



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 29, 2020

APPLICANT: Eden Radioisotopes, LLC

SUBJECT: SUMMARY OF DECEMBER 16, 2019, MEETING WITH EDEN
RADIOISOTOPES, LLC (EPID NO. L-2019-LLL-0027)

On December 16, 2019, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission staff and representatives of Eden Radioisotopes, LLC (Eden) via teleconference. The purpose of this meeting was to discuss the ongoing development and design of Eden's proposed medical radioisotope production project. The meeting notice and agenda, dated December 6, 2019, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML19340A089. Eden's presentation used in the meeting is also available in ADAMS at Accession No. ML20008D198. A list of meeting attendees is provided as an enclosure to this summary.

Eden first presented a design and documentation update for its proposed reactor and hot cell facility, including processing and target fabrication. Eden also provided a status update for the Environmental Report, Safeguards Information, Physical Security Plan, and Material Control and Accounting Program.

Eden plans to submit a joint application for a construction permit and operating license for its reactor facility under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and a separate license under 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," for its hot cell facility. Eden presented an overview of the hot cell facility design. The facility design has four Molybdenum-99 (Mo-99) processing lines and two research and development processing lines. Each line has a separate ventilation and filtration system and is physically separated. Up to four targets, less than 100 grams of uranium-235 total, can be sent to each processing line at one time. Eden discussed its interpretation of the definition of production facility in 10 CFR 50.2, "Definitions." Eden plans to submit a request for written interpretation of the definition of production facility to determine whether its hot cell facility could be licensed under 10 CFR Part 70.

Eden's reactor design includes utilizing both driver targets and nominal targets. Eden stated that the two target types are almost identical in design and performance and primarily differ in stability in hostile temperature and irradiation environment. Driver targets allow the reactor core to maintain a consistent reactivity environment and have a much longer lifetime than nominal targets. Nominal targets will be processed for Mo-99 production. Eden also discussed the safety basis for both target types and the startup and testing program.

Eden plans to request additional pre-application meetings to continue discussing its proposed project.

Please direct any inquiries to me at (301) 415-4103 or by electronic mail at Linh.Tran@nrc.gov.

/RA/

Linh Tran, Senior Project Manager
Non-Power Production and Utilization Facility
Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Project/Docket No. 99902077

Enclosure:
As stated

cc: w/enclosure:

Mr. Bennett Lee, CEO/Co-Founder
Eden Radioisotopes, LLC
6100 Indian School Road NE
Suite 125
Albuquerque, NM 87110

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RADIOISOTOPES, LLC. (EPID NO. L-2019-LLL-0027) DATED
JANUARY 29, 2020

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ADAMS Accession Nos.:

ML20008D189 Pkg

ML19340A089 Mtg. Notice

ML20024F075 Mtg. Summary

ML20008D198 Slides

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NRC-001

OFFICE	NRR/UNPL/PM*	NRR/UNPL/PM	NRR/UNPL/LA*	NRR/UNPL/BC	NRR/UNPL/PM
NAME	MGavello	LTran	NParker	GCasto	LTran
DATE	01/27/2020	1/28/2020	1/27/2020	1/29/202	1/29/2020

OFFICIAL RECORD COPY

LIST OF ATTENDEES

DECEMBER 16, 2019, MEETING WITH EDEN RADIOISOTOPES, LLC.

10:00 A.M. - 1:00 P.M.

<u>Name</u>	<u>Organization</u>
Linh Tran	U.S. Nuclear Regulatory Commission
Molly-Kate Gavello	U.S. Nuclear Regulatory Commission
Brian Smith	U.S. Nuclear Regulatory Commission
Greg Casto	U.S. Nuclear Regulatory Commission
Joseph McManus	U.S. Nuclear Regulatory Commission
Mitzi Young	U.S. Nuclear Regulatory Commission
David Tiktinsky	U.S. Nuclear Regulatory Commission
Robert Schaaf	U.S. Nuclear Regulatory Commission
Steven Lynch	U.S. Nuclear Regulatory Commission
Jeremy Wachutka	U.S. Nuclear Regulatory Commission
Elizabeth Reed	U.S. Nuclear Regulatory Commission
Charles Teal	U.S. Nuclear Regulatory Commission
Scott Krepel	U.S. Nuclear Regulatory Commission
Tim Harris	U.S. Nuclear Regulatory Commission
Jacob Zimmerman	U.S. Nuclear Regulatory Commission
Theresa Lalain	U.S. Nuclear Regulatory Commission
Geoffrey Wertz	U.S. Nuclear Regulatory Commission
Michael Balazik	U.S. Nuclear Regulatory Commission
Joseph Staudenmeier	U.S. Nuclear Regulatory Commission
Kevin Roche	U.S. Nuclear Regulatory Commission
Benjamin Parks	U.S. Nuclear Regulatory Commission
Ed Parma	Eden Radioisotopes, LLC
Bennett Lee	Eden Radioisotopes, LLC
Dick Coats	Eden Radioisotopes, LLC
Milton Vernon	Eden Radioisotopes, LLC
Thomas Poindexter	Morgan Lewis
Ryan Lighty	Morgan Lewis

Enclosure