

September 6, 1990

Docket Nos. 50-54
70-687

Cintichem, Inc.
ATTN: Mr. James J. McGovern
Plant Manager
P. O. Box 816
Tuxedo, New York 10987

Gentlemen:

Subject: Results of NRC TLD Direct Radiation Monitoring around the
Cintichem facility

The results of the subject monitoring are provided in the enclosure.

You may note that the total uncertainties in the net exposure rates and in the transit dose (the figures following the semicolons at the end of each line) are smaller than those reported in the previous report. An error was discovered in the software for calculation of the total uncertainty of the transit dose, which caused the total uncertainties of the control and the field TLDs to be approximately 40 percent larger than they should have been. This error did not affect the calculation of the net doses or the random uncertainties; nor did it affect the total uncertainty of the gross exposures.

Questions regarding this program may be directed either to me or to Dr. Richard K. Struckmeyer of my staff.

Sincerely,

Original Signed By:
Robert J. Bores

Robert J. Bores, Chief
Effluents Radiation Protection Section
Division of Radiation Safety and Safeguards

Enclosure(s): As Stated

cc:

T. Vaughn, Manager, Health Safety and Environmental Affairs
M. D. Johnson, Reactor Supervisor
D. D. Grogan, Manager, Radiochemical Production
W. G. Ruzicka, Nuclear Operations Manager
Dr. William Vernetson, Director of Nuclear Facilities,
University of Florida
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New York

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bcc:
Region I Docket Room (with concurrences)
Management Assistant, DRMA (w/o encl)
W. Brown, NMSS
J. Roth, DRSS
D. Haverkamp, DRP
P. Swetland, DRP
L. Rossbach, SRI - Indian Point 2
N. Dudley, DRP

RI:DRSS *AKS*
Struckmeyer
09/6/90

RI:DRSS *SJB*
Bores
09/06/90

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CINTICHEM
 JLD DIRECT RADIATION ENVIRONMENTAL MONITORING
 FOR THE PERIOD 900319-900725 129 DAYS
 FIELD TIME 93 DAYS

NRC STATION	LOCATION		GROSS EXPOSURE (mR)			NET EXPOSURE RATE mR/Std. Dtr.		
	AZIMUTH (deg.)	DIST (mi.)	+- Rdm; Tot.			+- Rdm; Tot.		
001	150	3.0	18.0	+- .5	; 2.7	15.6	+- .6	; 3.8
002	140	2.1	16.2	+- .5	; 2.4	13.9	+- .5	; 3.6
003	110	2.0	18.2	+- .5	; 2.7	15.8	+- .6	; 3.8
004	120	0.5	21.4	+- .6	; 3.2	19.0	+- .7	; 4.2
005	60	1.1	25.8	+- .8	; 3.9	23.2	+- .8	; 4.6
006	345	1.1	18.9	+- .6	; 2.8	16.5	+- .7	; 3.9
007	60	0.1	21.9	+- .7	; 3.3	19.4	+- .7	; 4.2
008	10	0.2	20.3	+- .6	; 3.0	17.9	+- .6	; 4.0
009	230	0.8	19.2	+- .6	; 2.9	16.8	+- .6	; 3.9
010	200	1.4	19.8	+- .6	; 3.0	17.4	+- .6	; 4.0
011	225	2.8	18.1	+- .5	; 2.7	15.7	+- .6	; 3.8
012	80	2.1	18.4	+- .6	; 2.8	16.1	+- .6	; 3.8
013	45	5.4	18.2	+- .5	; 2.7	15.8	+- .6	; 3.8
014	10	6.2	18.9	+- .6	; 2.8	16.5	+- .6	; 3.9
015	358	3.3	18.8	+- .6	; 2.8	16.4	+- .6	; 3.9
016	315	5.0	MISSING OR DAMAGED DOSIMETER					
017	265	4.0	16.6	+- .5	; 2.5	14.3	+- .6	; 3.7
018	235	6.7	18.8	+- .6	; 2.8	16.4	+- .6	; 3.9
019	235	6.7	18.8	+- .6	; 2.8	16.4	+- .6	; 3.9
020	235	6.7	18.8	+- .6	; 2.8	16.4	+- .6	; 3.9
TRANSIT DOSE *			1.8	+- .3	; 2.8			

CINTICHEM
FOR THE PERIOD 900319-900725

TLD DIRECT RADIATION ENVIRONMENTAL MONITORING

AZIMUTH (deg.)	NET AVER. EXPOSURE RATE (mR/Std.Qtr.) +-Std.Dev.	◆ IN GROUP
348.75-11.25 (N)	16.8 +- .8	3
11.25-33.75 (NNE)	NO DATA+-NO DATA	0
33.75-56.25 (NE)	15.8 +- 0.0	1
56.25-78.75 (ENE)	21.3 +- 2.7	2
78.75-101.25 (E)	16.1 +- 0.0	1
101.25-123.75 (ESE)	17.4 +- 2.2	2
123.75-146.25 (SE)	13.8 +- 0.0	1
146.25-168.75 (SSE)	15.6 +- 0.0	1
168.75-191.25 (S)	NO DATA+-NO DATA	0
191.25-213.75 (SSW)	17.4 +- 0.0	1
213.75-236.25 (SW)	16.3 +- .8	2
236.25-258.75 (WSW)	NO DATA+-NO DATA	0
258.75-281.25 (W)	14.3 +- 0.0	1
281.25-303.75 (WNW)	NO DATA+-NO DATA	0
303.75-326.25 (NW)	NO DATA+-NO DATA	0
326.25-348.75 (NNW)	16.5 +- 0.0	1

DISTANCE (mi) FROM THE REACTOR	NET AVER. EXPOSURE RATE (mR/Std.Qtr.) +-Std.Dev.	◆ IN GROUP
0-2	18.3 +- 2.3	8
2-5	15.3 +- 1.0	6
>5	16.2 +- .9	2
UPWIND CONTROL DATA	16.4 +- .8	3