 +- 0.8; 4.1	20.3 +- 0.6; 4.0	19.9 +- 2.9
12	0 0.0	38.1 +- 1.1; 5.7	28.3 +- 0.9; 5.0	27.6 +- 1.8
13	0 0.0	64.4 +- 1.9; 9.7	47.9 +- 1.5; 7.6	30.4 +- 10.9
14	0 0.0	37.8 +- 1.1; 5.7	28.1 +- 0.9; 5.0	27.9 +- 2.6
15	0 0.0	22.2 +- 0.7; 3.3	16.5 +- 0.5; 3.6	16.5 +- 1.9
16	0 0.0	27.9 +- 0.8; 4.2	20.8 +- 0.7; 4.1	20.9 +- 2.2

Transit Dose = 0.0 +- 0.3; 3.5

INS

For the period 931006-940209

TLD Direct Radiation Environmental Monitoring

Azimuth (degrees)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
348.76 - 11.25 N	44.1 +- 50.0	14
11.26 - 33.75 NNE	No Data +- No Data	0
33.76 - 56.25 NE	No Data +- No Data	0
56.26 - 78.75 ENE	No Data +- No Data	0
78.76 - 101.25 E	No Data +- No Data	0
101.26 - 123.75 ESE	No Data +- No Data	0
123.76 - 146.25 SE	No Data +- No Data	0
146.26 - 168.75 SSE	No Data +- No Data	0
168.76 - 191.25 S	No Data +- No Data	0
191.26 - 213.75 SSW	No Data +- No Data	0
213.76 - 236.25 SW	No Data +- No Data	0
236.26 - 258.75 WSW	No Data +- No Data	0
258.76 - 281.25 W	No Data +- No Data	0
281.26 - 303.75 WNW	No Data +- No Data	0
303.76 - 326.25 NW	No Data +- No Data	0
326.26 - 348.75 NNW	No Data +- No Data	0

Distance From Reactor (miles)	Ave. Exposure Rate (mR/Std.Qtr.) +- Std.Dev.	Number In Group
0 - 2	44.1 +- 50.0	14
2 - 5	No Data +- No Data	0
> 5	No Data +- No Data	0
Upwind Control	No Data +- No Data	0