

**STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT**

**NEW MEXICO ENVIRONMENT DEPARTMENT
RADIATION CONTROL BUREAU**

No. RCB

Complainant,

v.

LOVELACE BIOMEDICAL RESEARCH INSTITUTE,

Respondent.

**ADMINISTRATIVE ORDER REQUIRING
COMPLIANCE AND ASSESSING A CIVIL PENALTY**

Pursuant to the New Mexico Radiation Protection Act (“Act”), NMSA 1978, Sections 74-3-1 to -16 (1953, as amended through 2003), the Secretary of the New Mexico Environment Department (“Department”), acting through his designee, the Director of the Environmental Protection Division, issues this Administrative Compliance Order (“ Compliance Order”), on behalf of the Department’s Radiation Control Bureau (“ Bureau”), to Lovelace Biomedical Research Institute (“Respondent”), to assess a civil penalty for violations of the Act and the New Mexico Radiation Protection Regulations (“Regulations”), 20.3 NMAC, and to compel compliance with the Act, the Regulations and with the terms and conditions of New Mexico Radioactive Material License Number BB496-07 issued to Respondent.

I. FINDINGS

1. The Department is an agency of the executive branch of the State of New Mexico created pursuant to NMSA 1978, Section 9-7A-4 (2005).
2. The Department is charged with the administration and enforcement of the Act and the Regulations. NMSA 1978, § 74-1-7(A)(5) (2000).

3. The Division is an organizational unit of the Department. Pursuant to the Delegation Order dated September 14, 2020, the Secretary of the Department has delegated to the Director of the Division authority to seek administrative enforcement of the Act and the Regulations, including assessing civil penalties for violations thereof in accordance with NMSA 1978, Section 74-3-11.1 (2003). The Bureau is an organizational unit of the Division.

4. The Respondent is a domestic non-profit corporation incorporated in New Mexico with a mailing address of 2425 Ridgecrest Dr. SE, Albuquerque, NM 87108. The Respondent is on a 140-acre land parcel located on the Kirtland Air Force Base East, Area-Y in Bernalillo County, New Mexico (“Facility”).

5. Prior to December 30, 2019, Respondent was known as Lovelace Respiratory Research Institute or “LRRRI”. On December 30, 2019, Respondent executed a corporate name change from Lovelace Respiratory Research Institute to Lovelace Biomedical Research Institute.

6. Respondent is a person as defined in the Act, NMSA 1978, Section 74 -3-4(H), and the Regulations, 20.3.1.7(PP)NMAC.

7. During all times relevant to this Compliance Order, Respondent has held New Mexico Radioactive Material License Number BB496-07 (“License”), issued on February 24, 2014, and most recently amended on August 20, 2020, by the Department pursuant to 20.3.3.303(B) NMAC. **NMED Exhibit A.**

8. Respondent submitted its license application to the Bureau on December 20, 2013 due to a change in jurisdiction from the United States Nuclear Regulatory Commission (“NRC”) License No. 30-29237-01 to the State of New Mexico. This change was made in response to a transfer of real property from the United States Department of Energy (“DOE”), Office of

National Nuclear Security Administration to the Respondent on June 12, 2013 through a Quitclaim Deed.

9. Pursuant to Respondent's License condition #32, "[t]he licensee shall prepare a Decommissioning Plan in accordance with the provisions in 20.3.3.318.H and the NRC guidance NUREG-1757 and shall submit the Decommissioning Plan for Department approval by May 30, 2017."

10. On May 17, 2017, the Respondent submitted a request for a 60-day extension of the deadline for submittal of the Decommissioning Plan ("DP"). The Bureau approved this request via email on May 17, 2017.

11. On July 31, 2017, Respondent submitted its DP to the Bureau, which was prepared by CNA Associates, Inc., on behalf of Respondent. The DP also served as the decommissioning funding plan submittal as required by 20.3.3.311(A)(1) NMAC.

12. Pursuant to 20.3.3.311(A)(1) NMAC, "[e]ach applicant for a specific license authorizing the possession and use of unsealed radioactive material (except source material which is subject to Paragraph (3) of this subsection) of half-life greater than 120 days in quantities exceeding 100,000 (1E+5) times the applicable quantities set forth in 20.3.3.338 NMAC, shall submit a decommissioning funding plan as described in Subsection E of this section . The decommissioning funding plan must also be submitted when a combination of radioisotopes is involved if R divided by 100,000 (1E+5) is greater than 1 (unity rule), where R is defined here as the sum of the ratios of the quantity of each radioisotope to the applicable value in 20.3.3.338 NMAC." (emphasis added).

13. Respondent's License meets the requirements in 20.3.3.311(A)(1) NMAC, and therefore Respondent is regulatorily required to submit a decommissioning funding plan as described in 20.3.3.311(E) NMAC.

14. Pursuant to 20.3.3.311(E) NMAC, each decommissioning funding plan must be submitted to the Bureau for their review and approval. The decommissioning funding plan must contain a detailed cost estimate for decommissioning in an amount that meets the requirements in 20.3.3.311(E)(a) through (g) NMAC.

15. The decommissioning cost estimate proposed by Respondent is \$8,485,253.00. The DP stated that, "[t]he amount of the facility-specific cost estimate will support the minimum required level of financial assurance coverage to be established by [Respondent]." (emphasis added) **NMED Exhibits B and C.**

16. Included with the decommissioning cost estimate is a 25% contingency fee. The contingency fee is a necessary component of a decommissioning cost estimate since it is used to cover costs for unforeseen issues that may arise during decommissioning; having funds set aside for that purpose provides the Bureau with the assurance that a facility will have sufficient funds to fully decommission its site, should unexpected issues arise. The 25% contingency fee is in the amount of \$1,797,369.00. **NMED Exhibit C.**

17. Page 11, section 1.3 of the DP stated that "[Respondent] will modify the financial assurance to be in the form of a surety bond in the amount of \$8.5 M." **NMED Exhibit C.**

18. Respondent maintains an Irrevocable Standby Letter of Credit with Bank of the West in the amount of \$1,500,000.00, executed on March 3, 2015 and received by the Bureau on March 4, 2015. **NMED Exhibit D.**

19. Respondent's financial instrument is for \$1,500,000.00 and therefore it does not cover the cost estimate for decommissioning as required by 20.3.3.311(E)(1)(g) NMAC. Per 20.3.3.311(E)(1)(g) NMAC, a licensee is required to provide a signed original of the financial instrument obtained to satisfy the requirement of 20.3.3.311(F) NMAC, unless a previously submitted and accepted financial instrument continues to cover the cost estimate for decommissioning. Respondent's financial instrument of \$1,500,000.00 does not cover the cost estimate for decommissioning and therefore Respondent is required to increase its financial assurance and provide a financial instrument in the amount of \$8,485,253.00.

20. Pursuant to 20.3.3.311(E)(1)(f) NMAC, a licensee must certify that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning. In this case the cost estimate for decommissioning is \$8,485,253.00 and Respondent's financial instrument is for \$1,500,000.00. Therefore, Respondent is unable to certify that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning as required by 20.3.3.311(E)(1)(f) NMAC.

21. 20.3.3.311(F) NMAC requires a licensee to provide financial assurance for decommissioning by one of the methods outlined in 20.3.311(F)(1) through (3) NMAC. Those methods allow a licensee to provide financial assurance by prepayment, a surety method, insurance or other guarantee method, or an external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. 20.3.3.311(F)(1) through (3) NMAC.

22. Respondent's financial instrument of \$1,500,000.00 will also not cover the cost for an independent contractor to perform the decommissioning work as required by 20.3.311(E)(1)(a) NMAC.

23. Pursuant to 20.3.3.311(E)(1)(a) NMAC, the decommissioning cost estimate must be in an amount that reflects the cost of an independent contractor to perform all decommissioning activities. Having funds set aside for an independent contractor to perform decommissioning activities is an important part of the decommissioning cost estimate since the licensee may be unable or unwilling to decommission its site. Thus, licensees cannot reduce their decommissioning cost estimate by assuring the Bureau that they will perform the decommissioning work themselves.

24. On August 16, 2017, in response to Respondent's DP, the Bureau required Respondent to increase its financial assurance from \$1,500,000.00 to \$14,378,952.00. The Bureau informed Respondent that, due to the history of the Facility and the fact that a site characterization of the license location conditions was not done during the development of the DP, Respondent should increase the contingency fee from 25% to 100%, therefore increasing the decommissioning cost estimate from \$8,485,253.00 to \$14,378,952.00.

25. On September 6, 2017, Respondent requested that the Bureau reconsider its recommendation of increasing the contingency fee from 25% to 100%; Respondent claimed that the work completed with DOE in the 1990's and extending into 2010 in support of the property ownership transfer justifies a 25% contingency fee, not a 100% contingency fee. Respondent also requested relief from maintaining financial assurance in the amount of \$8,485,253.00, instead maintaining the current financial assurance of \$1,500,000.00. Respondent claimed a financial hardship and stated that it "operates on a modest budget with zero profit margins."

26. On October 10, 2017, the Bureau denied Respondent's request to lower the amount of financial assurance because it would conflict with 20.3.3.311 NMAC and Respondent's license possession limits. The Bureau continued to recognize the 25% contingency fee as too low,

however, it was willing to accept the proposed decommissioning cost estimate of \$8,485,253.00 and not \$14,378,952.00.

27. On October 19, 2017, Respondent claimed that its bank would not increase its financial assurance and if the Bureau required Respondent to increase its financial assurance it would negatively affect the viability of Respondent's business. Respondent requested a meeting with the Department to discuss this issue in further detail.

28. On November 10, 2017 the Department and Respondent met to discuss the contested issues but they were unable to come to a resolution.

29. On July 17, 2018, the Department and Respondent met so they could continue discussions regarding the contested issues. At the meeting, Respondent provided the Department with a letter summarizing the work it had done to date. Most notably, Respondent stated that, as of June 3, 2018, it reduced the total estimated decommissioning cost from \$8,485,253.00 to \$2,570,594.00 by removing and disposing of certain radioactive materials.

30. Despite Respondent's efforts to reduce its inventory, the Bureau could not accept the reduced financial assurance of \$2,570,594.00 because it violated 20.3.3.311 NMAC and Respondent's authorized license possession limits. The requirement to provide financial assurance is based on the authorized license possession limits specified in a licensee's New Mexico Radiation Control Bureau license. 20.3.3.311(A)-(D) NMAC. In general, above a threshold quantity of radioactive material, a licensee must provide increasing amounts of financial assurance as its authorized license possession limits increase. *Id.*

31. Respondent's authorized license possession limits did not change from the July 31, 2017 DP, which provided a decommissioning cost estimate of \$8,485,253.00; so, the Bureau could not accept the reduced financial assurance of \$2,570,594.00. As required by the

Regulations and page 8-1, section 8, of the NRC guidance document NUREG 1757 Vol. 3, Rev. 1, when a licensee provides financial assurance that is based on a site-specific decommissioning cost estimate, the amount of financial assurance must cover the amount of the last approved cost estimate. 20.3.3.311(E)(1)(f) NMAC. In this case, the last approved cost estimate was for \$8,485,253.00. **NMED Exhibit E.**

32. A licensee cannot reduce its financial assurance simply by reducing its inventory. If a licensee would like to adjust its financial assurance downward, a licensee must address any changes to its authorized license possession limits and resubmit its decommissioning funding plan for Bureau approval. 20.3.3.311(E)(2)(e) NMAC. As such, the Bureau could not accept the reduced financial assurance of \$2,570,594.00 because Respondent failed to address any changes to its authorized possession limits. The Bureau was also unable to verify Respondent's reduction in inventory due to incomplete records associated with their disposal activities.

33. On April 3, 2019, Respondent informed the Secretary of Environment that it had reduced its inventory even further and provided a revised decommissioning cost estimate to the Department of \$777,414.00.

34. Despite numerous attempts by the Bureau to verify Respondent's removal and disposal activities from 2015 to 2020, the Bureau has been unable to verify Respondent's reduction in inventory due to incomplete records associated with the disposal of the radionuclides that resulted in the reduced decommissioning cost estimate from \$8,485,253.00 to \$2,570,594.00 and from \$2,570,594.00 to \$777,414.00.

35. Pursuant to 20.3.3.326(A) NMAC, "[t]he licensee who disposed of the material shall retain each record of disposal of radioactive material until the department terminates each license that authorizes disposal of the material." Per 20.3.4.448(A) and (C) NMAC, each

licensee shall maintain disposal records of licensed materials made pursuant to 20.3.4.434 NMAC, 20.3.4.435 NMAC, 20.3.4.436 NMAC, 20.3.4.437 NMAC and 20.3.3 NMAC until the Department terminates each pertinent license or registration requiring the record.

36. On April 30, 2019, the Bureau issued a Notice of Violation (“NOV”) to Respondent for failure to provide disposal records that each licensee is required to maintain pursuant to 20.3.3.326(A) NMAC, 20.3.4.448(A) NMAC, and 20.3.4.448(C) NMAC. Specifically, the waste records reviewed by Bureau staff during an announced inspection on March 11 and 12, 2019, lacked records of receipt, transfer, waste storage, and final transportation manifests. In the NOV, the Bureau informed Respondent that “[r]esolution of this NOV will influence the determination of the amount of financial assurance coverage [Respondent] is required to maintain.” Once the Bureau is able to verify and approve of the reduction in inventory, Respondent may amend its license and reduce its license possession limits, thereby reducing the decommissioning cost estimate and associated financial assurance. **NMED Exhibit F.**

37. Respondent provided a response to the April 30, 2019 NOV on May 9, 2019 disputing the violations. Respondent claimed that the requested waste records were made available to Bureau staff and attached a copy of the radioactive waste disposal records that it has on file.

38. On August 26, 2019, the Bureau informed Respondent that it will require Respondent to maintain financial assurance of \$8,485,253.00 until Respondent can provide the Bureau with the records associated with the disposal of the radionuclides that resulted in the reduced decommissioning cost estimate from \$8,485,253.00 to \$2,570,594.00, and from \$2,570,594.00 to \$777,414.00. The Bureau told Respondent that it must provide the requested records within a certain timeframe or the Bureau will require Respondent to maintain financial assurance in the amount of \$8,485,253.00.

39. Due to incomplete manifests, records, and inventory provided to the Bureau, the Bureau has been unable to accurately verify Respondent's removal and disposal activities that resulted in the reduced decommissioning cost estimate from \$8,485,253.00 to \$777,414.00.

40. Until the Bureau is able to accurately verify Respondent's removal and disposal activities and Respondent amends its authorized license possession limits, the Bureau will require Respondent to maintain financial assurance in the amount of \$8,485,253.00 as required by 20.3.3.311 NMAC.

II. CONCLUSIONS OF LAW

41. Paragraphs 1 through 40 are incorporated herein by reference.

42. Respondent is subject to the requirements of the Act and the Regulations as well as the provisions and conditions of the Radioactive Material License issued to it by the State of New Mexico.

43. The conduct of Respondent violated the Regulations as set forth below.

III. VIOLATIONS

44. **Violation No. 1:** Respondent violated 20.3.3.311(E)(1)(f) and (g) NMAC and 20.3.3.311(F) NMAC when it failed to provide a signed original of the financial instrument in the amount of \$8,485,253.00 in order to satisfy 20.3.3.311(F) NMAC, which requires the licensee to provide financial assurance in the amount to cover the cost estimate for decommissioning. Respondent submitted a decommissioning funding plan to the Bureau as required in 20.3.3.311(A) NMAC, which contains a cost estimate of decommissioning in the amount of \$8,485,253.00.

45. **Violation No. 2:** Respondent violated 20.3.3.311(G) NMAC when it failed to maintain records of information important to the decommissioning of the facility. Respondent violated 20.3.3.326(A) and 20.3.4.448(A) and (C) NMAC when it failed to maintain records of the

disposal of licensed radioactive materials made pursuant to 20.3.4.434 NMAC, 20.3.4.435 NMAC, 20.3.4.436 NMAC, 20.3.4.437 NMAC, and 20.3.3 NMAC. During the March 11 and 12, 2019 inspection, one of the Bureau inspectors requested the most recent waste disposal records and Respondent failed to provide them. To date, the Bureau has not received them. The Regulations require a licensee to maintain all records of disposal of licensed material until the Department terminates the license.

IV. CIVIL PENALTY

46. NMSA 1978, Section 74-3-11.1(B) of the Act authorizes the assessment of civil penalties of up to Fifteen Thousand Dollars (\$15,000) per day for each violation of the Act, the Regulations, or a condition of a license issued pursuant to the Act. The Department hereby assesses a civil penalty of \$225,000.00 for Respondent's two violations. The penalty is calculated based on the factors set forth in the Department's Radiation Control Bureau Civil Penalty Assessment Policy and upon such other factors as justice may require. The penalty was calculated as follows:

<u>Violation</u>		<u>Amount</u>
No. 1	Failure to comply with 20.3.3.311(E)(1)(f) and (g) NMAC and 20.3.3.311(F) NMAC	\$182,400.00
No. 2	Failure to comply with 20.3.3.311(G) NMAC, 20.3.3.326(A) NMAC, and 20.3.4.448(A) and (C) NMAC	\$42,600.00
	TOTAL:	\$225,000.00

47. Within 45 days of this Order becoming final, the Respondent shall remit the civil penalty found in paragraph 46 to the Department. Payments shall be made by certified or cashier's check payable to the State of New Mexico and mailed to:

New Mexico Environment Department
Radiation Control Bureau
Attention: Santiago Rodriguez, Bureau Chief
P.O. Box 5469
Santa Fe, New Mexico 87502-5469

48. Failure to take corrective action and timely comply with the foregoing requirements of this Order, the Secretary of the Department, pursuant to NMSA 1978, Section 74-3-11.1(B) of the Act, may assess additional civil penalties of not more than \$15,000 for each day of noncompliance with the Order.

V. SCHEDULE OF COMPLIANCE

49. Based on the foregoing findings and conclusions, and pursuant to 20.3 NMAC, and NMSA 1978, Section 74-3-11.1(A) of the Act, Respondent shall increase its financial assurance from \$1,500,000.00 to \$8,485,253.00 and provide the Bureau with a signed original of the financial instrument in the amount of \$8,485,253.00 within 45 days of this Order becoming final. The financial instrument must meet the requirements in 20.3.3.311(F) NMAC.

VI. NOTICE OF OPPORTUNITY TO ANSWER AND REQUEST A HEARING

50. Under the NMSA 1978, Section 74-3-11.1(D) of the Act, this Order shall become final unless, no later than thirty (30) days after the Order is served, Respondent submits a written request to the Secretary for a public hearing to:

Pamela Jones, Hearing Clerk
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502
public.facilitation@state.nm.us

A copy of this Order must be attached to the Request for Hearing. 20.1.5.200.A(2)(d) NMAC.

51. The request for Hearing shall include an Answer. Respondent's Answer shall clearly and directly admit, deny or explain each of the factual allegations contained in the Order

with regard to which Respondent has any knowledge. Where Respondent has no knowledge of a particular factual allegation, Respondent should so state, and Respondent may deny the allegation on that basis. Any allegation of the Order not specifically denied shall be deemed admitted. 20.1.5.200.A(2)(a) NMAC.

52. Respondent's Answer shall also include any affirmative defenses upon which Respondent intends to rely. Any affirmative defenses not asserted in the Answer and Request for Hearing, except a defense asserting lack of subject matter jurisdiction, shall be deemed waived. 20.1.5.200.A(2)(b) NMAC.

53. The Answer shall be signed under oath or affirmation that the information contained therein is, to the best of the signer's knowledge, true and correct. 20.1.5.200.A(2)(c) NMAC.

54. The public hearing shall be governed by the Department's Adjudicatory Procedures, 20.1.5 NMAC (available at www.nmenv.state.nm.us).

VII. FINALITY OF ORDER

55. This Order shall become final unless Respondent files a Request for Hearing and Answer within thirty (30) days after receipt of this Order. Unless a hearing is requested and an Answer filed in writing, the penalty proposed in this Order shall become due and payable as set forth in the Schedule of Compliance.

VIII. SETTLEMENT

56. Whether or not Respondent submits a Request for Hearing and files an Answer, Respondent may confer with the Department concerning settlement. The Department encourages settlement consistent with the provisions and objectives of the Act and the Regulations. Settlement discussions do not extend the 30-day deadline for filing an Answer and Request for Hearing or alter

the deadlines for this Order. Settlement discussions may be pursued as an alternative to and simultaneously with the hearing proceedings. Respondent may appear at the settlement conference itself and may be represented by legal counsel.

57. Any settlement reached by the parties must be consistent with the Radiation Control Bureau's policies and the Regulations. Any settlement must be approved by the Secretary of the Department and shall be executed as a Stipulated Final Order signed by the parties. The Stipulated Final Order must contain all the requirements of Subsection B of 20.1.5.600 NMAC.

58. To explore the possibility of settlement in this matter, please contact Mia Napolitano, Assistant General Counsel, Office of General Counsel, New Mexico Environment Department, 1190 St. Francis Drive, Suite N4050, Santa Fe, NM 87505, (505) 827-2885, mia.napolitano@state.nm.us.

IX. COMPLIANCE WITH OTHER LAWS


59. Compliance with the requirements of this Order does not relieve Respondents of the obligation to comply with all other applicable laws and regulations.

X. TERMINATION

60. This Order shall terminate when Respondents certify that all the requirements of this Order have been met, and the Department has approved such certification, or when the Secretary approves a Stipulated Final Order.

Sandra Ely

Sandra Ely
Division Director
Environmental Protection Division
New Mexico Environment Department

 Digitally signed by Sandra Ely
Date: 2020.10.27 15:01:14 -06'00'


Date

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing “Administrative Compliance Order and Assessment of Civil Penalty” was sent via certified mail return receipt requested (70191640000230526475) and via email on the following party of record on October 27, 2020:

Dale H. Mack, RSO
Lovelace Respiratory Research Institute-South
2425 Ridgecrest Dr. SE
Albuquerque, NM 87108
imack@lovelacebiomedical.org

Mia
Napolitano



Digitally signed by
Mia Napolitano
Date: 2020.10.27
15:36:35 -06'00'

Mia A. Napolitano
Assistant General Counsel
New Mexico Environment Department



MICHELLE LUJAN
GRISHAM
Governor

HOWIE MORALES
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

1100 St. Francis Drive Suite 2022
P.O. Box 5469
Santa Fe, NM 87502-5469

Telephone_number: (505) 476-8600 Fax number: (505) 476-8654
<https://www.env.nm.gov/rcb/>



JAMES KENNEY
Cabinet Secretary
JENNIFER J. PRUETT
Deputy Secretary



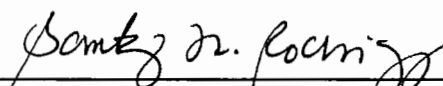
RADIOACTIVE MATERIAL LICENSE

Pursuant to Sections 74-3-1 through 74-3-16 NMSA 1978, and 20.3.3 NMAC, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated in this license; and to use said radioactive material(s) for the purpose(s) and at the place(s) designated herein. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect, of the New Mexico Environment Department and to any conditions specified herein.

1. License Name Lovelace Biomedical Research Institute	2. License Number BB496-09
3a. Address 2425 Ridgecrest Dr. SE Albuquerque NM 87108	3b. Actual Location of Operation Kirtland Air Force Base East (Area Y), Albuquerque, New Mexico 87115
4. Telephone (505) 348-9600 (505) 348-9457	5. Expiration Date February 28, 2019

Date: August 20, 2020

For the New Mexico Environment Department


Santiago M. Rodriguez, Bureau Chief (vmd)
Radiation Protection Program

Attachments:

- 1) Radioactive Material Specifications
- 2) Authorized Use(s) and License Conditions

BB496-09

NMED Exhibit A

ATTACHMENT 1 - RADIOACTIVE MATERIAL SPECIFICATIONS



LICENSE NUMBER BB496-09

6. RADIOACTIVE MATERIALS (element and mass number)	7. FORM (chemical or physical)	8. MAXIMUM QUANTITY (Licensee may possess at any one time)
A. Any byproduct material with atomic numbers 1 through 83.	A. Any.	A. 500 millicureis per radionuclide and 1 curie total.
B. Any byproduct material with atomic numbers 84 though 101.	B. Any.	B. 10 millicuries per radionuclide and 1 curie total.
C. Hydrogen-3.	C. Any.	C. 2 curies total.
D. Carbon-14.	D. Any.	D. 4 curies total.
E. Technetium-99m.	E. Any.	E. 1 curie total.
F. Thorium-232.	F. Thorium Dioxide (ThO ₂) solution- thorotrast.	F. 100 millicuries total.
G. Plutonium-239.	G. Any.	G. 1 curie total.
H. Plutonium-241.	H. Any.	H. 1 microcurie total.
I. Plutonium-242.	I. Any.	I. 5 microcurie total.
J. Uranium-235.	J. Any.	J. 22 microcuries total.
K. Uranium-238.	K. Any.	K. 100 millicuries total.
L. Cerium-141.	L. Any.	L. 500 millicuries total.
M. Radium-226.	M. Any.	M. 200 millicuries total.



ATTACHMENT 1 - RADIOACTIVE MATERIAL SPECIFICATIONS**LICENSE NUMBER BB496-09**

6. RADIOACTIVE MATERIALS (element and mass number)	7. FORM (chemical or physical)	8. MAXIMUM QUANTITY (Licensee may possess at any one time)
N. Americium-241.	N. Any.	N. 12 curies total.
O. Strontium-90.	O. Any.	O. 10 millicuries.
P. Sodium-22.	P. Calibration or reference source.	P. 1 millicurie total.
Q. Technetium-99.	Q. Calibration or reference source.	Q. 1 millicurie total.
R. Cesium-137.	R. Calibration or reference source.	R. 6 millicuries total.
S. Cobalt-60.	S. Calibration or reference source.	S. 1 millicurie total.
T. Krypton-85	T. Sealed sources (Isotope Products Laboratories Model NER-584).	T. 2.2 curies per source and 4.4 curies total.
U. Uranium (Depleted).	U. Metal.	U. 999 kilograms.
X. Strontium-90.	X. Sealed source (AEA Model SIC.LC1).	X. Five sources, 500 millicuries each. Total 2.5 curies.

END OF THIS SECTION

ATTACHMENT 2 - AUTHORIZED USE(S) AND LICENSE CONDITIONS



LICENSE NUMBER BB496-09

9. Authorized use:

- A. through O and X. Research and development as defined in 20.3.1.7 NMAC; animal studies.
- P. through T. Calibration or reference source.
- U. Shielding in a linear accelerator.

10. The licensee shall comply with the provisions of 20.3.1, 20.3.3, 20.3.4, 20.3.10, 20.3.16 NMAC.

11. The Secretary of the Department or the Secretary's authorized representatives shall be allowed to enter the premises and inspect the radiation related activities at all reasonable times. Failure of the licensee to admit the Secretary or the Secretary's authorized representatives shall constitute grounds for issuance of an immediate cease and desist order.

12. Thirty (30) days before vacating or relinquishing possession or control of the premises, the licensee shall notify the Department in writing of the intent to vacate and the address of relocation.

13. The Radiation Safety Officer for this license is Dale H. Mack.

14. Licensed material shall be used by, or under the supervision of, authorized users designated and approved by the Department upon recommendation by the Radiation Safety Officer, only after each user has completed the training program described in license application dated December 20, 2013. Names and evidence of training of these individuals shall be kept on file for inspection by the Department.

A. Prior to granting Authorize User status, each applicant's documentation shall be submitted to the Radiation Control Bureau for review to include all supporting documentation.

15. Licensed material shall not be used in or on humans except as provided otherwise by specific condition of this license.

16. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.

17. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.

18. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventory shall be maintained for 5 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

19. Each sealed source containing licensed material, other than hydrogen 3, with a half-life greater than thirty days and in any form other than gas, shall be tested for contamination and leakage at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a sealed source received from another



ATTACHMENT 2 - AUTHORIZED USE(S) AND LICENSE CONDITIONS



LICENSE NUMBER BB496-09

person shall not be put into use until tested.

A. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak test when the source contains 100 microcuries or less of beta and gamma emitting material or 10 microcuries or less of alpha emitting material.

B. Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.

C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.

D. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five days of the test with the New Mexico Environment Department, Radiation Control Bureau, P.O. Box 5469, Santa Fe, New Mexico 87502, describing the equipment involved, the test results and the corrective action taken.

E. Leak test analyses shall be performed by the licensee according to procedures described in license application dated December 20, 2013, or by manufacturer or by other persons specifically authorized by the Department to perform such services.

20. In addition to the notification requirements in 20.3.3 and 20.3.4 NMAC, each licensee shall report immediately any compromise to the integrity of any sealed sources or devices containing radioactive materials.

21. Sealed sources containing licensed material shall not be opened or sources removed from the source holders by the licensee except as specifically authorized.

22. The licensee shall not repair, remove, replace, or alter any of the following: electrical and mechanical systems that control source or shielding movement, the irradiator's shielding or sealed source, safety interlocks, or any component that may affect safe operation of the irradiator. These activities shall be performed by the manufacturer, or persons specifically licensed by the Department to perform such services.

A. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.



ATTACHMENT 2 - AUTHORIZED USE(S) AND LICENSE CONDITIONS



LICENSE NUMBER BB496-09

23. Except for maintaining labeling as required by 20.3.4 NMAC, the licensee is not authorized to make any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Registration Certificates.
24. Detector cells containing titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperature from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.
25. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
26. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:
- A. Waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives;
 - B. Before disposal as ordinary trash, waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background;
 - C. All radiation labels shall be removed or obliterated.
 - D. A record of each such disposal permitted under this license condition shall be retained for 3 years. The record must include the date of disposal, the date on which the radioactive material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
27. The licensee shall comply with Title 10 Code of Federal Regulations, Part 37 except as follows:
- (a) Sections 37.1, 37.3, 37.7, 37.9, 37.11(a-b), 37.13, 37.43(d)(9), 37.77(f), 37.105, 37.107, and 37.109 are excluded.
 - (b) Any reference to the Commission or NRC shall be deemed to be a reference to the New Mexico Environment Department/Radiation Control Bureau, except:
 - a) 37.5 Definitions: Agreement State, Byproduct material, Commission, Fingerprint orders, Person,
 - b) 37.25(b),
 - c) 37.27(a) and (c),
 - d) 37.29(a),
 - e) 37.71 referring to NRC's license verification system,
 - f) 37.71 "licensee of the Commission or an Agreement State" shall be deemed to be a reference to "licensee of the New Mexico Environment Department/Radiation Control Bureau, NRC or an Agreement State."
 - (c) In lieu of the address given in 37.27(c), licensees shall submit fingerprint cards or records to Director, Division of Facilities and Security, U.S. NRC, 11545 Rockville Pike, Rockville, Maryland 20852-2738, ATTN: Criminal History Program, Mail Stop T-03B46M.
 - (d) Reference in Part 37 to the following NRC regulation shall be deemed a reference to the Identified section(s) in 20.3.3 New Mexico Administrative Code (NMAC):

NRC Regulation (10CFR)	NMAC regulations (20.3.3)
NRC Regulation (30.41(d))	NMAC (20.3.3.323.D)
 - (e) License required reports of events or notifications in 37.41, 37.45, 37.57, 37.77(a)-(d), 37.81, shall



ATTACHMENT 2 - AUTHORIZED USE(S) AND LICENSE CONDITIONS



LICENSE NUMBER BB496-09

use New Mexico Environment Department, Radiation Control Bureau, P.O. Box 5469, Santa Fe, NM 87502-5469 contact information.

28. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
29. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the designee of which NRC has specifically approved for transport of plutonium by air.
30. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8, of the license in accordance with statements, representations and procedures contained in, referenced in, or enclosed with the documents listed below. The New Mexico Radiation Protection rules shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the rules.
31. Radioactive waste generated shall be stored in accordance with the statements representations and procedures included with the waste storage plan described in the licensee's application dated December 20, 2013.
32. The licensee shall prepare a Decommissioning Plan in accordance with the provisions in 20.3.3.318.H NMAC and the NRC guidance NUREG-1757, and shall submit the Decommissioning Plan for Department approval by May 30, 2017.
33. Notwithstanding the requirements of application dated December 20, 2013 and attachments dated January 10, 2014, which were previously approved by the New Mexico Radiation Protection Regulations and NRC's and incorporated into the license, without prior Bureau approval, as long as:
- A. The proposed revision is documented, reviewed, and approved by the licensee's Radiation Safety committee in accordance with established procedures prior to implementation;
 - B. The revised program is in accordance with regulatory requirements, will not change license conditions, and will not decrease the effectiveness of the Radiation Safety Program;
 - C. The licensee's staff is trained in the revised procedures prior to implementation; and
 - D. The licensee' audit program evaluates the effectiveness of the change and its implementation.
34. Except as specifically provided otherwise by this license, the licensee shall conduct its program in accordance with the statements, representations and procedures contained in the documents, including any enclosures, listed below. The New Mexico Radiation Protection Regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations:



ATTACHMENT 2 - AUTHORIZED USE(S) AND LICENSE CONDITIONS



LICENSE NUMBER BB496-09

- 00 New application with attachments dated December 20, 2013.
- 01 Administratively amended, request by Dr. Janet Benson, RSO with attachments dated February 24, 2014.
- 02 Amendment with attachments dated July 5, 2014.
- 03 Amendment request with attachments dated November 10, 2015.
- 04 Administratively amended to comply with 10CFR37 dated March 4, 2016.
- 05 Amendment request with attachments dated February 10, 2016.
- 06 Amendment request with attachments dated April 21, 2016.
- 07 Administratively amended March 22, 2017.
- 08 Amendment request dated October 2, 2019.
- 09 Amendment request dated July 29, 2020 (License under a Timely Renewal Letter).

END OF THIS SECTION.



1.11 SCHEDULE FOR DECOMMISSIONING ACTIVITIES

There is currently no plan, or scheduled time-frame anticipated to decommission the LRRIS facility or terminate the LRRIS radiological material license. When LRRRI elects to proceed with license termination for LRRIS, LRRRI will notify the NMED RCB of the planned cessation of licensed operations in accordance with NMAC 30.3.3.318 E. LRRRI anticipates that decommissioning actions would be completed consistent with NMAC 30.3.3.318 I (1) and (2), i.e., with a 24-month time-frame (NMED, 2009).

1.12 DECOMMISSIONING PROGRAMS

Since there is currently no plan to decommissioning the LRRRI facility for the foreseeable future, detailed decommissioning programs and plans required under NUREG-1757 cannot be developed at this time. Rather, when LRRRI facility decommissioning is foreseeable, an amendment to this DP will be issued for NEMD approval prior to proceeding with site decommissioning actions.

1.13 FINANCIAL ASSURANCE

A Decommissioning Funding Plan (DFP) has been developed to support a site-specific cost estimate for decommissioning the LRRRI facility. The amount of the facility-specific cost estimate will support the minimum required level of financial assurance coverage to be established by LRRRI.

The site-specific cost estimate developed by CN in support of this DFP assumes that future decommissioning work will be performed by an independent third party. CN's cost estimate was developed using a series of cost estimating tables consistent with the format presented in NUREG 1757 and supported by detailed information as presented in this DP. Consistent with NUREG 1757, the decommissioning cost estimate contain three basic parts (NRC, 2012:

- a facility description, including subsurface;
- the estimated decommissioning costs (including labor costs, nonlabor costs, and a contingency factor); and
- identification and justification of the key assumptions used in the decommissioning cost estimate.

The decommissioning cost estimate accounts for the costs of all major phases of site decommissioning that are reasonably

foreseeable based on the existing and use of the site, past decommissioning actions completed by DOE prior to transfer of the property to LRRI in 2013, and the current radiological status of the facility including areas of known radiological contamination, existing and projected future operations.

Table F-11: Total Estimate Decommissioning Cost July 2017

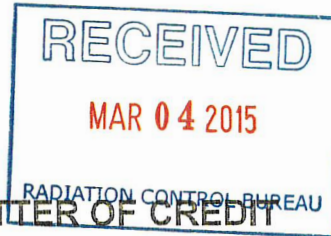
Task/Component	Cost	Percentage
Radiological Materials & Waste Disposal (Table E-4)	\$ 2,005,200	30%
Total Labor Decommissioning Services (Table E-7)	\$ 1,622,910	24%
Equipment/Supply Costs (Table E-8)	\$ 441,800	7%
Laboratory Costs (Table E-9)	\$ 1,199,475	18%
Miscellaneous Costs - Subcontractors (Table E-10)	\$ 1,418,500	21%
SUBTOTAL	\$ 6,687,885	100%
NM GST (Albuquerque 7.5%)	\$ 501,591	
SUBTOTAL	\$ 7,189,476	
25% Contingency	\$ 1,797,369	
TOTAL DECOMMISSIONING COST ESTIMATE	\$ 8,485,254	

LRRI currently maintains financial assurance for site decommissioning in the form a letter of credit in the amount of \$1.5M. LRRI will modify the financial assurance to be in the form of a surety bond in the amount of \$8.5M.

Use of a DFP requires that the licensee specify the means (i.e., the method and frequency) by which they will periodically adjust the cost estimate and associated funding levels over the life of the facility (NRC, 2012). In general, LRRI's cost estimate will be updated with the current prices of goods and services at least every three years, or when the amounts, or types, of material at the facility change. Triennial adjustments will be made to account for inflation, for other changes in the prices of goods and services (e.g., disposal cost increases), for changes in facility conditions, or operations, and for changes in expected decommissioning procedures.



BANK OF THE WEST
GLOBAL TRADE SERVICES
1977 SATURN STREET, SC-MPK-02-G
MONTEREY PARK, CA 91755
SWIFT: BWSTUS66LAX



DATE: MARCH 03, 2015

IRREVOCABLE STANDBY LETTER OF CREDIT

FILE COPY

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. MB60515794

IN FAVOR OF BENEFICIARY:
RADIATION CONTROL BUREAU,
NEW MEXICO ENVIRONMENT
DEPARTMENT
MONTTOYA BUILDING
1100 ST. FRANCIS DRIVE,
SUITE 2022
SANTA FE, NM 87505

FOR ACCOUNT OF (APPLICANT):
LOVELACE RESPIRATORY RESEARCH
INSTITUTE
2425 RIDGECREST DRIVE SE
ALBUQUERQUE, NM 87108

AMOUNT: USD 1,500,000.00

(ONE MILLION FIVE HUNDRED THOUSAND
AND 00/100 U.S. DOLLARS)

EXPIRY DATE / PLACE: APRIL 30, 2016 AT 5:00 P.M. / IN MONTEREY PARK AT OUR ABOVE ADDRESS

DEAR SIR OR MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. MB60515794 IN YOUR FAVOR, AT THE REQUEST AND FOR THE ACCOUNT OF LOVELACE RESPIRATORY RESEARCH INSTITUTE, 2425 RIDGECREST DRIVE SE, ALBUQUERQUE, NM 87108, UP TO THE AGGREGATE AMOUNT OF ONE MILLION FIVE HUNDRED THOUSAND AND NO/100, U.S. DOLLARS \$1,500,000.00 AVAILABLE UPON PRESENTATION OF:

(1) YOUR SIGHT DRAFT, BEARING REFERENCE TO THIS LETTER OF CREDIT NO. MB60515794, AND;

(2) YOUR SIGNED STATEMENT READING AS FOLLOWS:

"I CERTIFY THAT THE AMOUNT OF THE DRAFT IS PAYABLE PURSUANT TO REGULATIONS ISSUED UNDER AUTHORITY OF THE STATE OF NEW MEXICO, RADIATION CONTROL BUREAU"

THIS LETTER OF CREDIT IS ISSUED IN ACCORDANCE WITH REGULATIONS ISSUED UNDER THE AUTHORITY OF THE NEW MEXICO RADIATION CONTROL BUREAU, NEW MEXICO ENVIRONMENT DEPARTMENT. THE NM ENVIRONMENTAL DEPARTMENT HAS PROMULGATED REGULATIONS IN TITLE 20, CHAPTER 3, PART 3 OF THE NEW MEXICO ADMINISTRATIVE CODE (20.3.3.3011 NMAC), WHICH REQUIRE THAT A HOLDER OF, OR APPLICANT FOR, A LICENSE ISSUED UNDER TITLE 20 OF THE NMAC PROVIDE ASSURANCE THAT FUNDS WILL BE AVAILABLE WHEN NEEDED FOR DECOMMISSIONING.

THIS LETTER OF CREDIT IS EFFECTIVE AS OF THE DATE OF ISSUE AND SHALL EXPIRE ON APRIL 30, 2016, BUT SUCH EXPIRATION DATE SHALL BE AUTOMATICALLY EXTENDED FOR A PERIOD OF ONE (1) YEAR ON APRIL 30, 2016 AND ON EACH SUCCESSIVE EXPIRATION DATE, UNLESS, AT LEAST 120 DAYS BEFORE THE CURRENT EXPIRATION DATE, WE NOTIFY BOTH YOU AND LOVELACE RESPIRATORY RESEARCH INSTITUTE, BY CERTIFIED MAIL, AS SHOWN ON THE SIGNED RETURN RECEIPTS. IF LOVELACE RESPIRATORY RESEARCH INSTITUTE IS UNABLE TO SECURE ALTERNATIVE FINANCIAL ASSURANCE TO REPLACE THIS LETTER OF CREDIT WITHIN 30 DAYS OF NOTIFICATION OF CANCELLATION, THE NM ENVIRONMENTAL DEPARTMENT MAY DRAW UPON THE FULL VALUE OF THIS LETTER OF CREDIT PRIOR TO CANCELLATION. THE BANK SHALL GIVE IMMEDIATE NOTICE TO THE



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MONTEREY PARK, CA 91755
SWIFT: BWSTUS66LAX

APPLICANT AND THE NM ENVIRONMENTAL DEPARTMENT OF ANY NOTICE RECEIVED OR ACTION FILED ALLEGING (1) THE INSOLVENCY OR BANKRUPTCY OF THE FINANCIAL INSTITUTION OR (2) ANY VIOLATIONS OF REGULATORY REQUIREMENTS THAT COULD RESULT IN SUSPENSION OR REVOCATION OF THE BANK'S CHARTER OR LICENSE TO DO BUSINESS.

FILE COPY

THE FINANCIAL INSTITUTION ALSO SHALL GIVE IMMEDIATE NOTICE IF THE BANK, FOR ANY REASON, BECOMES UNABLE TO FULFILL ITS OBLIGATION UNDER THE LETTER OF CREDIT.

WHENEVER THIS LETTER OF CREDIT IS DRAWN ON UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT, WE SHALL DULY HONOR SUCH DRAFT UPON ITS PRESENTATION TO US WITHIN 30 DAYS, AND WE SHALL DEPOSIT THE AMOUNT OF THE DRAFT DIRECTLY INTO THE STANDBY TRUST FUND OF LOVELACE RESPIRATORY RESEARCH INSTITUTE IN ACCORDANCE WITH YOUR INSTRUCTIONS.

EACH DRAFT MUST BEAR ON ITS FACE THE CLAUSE: "DRAWN UNDER LETTER OF CREDIT NO. MB60515794 DATED MARCH 3, 2015, AND THE TOTAL OF THIS DRAFT AND ALL OTHER DRAFTS PREVIOUSLY DRAWN UNDER THIS LETTER OF CREDIT DOES NOT EXCEED ONE MILLION FIVE HUNDRED THOUSAND AND NO/100, U.S. DOLLARS \$1,500,000.00."

THIS CREDIT IS SUBJECT TO THE UNIFORM COMMERCIAL CODE.



AUTHORIZED SIGNATURE
GLOBAL TRADE SERVICES
TEAM NO 02



AUTHORIZED SIGNATURE
GLOBAL TRADE SERVICES
TEAM NO 02

8. RETURNING, CANCELING, OR REDUCING FINANCIAL ASSURANCE INSTRUMENTS

When licensees replace financial instruments, the superseded instruments should be canceled and returned to the licensee. Likewise, when licenses are terminated, or licenses fall below the possession limit thresholds requiring financial assurance, the instruments should be canceled and returned to the licensee. As an alternative, at the request of the licensee, the superseded or canceled financial instrument may be sent directly to the issuer.

Note that financial instruments are amended or revised from time to time. An amendment or revision to an existing instrument generally does not require cancellation and return of the earlier versions to the licensee.

The regulations in 10 CFR Parts 30, 40, 70, and 72 provide no method to credit work completed during decommissioning against the amount of financial assurance provided. Therefore, to reduce the amount of financial assurance, the licensee must either amend its license to reduce its possession limits, amend its decommissioning cost estimate to reflect the actual cost remaining to complete decommissioning, or terminate its license.

Where the licensee provides financial assurance for a prescribed amount, based on its license possession limits, the financial assurance must be maintained in accordance with the license possession limits until the license is terminated. In this case, the financial assurance instrument may not be returned until after the license is terminated. The amount of financial assurance may not be reduced unless the license is amended to reduce the possession limits to permit either (1) use of a lower prescribed amount of financial assurance or (2) elimination of the financial assurance requirement. However, the licensee has the option to provide financial assurance using a DFP, with the amount based on a site-specific cost estimate. If the licensee exercises that option, it may reduce or cancel its financial assurance as described below.

Where the licensee provides financial assurance using a DFP based on a site-specific decommissioning cost estimate, the amount of financial assurance must cover the amount of the last approved cost estimate. Therefore, the licensee can reduce its financial assurance by submitting a revised DFP and receiving NRC approval. The licensee may not reduce its decommissioning cost estimate simply by subtracting the cost of work completed from the last approved cost estimate. In order to reduce the amount of financial assurance provided, the licensee must submit a new cost estimate, acceptable to the NRC, which justifies a lower amount based on the cost of work remaining to be done. If the licensee has completed all decommissioning activities and surveys, it may submit a cost estimate of zero, which will permit cancellation of its financial assurance instruments when the cost estimate is accepted by the NRC.



MICHELLE LUJAN
GRISHAM
Governor

HOWIE C. MORALES
Lt. Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

1100 St. Francis Drive Suite 2022
Post Office Box 5469
Santa Fe, NM 87502-5469
Phone (505) 476-8600 Fax (505) 476-8654
<https://www.env.nm.gov/rcb/>



JAMES C. KENNEY
Cabinet Secretary

JENNIFER J. PRUETT
Deputy Secretary

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
NOTICE OF VIOLATION

April 30, 2019

Dale H. Mack, RSO
Lovelace Respiratory Research Institute – South
2425 Ridgcrest Dr. SE
Albuquerque, NM 87108

Dear Mr. Mack:

This letter documents an announced inspection of your Lovelace Respiratory Research Institute - South, New Mexico facility by New Mexico Environment Department (NMED) employees Victor Diaz, James Hesch, and Michael Ortiz on March 11 and 12, 2019, of activities authorized under New Mexico Radioactive Materials License Number BB496-07. The inspection was an examination of activities authorized under the license above as they relate to radiation safety and compliance with the New Mexico Radiation Protection Regulations (20.3 NMAC), and any special license conditions.

During the inspection, the following deficiencies were noted:

- 1- **20.3.3.326.A NMAC:** "The licensee shall keep records showing the ... disposal of the radioactive material as follows." "The licensee who disposed of the material shall retain each record of disposal of radioactive material until the department terminates each license that authorizes disposal of the material."

20.3.4.448.A NMAC: "Each licensee shall maintain records of the disposal of licensed materials made pursuant to 20.3.4.434 NMAC, 20.3.4.435 NMAC, 20.3.4.436 NMAC, 20.3.4.437 NMAC and 20.3.3 NMAC."

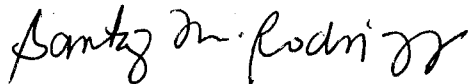
20.3.4.448.C NMAC: "The licensee or registrant shall retain the records required by Subsections A...of this section until the department terminates each pertinent license or registration requiring the record."

During the inspection, one of the NMED inspectors requested the most recent waste disposal records and the licensee failed to provide them. To date, NMED has not received them. The regulations require a licensee to maintain all records of disposal of licensed material until NMED terminates the license. Failure to maintain records of disposal of licensed material is in direct violation of multiple sections of the New Mexico Radiation Protection Regulations.

Please provide a written response to the listed violation within 15 days of receipt of this letter and ensure all submitted documentation is certified as a true and accurate copy. A response can include information regarding the violation circumstances, means by which the licensee is now in compliance with the regulations and its license, or a corrective action plan. Resolution of this NOV will influence the determination of the amount of financial assurance coverage LRRI is required to maintain. Failure to respond may result in heightened oversight and the issuance of an administrative compliance order, which can include civil penalties of up to \$15,000 per day of non-compliance.

Thank you, for the assistance and courtesy extended to our staff during this inspection. Should you have any questions, please contact the Radiation Control Bureau at (505) 476-8600.

Sincerely,

A handwritten signature in black ink, appearing to read "Santiago M. Rodriguez". The signature is fluid and cursive, with the first name "Santiago" being more prominent.

Santiago M. Rodriguez
Bureau Chief
Radiation Control Bureau