

JUN 01 1993

Docket No. 030-20934

License No. 37-23341-01

Borough of Royersford
ATTN: Michael Claflin, Superintendent
Wastewater Treatment Facility
300 Main Street
P. O. Box 188
Royersford, Pennsylvania 19468

Dear Mr. Claflin:

Subject: Third Quarter and Fourth Quarter 1992 Wastewater Discharge Reports from INS Corporation and Results of Second and Third Quarters 1992 TLD Direct Radiation Environmental Monitoring at the Royersford Wastewater Treatment Facility

Enclosed are the results of analyses of discharges made by the INS Corporation to the Royersford Wastewater Treatment Facility during the months of July, August, September, October, November and December of 1992. Also enclosed are the results of the TLD dosimeters used to monitor environmental radiation levels during the periods of July 17 through October 1, 1992 and October 1, 1992 through January 8, 1993. Please contact me or Betsy Ullrich at 215-337-5040 if you have any questions.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Research, Development, and
Decommissioning Section
Division of Radiation Safety and
Safeguards

Enclosures:

1. Third Quarter 1992 Wastewater Discharge Report
2. Fourth Quarter 1992 Wastewater Discharge Report
3. Third Quarter 1992 TLD Direct Radiation Environmental Monitoring Record
4. Fourth Quarter 1992 TLD Direct Radiation Environmental Monitoring Record

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OFFICIAL RECORD COPY

April 19, 1993

RETURN ORIGINAL TO
REGION I

IE-07

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PDR ADOCK 03020934
C PDR

Borough of Royersford

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cc:

Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania

Commonwealth of Pennsylvania
Department of Environmental Resources
ATTN: Margaret Reilly
P. O. Box 2063
Harrisburg, Pennsylvania 17120

Commonwealth of Pennsylvania
Department of Environmental Resources
ATTN: Ivna Shanbaky
1875 New Hope Street
Norristown, Pennsylvania 19401

Interstate Nuclear Services
ATTN: Michael Bovino, Manager
Health Physics and Engineering
295 Parker Street
P. O. Box 51957
Springfield, Massachusetts 01151

Interstate Nuclear Services
ATTN: H. Burns, Plant Manager
401 North Third Avenue
Royersford, Pennsylvania 19468

bcc:

Region I Docket room (w/concurrences)
E. Ullrich, RI
J. Kinneman, RI
M. Miller, RI

RI:DRSS
Ullrich/GMP

RI:DRSS
Kinneman

4/30/93

5/2/93

ENCLOSURE 1

INS CORPORATION

QUARTERLY WASTEWATER DISCHARGE REPORT

ROYERSFORD, PA

July 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-134	3.46E-7	.12
Cs-137	1.75E-6	.44
Co-58	1.40E-7	<.01
Co-60	2.58E-7	.03
Mn-54	9.84E-8	<.01
Zn-65	1.01E-7	<.01

August 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-134	1.33E-7	.04
Cs-137	1.87E-6	.47
Co-58	7.10E-8	<.01
Co-60	3.10E-7	.03
Mn-54	8.93E-8	<.01

September 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-137	3.10E-7	.08
Co-60	4.75E-7	.05
Mn-54	3.10E-7	.01
Zn-65	4.66E-7	.02

July 1992 through September 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
H-3	1.95E-5	.02
Sr-90	1.8E-8	.18
Sr-89	<MDA	
Tc-99	6.8E-8	<0.01
Fe-55	3.0E-7	<0.01

Total volume discharged this quarter was 115909 ft³.

Total Activity discharged this quarter was 71,904 μCi .

INS CORPORATION
QUARTERLY WASTEWATER DISCHARGE REPORT
ROYERSFORD, PA

October 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-134	9.18E-8	.03
Cs-137	3.02E-7	.08
Co-60	5.80E-7	.06
Mn-54	4.50E-7	.02
Zn-65	1.88E-6	.06

November 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-134	1.41E-7	.05
Cs-137	7.11E-7	.18
Co-60	2.74E-7	.03
Mn-54	1.01E-7	< .01

December 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
Cs-134	2.01E-7	.07
Cs-137	1.18E-6	.30
Co-60	1.85E-6	.18
Mn-54	4.24E-7	.01
Zn-65	4.39E-7	.01

October 1992 through December 1992

ISOTOPE	CONCENTRATION $\mu\text{Ci/ml}$	% SEWER MPC
H-3	1.08E-5	.01
Sr-90	1.69-8	.17
Sr-89	<MDA	
Tc-99	2.31-7	<0.01
Fe-55	<MDA	

Total volume discharged this quarter was 179,631 ft³.

Total Activity discharged this quarter was 56,765 μCi .

ENCLOSURE 3

Third Quarter 1992 TLD Direct Radiation Environmental Monitoring at the Royersford Wastewater Treatment Facility

Period: July 17, 1992 to October 1, 1992

Transit Dose: 4.0 millirem

<u>Location</u>	<u>Net Exposure (millirem)</u>
1. Reed Bed #1, Cell A	160.4
2. Reed Bed #2, Cell B	190.5
3. Fence by Reed Bed #1 (east)	19.0
4. Settling tanks rail - by Reed Bed #1	33.1
5. Settling tanks rail - by Secondary digester	16.1
6. Rear Fence (north)	17.5
7. Fence by Reed Bed #2 (west)	18.5
8. Secondary Biofilter lamp post	19.7
9. Secondary Digester - center of west side	missing - no data
10. Flag pole	18.5
11. Front fence (south)	17.8
12. Chlorine building lamp post	27.2
13. Primary Digester - top of ladder	35.7
14. Secondary Digester - center of east side	27.1
15. Settling tanks rail - path to office door	16.3
16. Office	20.8

ENCLOSURE 4

Fourth Quarter 1992 TLD Direct Radiation Environmental Monitoring at the Royersford Wastewater Treatment Facility

Period: October 1, 1992 to January 8, 1993

Transit Dose: 3.8 millirem

<u>Location</u>	<u>Net Exposure (millirem)</u>
1. Reed Bed #1, Cell A	163.0
2. Reed Bed #2, Cell B	181.4
3. Fence by Reed Bed #1 (east)	22.2
4. Settling tanks rail - by Reed Bed #1	38.1
5. Settling tanks rail - by Secondary digester	19.3
6. Rear Fence (north)	20.2
7. Fence by Reed Bed #2 (west)	23.1
8. Secondary Biofilter lamp post	24.6
9. Secondary Digester - center of west side	21.5
10. Flag pole	19.5
11. Front fence (south)	23.7
12. Chlorine building lamp post	30.0
13. Primary Digester - top of ladder	18.6
14. Secondary Digester - center of east side	28.3
15. Settling tanks rail - path to office door	17.6
16. Office	22.1