

INTRACEL

Sheri A. Arredondo
U.S. Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406

20 May 1994

Dear Sheri,

It was a pleasure to meet with you last month and we appreciate your advice with respect to closing out our NRC license. You specified several requirements that needed to be met in order that a formal close-out could be made. Specifically, 1) An approved person must do the wipes on 100 cm² and report the data in DPM; 2) Wipes must be done for all laboratories where radioactivity was used at both 359 Allston Street and 320 Putnam Avenue; 3) The freezer where radioactivity was stored must be wiped, inside and outside, and the "ice" must be counted; 4) Disposal drums must be wiped, inside and outside, and counted; 5) All "pinwheels" and signs must be removed; 6) The radioactive waste must be removed by an approved vendor after a disposal permit has been obtained to the Barnwell facility and 7) We had agreed on a 15 June 1994 deadline to have completed all of these tasks through final disposal.

The following is a point-by-point response to these requirements: 1) Brent Dorval, RSO, did all the wipes on 100 cm², sample preparation and subsequent data collection and processing (see Attachment 1); 2) The counts for wipes done in laboratories at 359 Allston Street and 320 Punam are on pages 1 and 2, numbers 1-21 and pages 3 and 4, numbers 29-38, respectively; 3) The counts for wipes and ice done for freezer #4, which was used to store radioactivity, are on page 2, numbers 15-20. The cold box was also used to store radioactivity and these counts are on page 1, numbers 8 and 9; 4) The wipes for the disposal drums on the loading dock are on pages 2 and 3, numbers 22-28; 5) All pinwheels and signs have been removed; 6) US Ecology was contracted to remove the waste after a permit to Barnwell was obtained (see Attachment 2) and 7) The waste was removed by US Ecology on 19 May 1994 for shipment to Barnwell and the manifest is provided (see Attachment 3).

There was no residual contamination detected, based on the wipes and all radioactive waste has been removed from storage. Currently, we do not have any radioactivity at our facility.

If you have any questions feel free to call (617) 547-5535, and ask for me directly.

Best Regards,



Brent L. Dorval, Ph.D.
Director of Diagnostics

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PDR ADDCK 03030334
C PDR

MAY 23 1994

Final Swipe Tests-5/4/94

The following swipe tests were done on 5/4/94 by Dr. Brent Dorval. They were counted for H3, C14, S35, and P32. The units are DPM. The H3 count efficiency is 59% and the C14 count efficiency is 90%. Both were calculated using isotope standards. The S35 max. count efficiency is 95% and the P32 max. count efficiency is 99%. I used these percentages because we have no S35 or P32 standards.

<u>#</u>	<u>Location</u>	<u>H3 Count</u>	<u>C14 Count</u>	<u>S35 Count</u>	<u>P32 Count</u>
Back Lab					
1	Scintillation Counter Lid	21.27	29.34	42.82	28.52
2	Work Area	23.32	28.00	45.48	34.04
3	Floor by Work Bench	20.74	29.12	41.23	27.91
4	Left Side of Sink	22.29	30.92	43.46	28.62
5	Right Side of Sink	19.90	27.77	43.89	31.79
6	Phone Handle	21.27	30.13	39.53	27.69
7	Floor in Middle of Room	19.54	35.53	38.34	31.78
Main Lab					
8	Far Right Door of Cold Box	21.78	28.00	41.12	27.69
9	Floor by Door	21.95	30.58	42.61	30.56
10	Dave's Bench Front	21.27	31.71	46.34	31.59
11	Sink	19.37	29.91	42.82	29.75

<u>#</u>	<u>Location</u>	<u>H3 Count</u>	<u>C14 Count</u>	<u>S35 Count</u>	<u>P32 Count</u>
You Hua's Lab					
12	Middle of Bench by Sink	19.54	32.27	44.00	31.58
13	Floor by Bench	25.37	31.71	41.97	28.31
14	Refrigerator Handle	20.92	32.50	42.61	30.87
Front Cold Room Lab					
15	Fridge #4	19.37	32.94	43.38	32.30
16	Floor by Fridge #4	21.27	32.72	46.66	32.20
17	Inside left of Fridge #4	15.95	28.22	47.52	31.59
18	Inside right of Fridge #4	22.98	31.82	41.97	30.05
19	Inside door of Fridge #4	21.27	30.81	39.95	27.29
20	Ice chip from inside #4	24.86	32.04	41.65	28.11
21	Floor by Dry Ice Chest	22.46	27.32	39.41	27.09
Loading Dock					
22	Top of Right Barrel	24.36	33.51	44.96	25.04
23	Top of Middle Barrel	22.12	31.93	40.69	26.99

<u>#</u>	<u>Location</u>	<u>H3 Count</u>	<u>C14 Count</u>	<u>S35 Count</u>	<u>P32 Count</u>
Loading Dock (Cont.)					
24	Top of Left Barrel	25.20	30.58	42.72	30.36
25	Inside Right Barrel	19.71	28.22	40.59	26.78
26	Inside Middle Barrel	22.98	31.60	48.37	28.83
27	Inside Left Barrel	27.95	28.22	46.66	31.07
28	Floor by Barrels	20.58	31.93	41.86	27.70
320 Putnam-Lab 1					
29	Bench	19.54	31.37	44.10	30.46
30	Floor	24.69	29.12	47.08	29.65
320 Putnam-Lab 2					
31	Bench	23.15	28.79	44.11	33.22
32	Floor	21.08	31.03	38.99	26.58
320 Putnam-Lab 3					
33	Bench	22.63	29.46	41.12	29.65
34	Floor	21.61	30.36	44.11	29.13
320 Putnam-Lab 4					
35	Bench	25.73	32.04	41.65	27.70
36	Floor	22.85	32.50	43.15	29.65

<u>#</u>	<u>Location</u>	<u>H3 Count</u>	<u>C14 Count</u>	<u>S35 Count</u>	<u>P32 Count</u>
	320 Putnam-Lab 7				
37	Bench	21.44	31.82	43.36	29.75
38	Floor	19.90	33.06	44.53	31.48
	320 Putnam				
39	Background	20.41	32.61	40.16	26.27

US Ecology, Inc.
3766 Tulane Ave. NE
Louisville, Ohio 44641

216/875-1419
800/325-6899
Fax: 216/875-1868

USEcology

an American Ecology company

May 3, 1994

Dr. Brent Dorval, PhD.
Intracel Corporation
359 Allston Street
Cambridge, MA 02139

Re: Quotation No. 94141R

Dear Dr. Dorval:

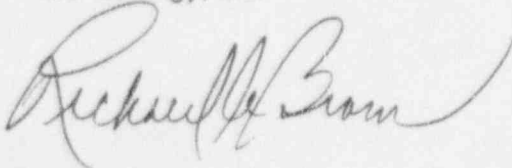
US Ecology is pleased to provide this quotation for the disposal of your dry solid waste with 3H contamination.

Our quoted price includes routine packaging materials, labeling, manifesting, transportation and disposal of the above described materials. Disposal site variance and/or export permits are also included if required by the compacts/states having jurisdiction. Our price for these services will be \$1,455.50/30 gallon drum. The cost of any required disposal site permit is not included. We will provide you with the necessary application forms and technical assistance in completing the form(s).

The quoted price is valid for 15 days from the date of this letter. The material, as represented by Intracel Corporation must conform to disposal site/processor criteria. Any material rejected for non-compliance will be returned to Intracel Corporation, and handling and transportation charges incurred would be billed in addition to the price quoted above.

Please contact us at (800)-888-8859 if you have any questions.

Sincerely,
US Ecology, Inc.



Richard A. Brown
General Manager

RAB/djh

cc: FWG KAP File
 TOK GAP

USEcology

an American Ecology company

Date: May 3, 1994

State of South Carolina
Department of Health & Environmental Control
Bureau of Radiological Health
2600 Bull Street
Columbia, South Carolina 29201

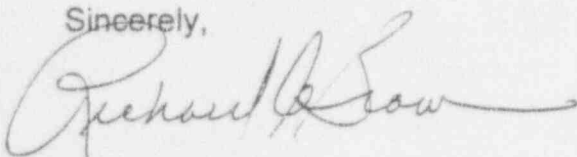
TO WHOM IT MAY CONCERN:

This is to inform your office that INTRACEL CORPORATION has contracted with US Ecology, Inc. for the transportation of low-level radioactive waste.

US Ecology, Inc. carries Nuclear Transporters Liability coverage in the amount of \$15,000,000 with American Nuclear Insurers, Policy No. NS 449. It also carries standard liability insurance of \$5,000,000.

Should you need any further information, please do not hesitate to contact the undersigned at 1-800-888-8859.

Sincerely,



Richard A. Brown
General Manager

RAB/djh

PICK-UP/DELIVERY SLIP

GENERATOR NO: P.O. D-1532

CUSTOMER NAME: Intracel Corp.
 ADDRESS: 359 Allston St.
Cambridge, MA 02139

TELEPHONE: (617) 547-5535

CONTACT PERSON: Dr. Brent Dorval

U.S. Ecology, Inc.
 9200 Shelbyville Rd.
 Suite 300
 Louisville, KY 40222
 800/626-5334


2574-20-944

CATEGORY	# OF DRUMS & TYPE (30 or 55 gallon)	DESTINATION			
		Richland WA	Pleasanton CA	Barnwell SC	Quadrex
Dry Solid	30 gal Drum ✓			1	
Absorbed Aqueous					
Absorbed Organic					
Non-exempt Vials					
Exempt Vials					
Bulk Liquids					
Carcasses					
OTHER					

SUPPLIES: 1 30 gal Drum ✓

TOTAL CU. FT.
4.1

DATE: 2/19/94

RECEIVED BY:


Attachment #3

