

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

BIO-SCIENCE LABS.
4212 ST. CHARLES ROAD
BELLWOOD ILLINOIS

60104

LICENSE: 12-16297-01
EXPIRATION DATE: 04/30/85
PROGRAM CODE: 02410
NOTICE DATE: 02/05/85

SUBJECT: NOTICE OF EXPIRATION

YOUR NRC LICENSE SPECIFIED ABOVE WILL EXPIRE ON THE DATE SHOWN. IF YOU WISH TO CONTINUE YOUR PROGRAM, YOU MUST SUBMIT AN APPLICATION FOR LICENSE RENEWAL.

IN THE PAST, WE HAVE REQUESTED THAT RENEWAL APPLICATIONS BE SUBMITTED IN THEIR ENTIRETY, WITH NO REFERENCES TO PREVIOUS SUBMITTALS. THIS ASSURED THAT COMPLETE, UP-TO-DATE INFORMATION ON LICENSEE PROGRAMS WAS SUBMITTED AT LEAST EVERY FIVE YEARS. IF YOU SO CHOOSE, YOU MAY SUBMIT A COMPLETE, UP-TO-DATE RENEWAL APPLICATION IN DUPLICATE WITH PROPER FEE, AS HAS BEEN DONE IN THE PAST.

HOWEVER, IN ORDER TO SIMPLIFY THE LICENSE RENEWAL PROCEDURE AND SAVE PAPERWORK, YOU MAY WISH TO CONSIDER AN ALTERNATIVE WHICH WOULD ALLOW SUBMITTAL OF ONLY THE ESSENTIAL INFORMATION WHICH IS NECESSARY FOR US TO ASSESS YOUR CURRENT PROGRAM AND ANY CHANGES YOU MAY REQUEST. IF YOU CHOOSE THIS ALTERNATIVE, YOU SHOULD DO THE FOLLOWING:

1. REVIEW YOUR CURRENT LICENSE TO DETERMINE THAT THE INFORMATION CONCERNING THE RADIONUCLIDES, CHEMICAL AND/OR PHYSICAL FORMS OF THE RADIONUCLIDES, QUANTITIES YOU WISH TO POSSESS, AND USES FOR THE RADIONUCLIDES ACCURATELY REPRESENTS YOUR CURRENT AND ANTICIPATED PROGRAM. IDENTIFY ANY ADDITIONS, DELETIONS, OR OTHER CHANGES. FOR ADDITIONS OR OTHER CHANGES, YOU MUST PREPARE INFORMATION CONCERNING PERSONNEL, FACILITIES, EQUIPMENT, AND RADIATION SAFETY PROCEDURES APPROPRIATE FOR THE REQUESTED ADDITIONS OR CHANGES.
2. REVIEW THE DOCUMENTS YOU HAVE SUBMITTED IN THE PAST TO DETERMINE THAT THE INFORMATION IN THEM IS UP-TO-DATE AND ACCURATELY REPRESENTS YOUR MANAGEMENT CONTROL PROGRAM, FACILITIES, EQUIPMENT, PERSONNEL, RADIATION SAFETY PROCEDURES, WASTE DISPOSAL PROCEDURES, LOCATION(S) OF USE, AND ANY OTHER INFORMATION PERTINENT TO YOUR PROGRAM. THE DOCUMENTS WHICH YOU CONSIDER TO BE THOSE WHICH REPRESENT YOUR CURRENT PROGRAM SHOULD BE IDENTIFIED. ANY OUT-OF-DATE AND SUPERSEDED DOCUMENTS SHOULD ALSO BE IDENTIFIED. (THOSE DOCUMENTS WHICH YOU HAVE SUBMITTED IN THE PAST WHICH ARE PART OF YOUR LICENSE ARE REFERENCED IN YOUR CURRENT LICENSE.) CHANGES SHOULD BE MADE IN THE DOCUMENTS, AS NECESSARY, TO REFLECT YOUR CURRENT PROGRAM.

8508220189 850802
REG3 LIC30
12-16297-01 PDR

3. REVIEW NRC REGULATIONS TO ASSURE THAT ANY CHANGES IN THE REGULATIONS ARE APPROPRIATELY COVERED IN YOUR PROGRAM DESCRIPTION. IN PARTICULAR, YOU SHOULD REVIEW 10 CFR PART 35 TO DETERMINE THE EFFECT OF CHANGES IN THIS REGULATION ON YOUR PROGRAM.
4. AFTER YOU HAVE COMPLETED YOUR REVIEW, YOU SHOULD SUBMIT A LETTER IN DUPLICATE WITH PROPER FEE, REQUESTING RENEWAL OF YOUR LICENSE. IF YOUR CURRENT LICENSE AND SUPPORTING DOCUMENTS ACCURATELY REFLECT YOUR PROGRAM, YOU SHOULD STATE THAT YOU WISH TO CONTINUE TO OPERATE UNDER YOUR CURRENT LICENSE, LIST THE DOCUMENTS BY DATE WHICH YOU HAVE PREVIOUSLY SUBMITTED THAT REFLECT YOUR CURRENT PROGRAM, AND STATE THAT YOU WILL CONTINUE TO OPERATE IN ACCORDANCE WITH THOSE DOCUMENTS AND APPLICABLE NRC REGULATIONS AND LICENSE CONDITIONS. ANY OBSOLETE OR SUPERSEDED DOCUMENTS SHOULD BE DELETED.
5. IF YOUR CURRENT LICENSE AND/OR SUPPORTING DOCUMENTS DO NOT REFLECT YOUR CURRENT PROGRAM, YOU SHOULD IDENTIFY AND DESCRIBE CHANGES AS APPROPRIATE. IF YOU REQUEST ADDITIONAL AUTHORIZATION AND CHANGES IN YOUR PROGRAM, YOU SHOULD INCLUDE APPROPRIATE SUPPORTING DOCUMENTS IN DUPLICATE.
6. PLEASE INCLUDE THE NAME AND TELEPHONE NUMBER OF THE PERSON WHO MAY BE CONTACTED CONCERNING YOUR RENEWAL APPLICATION, AND INCLUDE YOUR CORRECT MAILING ADDRESS IF IT IS NOT INDICATED CORRECTLY ON YOUR LICENSE.

IT IS IMPORTANT THAT THE INFORMATION YOU PROVIDE IN YOUR APPLICATION FOR LICENSE RENEWAL, AND WHICH WILL BECOME PART OF YOUR LICENSE BY REFERENCE, ACCURATELY REFLECTS YOUR PROGRAM. YOU WILL BE EXPECTED TO FULFILL THE COMMITMENTS YOU MAKE. YOU WILL BE INSPECTED AGAINST THOSE COMMITMENTS AS WELL AS NRC REGULATIONS AND THE TERMS AND CONDITIONS OF YOUR LICENSE.

AFTER OUR REVIEW OF YOUR APPLICATION FOR LICENSE RENEWAL, WE RESERVE THE RIGHT TO REQUEST ANY ADDITIONAL INFORMATION, INCLUDING A COMPLETE UP-TO-DATE APPLICATION, WHICH WE DEEM NECESSARY PRIOR TO ISSUANCE OF A RENEWAL LICENSE. IN PARTICULAR, UP-TO-DATE INFORMATION MAY BE REQUESTED FOR LICENSES WHICH HAVE BEEN AMENDED FREQUENTLY OR ARE SUPPORTED BY A LARGE NUMBER OF FRAGMENTED OR DISJOINTED DOCUMENTS.

IF YOUR APPLICATION FOR LICENSE RENEWAL IS FILED AT LEAST THIRTY (30) DAYS BEFORE THE EXPIRATION DATE OF YOUR LICENSE AND THE APPLICATION IS ACCOMPANIED BY THE APPROPRIATE FEE FOR LICENSE RENEWAL, YOUR LICENSE WILL AUTOMATICALLY REMAIN IN EFFECT UNTIL FINAL ACTION IS TAKEN ON YOUR APPLICATION. HOWEVER, IF YOUR APPLICATION IS FILED LESS THAN THIRTY (30) DAYS BEFORE THE EXPIRATION DATE AND IT CANNOT BE PROCESSED BEFORE THAT DATE, YOU COULD BE WITHOUT A VALID LICENSE WHEN THE LICENSE EXPIRES.

LICENSE NO: 12-16297-01

- 3 -

IT IS IMPORTANT THAT THE APPROPRIATE FEE FOR LICENSE RENEWAL ACCOMPANY YOUR APPLICATION FOR LICENSE RENEWAL. IN ACCORDANCE WITH SECTION 170.12 OF 10 CFR PART 170, NO APPLICATION WILL BE ACCEPTED FOR FILING OR WILL BE PROCESSED BEFORE THE PROPER FEE IS PAID.

AN IMPORTANT ELEMENT OF THE REGULATORY PROCESS IS THE MAINTENANCE OF AN UP-TO-DATE LICENSE. IT IS YOUR RESPONSIBILITY TO REQUEST A LICENSE AMENDMENT FOR CHANGES YOU WISH TO MAKE IN YOUR PROGRAM. CHANGES IN YOUR PROGRAM MAY NOT BE IMPLEMENTED UNTIL YOU RECEIVE THE LICENSE AMENDMENT. IF YOUR LICENSE IS KEPT UP-TO-DATE, FUTURE LICENSE RENEWALS SHOULD BE SIMPLE AND STRAIGHTFORWARD.

IF YOU DO NOT WISH TO RENEW YOUR LICENSE, YOU MUST DISPOSE OF ALL LICENSED RADIOACTIVE MATERIAL IN YOUR POSSESSION IN A MANNER AUTHORIZED IN 10 CFR PART 20, COMPLETE THE ENCLOSED FORM NRC-314, "CERTIFICATE OF DISPOSITION OF MATERIALS," AND RETURN IT BEFORE THE EXPIRATION DATE OF YOUR LICENSE WITH A REQUEST THAT YOUR LICENSE BE TERMINATED. IF YOU CANNOT DISPOSE OF ALL LICENSED RADIOACTIVE MATERIAL IN YOUR POSSESSION BEFORE THE EXPIRATION DATE, YOU MUST REQUEST A LICENSE RENEWAL FOR STORAGE ONLY OF THE RADIOACTIVE MATERIAL TO AVOID VIOLATIONS OF POSSESSING LICENSEABLE MATERIAL WITHOUT A VALID LICENSE.

MATERIAL LICENSING BRANCH
DIVISION OF FUEL CYCLE AND
MATERIAL SAFETY

ENCLOSURES:

NRC-313M

NRC-314

REG. GUIDE 10.8

10 CFR PARTS 20, 30, 35, 170

1. Name of Organization (Generator) AMERICAN BIO-SCIENCE LABORATORIES

2. Address 4212 West St. Charles Road, Bellwood, Illinois 60104

3. Principal Officers:

Name James G. Connelly Title President

Name James A. Inkpen Title VP Central Region/Director

Name _____ Title _____

Name _____ Title _____

4. Contact Person James A. Inkpen Phone 1-312-883-2010

5. LLRW Reg. Number: OWT- _____

6. Place an "x" beside the item which best characterizes your facility.

- ☐ a. Fuel cycle/reactor
- ☒ b. Medical
- ☐ c. Industrial
- ☐ d. Institutional/Research
- ☐ e. Other (specify) _____

7. Place an "x" beside the source reduction techniques you are currently using.

- ☐ a. High pressure water
- ☒ b. Evaporation
- ☒ c. Limitation of contaminateed areas
- ☐ d. Limitation of articles in contaminated areas
- ☒ e. Sorting of waste by radioisotope, half-life, or activity
- ☒ f. Employment of techniques alternative to those using radionuclides
- ☐ g. Employment of water-miscible scintillation fluids that can be disposed by dilution
- ☐ h. Removable coating on machinery and tools
- ☐ i. Recycling
- ☐ j. Other (specify) _____

8. Place an "x" beside the source reduction techniques you are projecting for use from 1985 through 1993. State the year of projected use.

NOT RELEVANT - SITE CLOSING JUNE 1, 1985

- ☐ a. High pressure water _____
- ☐ b. Evaporation _____
- ☐ c. Limitation of contaminated areas _____
- ☐ d. Limitation of articles in contaminated areas _____

- ☐ e. Sorting of Waste by Radioisotope, half-life, or activity
- ☐ f. Employment of techniques alternative to those using radionuclides
- ☐ g. Employment of water-miscible scintillation fluids that can be disposed of by dilution
- ☐ h. Removable coating on machinery and tools
- ☐ i. Recycling
- ☐ j. Other (specify)

9. What is the maximum amount of LLW by volume, type and classification (10 CFR 61) and total curie content that your existing waste storage facility can hold?

- a. Volume 250 Gallons
- b. Type H^3 , Co^{60} , I
- c. Classification Very Low Levels
- d. Total Curie Count 0.1

10. Do you plan to make any changes in storage capacity from 1985 through 1993? Please describe these plans.

No Changes

11. What is the length of time your current radioactive materials license allows you to store LLW?

90 Days

12. Do you plan to request license revisions to extend the storage time currently provided for in your license? Yes _____ No X
If yes, explain:

13. Place an "x" beside the methods you are currently using to dispose of LLW.

- ☒ a. Decay then dispose of as non-radioactive waste
- ☐ b. Dispose of as hazardous chemical waste
- ☐ c. Return to manufacturer or radiopharmacy
- ☒ d. Use a LLW broker to arrange final disposal
- ☒ e. Dispose of limited quantities by dilution
- ☐ f. Ship directly to a LLW disposal site
- ☐ g. Incinerate on-site

14. Place an "x" beside the methods you plan to use to dispose of LLW from 1985 through 1993. State the year of projected use.

- ☒ a. Decay then dispose of as non-radioactive waste _____
- ☐ b. Dispose of as hazardous chemical waste _____
- ☐ c. Return to manufacturer or radiopharmacy _____
- ☒ d. Use a LLW broker to arrange final disposal _____
- ☒ e. Dispose of limited quantities by dilution _____
- ☐ f. Ship directly to a LLW disposal site _____
- ☐ g. Incinerate on-site _____

15. Place an "x" beside waste treatment techniques you are currently using.

- ☐ a. Incineration
- ☒ b. Compaction
- ☐ c. Shreading
- ☐ d. Recycling
- ☐ e. Solidification
- ☒ f. Evaporation
- ☐ g. Ion Exchange Resins
- ☐ h. Chemical Treatment (Extraction)
- ☐ i. Absorption
- ☐ j. Strippable Coatings
- ☐ k. Washing
- ☒ l. Other (specify) _____ Decay

16. Place an "x" beside any waste treatment techniques you plan to use from 1985 through 1993. State the year of projected use.

- ☐ a. Incineration _____
- ☒ b. Compaction _____
- ☐ c. Shreading _____
- ☐ d. Recycling _____
- ☐ e. Solidification _____
- ☒ f. Evaporation _____
- ☐ g. Ion Exchange Resins _____
- ☐ h. Chemical Treatment (Extraction) _____
- ☐ i. Absorption _____
- ☐ j. Strippable Coatings _____
- ☐ k. Washing _____
- ☒ l. Other (specify) _____ Decay

17. Approximately what volume reduction from contaminated material to final waste form is achieved using current source and volume reduction techniques?

a. Source reduction 50.0 %
b. Volume reduction 85.0 %

18. During the period between December 13, 1983, and December 31, 1984, what amount of LLW by volume, type and classification (10 CFR 61) and total curie content did you:

a. produce or possess:

SEE ATTACHED

b. store for treatment or disposal:

SEE ATTACHED

c. ship for disposal at a LLW site (include dates, destination and means of shipment):

SEE ATTACHED

19. Did any of the waste contain:

Yes / No

		a. Hazardous Chemical Waste (40 CFR 261)
		b. Chelating Agents
X		c. Biological Waste

20. During the period between January 1, 1985, and December 31, 1985, what amount of LLW by volume, type and classification (10 CFR 61) and total curie content do you project:

a. to produce or possess: Site will be closed as of June 1, 1985.

b. to store for treatment or disposal: Site will be closed as of June 1, 1985. LLW Broker to be used for close down disposal.

c. to ship: 300 Gallons by LLW Broker

21. During the period between January 1, 1986, and December 31, 1993, what amount of LLW by volume, type and classification (10 CFR 61) and total curie content do you project:

a. to produce or possess: NOT APPLICABLE - SITE CLOSED

b. to store for treatment or disposal: NOT APPLICABLE - SITE CLOSED

c. to ship: NOT APPLICABLE - SITE CLOSED

22. Do you project that any of this LLW will contain:

Yes / No	NOT APPLICABLE - SITE CLOSED
<input type="checkbox"/>	a. Hazardous Chemical Waste (40 CFR 261)
<input type="checkbox"/>	b. Chelating Agents
<input type="checkbox"/>	c. Biological Waste

23. During the period of December 13, 1983, through December 31, 1984, did you report and pay applicable fees to the Department of Nuclear Safety for the waste which was shipped for storage, treatment or disposal or stored for subsequent treatment or disposal?

Stored:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	To the Best of our Knowledge
Shipped:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

24. Have you studied the technological and economic feasibility and environmental soundness of alternative treatment, storage and disposal methods? Describe briefly:

NOT APPLICABLE -- SITE TO BE CLOSED AS OF JUNE 1, 1985

25. Comments:

RADIOACTIVE WASTE DISPOSAL 1984

<u>DATE</u>	<u>#55 Gallon Drums (7.5 cu.ft.)</u>	<u>Type</u>	<u>Classification</u>	<u>Contents, Each Drum, MilliCurie</u>
1/11/84	3	LSA	A	.100 I ¹²⁵ , .010 Co ⁵⁷
2/20/84	4	LSA	A	.010 I ¹²⁵ , .010 Co ⁵⁷ , .010 H ³
3/14/84	3	LSA	A	.100 I ¹²⁵ , .010 Co ⁵⁷
	1	LSA	A	.100 I ¹²⁵ , .010 Co ⁵⁷ , .050 H ³
4/17/84	3	LSA	A	.100 I ¹²⁵ , .050 Co ⁵⁷
5/30/84	4	LSA	A	.050 I ¹²⁵ , .020 Co ⁵⁷
6/28/84	4	LSA	A	.100 I ¹²⁵ , .010 Co ⁵⁷
8/20/84	4	LSA	A	.100 I ¹²⁵ , .015 Co ⁵⁷
9/15/84	3	A2	A	.100 I ¹²⁵ , .050 Co ⁵⁷
	1	A2	A	.100 H ³
10/16/84	4	A2	A	.100 I ¹²⁵ , .015 Co ⁵⁷
11/16/84	4	A2	A	.100 I ¹²⁵ , .015 Co ⁵⁷
12/12/84	4	A2	A	.100 I ¹²⁵ , .010 Co ⁵⁷

TOTAL FOR 1984 42 Drums = 315 Cubic Feet

¹²⁵ I = 3.54 MilliCuries

⁵⁷ Co = 0.75 MilliCuries

³ H = 0.19 MilliCuries

All waste consigned to: Adcom Express, Inc.
 17650 Duvan Drive
 Tinley Park, Illinois 60477