

2007 FEB - 5 PM 1: 36

Matthew Oristano Chairman matt@reactionbiology.com

NMCG/RGNI MATERIALS-002

January 31, 2007

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NMSBZ

Attention: LAT Division of Nuclear Materials Safety U.S. NRC Region I 475 Allendale Road King of Prussia, PA 19406

Subject: Reaction Biology Corp. 03037093 Request to Increase Authorized License Limits NRC License No. 37-31106-01 IES Project No. EHS06672.01

To Whom It May Concern:

Reaction Biology Corp. (Reaction Biology) of Malvern, Pennsylvania, NRC License No. 37-31106-01, would like to request the addition of 14 C and 3 H to our license as outlined below.

a. Element and Mass Number	b. Chemical and/or physical form	c. Maximum amount to be possessed at any one time
Carbon 14 (^{14}C)	bound/non-volatile	50 millicuries
Tritium (³ H)	bound/non-volatile	100 millicuries

Reaction Biology is requesting the addition of ¹⁴C and ³H to allow us to service additional clients. The purpose(s) for which licensed material will be used will remain the same and we do not expect existing staff exposure to increase from the addition of these isotopes to the license. (Actually, considering to the very low energy of ³H and ¹⁴C employee exposure may decrease.) We are prepared to properly store and dispose of any long half-life waste generated.

As we have potential customer interested in our ability to perform their assay with ${}^{3}H$ or ${}^{14}C$ right now, we would appreciate your prompt attention to our request.

1764 Litchfield Turnpike, Suite 203 • Woodbridge, CT 06525 • 203-389-7407

Should you have any questions regarding this request, please feel free to contact Ms. Jessica Leonard of IES Engineers at 610-828-3078. If not, we look forward to receiving an updated version of our license.

Sincerely,

Matthew Oristano Chairman

cc: H. Ma, Reaction Biology J. Leonard, IES

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ITEM 1

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THIS IS AN APPLICATION FOR B. Amendment to License Number 37-31129-01

ITEM 2

NAME AND ADDRESS OF APPLICANT (INCLUDE ZIP CODE) Reaction Biology Corp. One Great Valley Parkway Suite 8 Malvern, PA 19355

ITEM 3 ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED One Great Valley Parkway Suite 8 Malvern, PA 19355

ITEM 4

NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Haiching Ma, Ph.D. or Ms. Jessica Leonard (IES Engineers)

TELEPHONE NUMBER

610-722-0247 (Jessica Leonard office 610-828-3078)

ITEM 5

RADIOACTIVE MATERIAL

a. Element and Mass Number	b. Chemical and/or physical form	c. Maximum amount to be possessed at any one time
Phosphorus 32	bound/non-volatile	100 millicuries
Phosphorus 33	bound/non-volatile	100 millicuries
Hydrogen 3	bound/non-volatile	100 millicuries
Carbon 14	bound/non-volatile	50 millicuries

ITEM 6

PURPOSE(S) FOR WHICH LICENSE MATERIAL WILL BE USED

Reaction Biology Corporation uses a patent-pending mix of established technologies to perform High Throughput Screening at the nanoliter scale, while preserving quality, speed and simplicity. Radioactive materials will be used for high throughput screening in accordance with the amounts, forms and purposes described above. Animal studies will not be conducted.

This is to acknowledge the receipt of your letter/application dated

includes an administrative review has been performed.

There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number 140052 When calling to inquire about this action, please refer to this control number. You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI) (6-96)

Sincerely, Licensing Assistance Team Leader 1