



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

October 17, 2019

LICENSEE: Eden Radioisotopes, LLC

SUBJECT: SUMMARY OF SEPTEMBER 10, 2019, MEETING WITH EDEN
RADIOISOTOPES, LLC (EPID NO. L-2019-LLL-0027)

On September 10, 2019, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Eden Radioisotopes, LLC (Eden) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. 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 August 20, 2019, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML19232A451. Eden's presentation used in the meeting is also available in ADAMS at Accession No. ML19255G793. A list of meeting attendees is provided as an enclosure to this summary.

Eden presented an overview of its company and proposed molybdenum-99 production technology. Eden identified three areas of primary development: target irradiation, target processing, and target fabrication. Eden described the technology of its proposed 2-megawatt thermal reactor with a design that includes a flexible core configuration, open pool system with natural circulation, and an annular hexagonal array of uranium targets and drivers.

Eden then discussed the general layout for the reactor facility, hot cell facility, and fuel fabrication facility. Eden stated that it plans to process up to 500 grams of low-enriched uranium as a batch in the facility. The NRC staff described licensing requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material."

Eden presented the development of the integrated safety analysis (ISA) for the reactor facility, hot cell facility, and the fuel fabrication facility, including the phases and scope of the ISA. Eden described the maximum hypothetical accidents for the reactor and the hot cell facilities. Eden also described the proximity of its proposed facility in Eunice, New Mexico to other facilities and to the nearest resident. Eden discussed the progress of the environmental report. The NRC staff described the requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," for the environmental review.

Eden plans to request additional pre-application meetings to discuss its proposed licensing approach further with the NRC staff.

Please direct any inquiries to Linh Tran at 301-415-4103 or Linh.Tran@nrc.gov

Sincerely,

/RA/

Linh N. 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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OCTOBER 17, 2019

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ADAMS Accession Nos.: ML19255G842 Pkg
ML19232A451 Mtg. Notice
ML19259A060, Mtg. Summary
ML19255G793 Slides *concurred via email NRC-001

OFFICE	NRR/DLP/PRLB/PM	NRR/DLP/PRLB/PM	NRR/DLP/PRLB/LA	NRR/DLP/PRLB/BC	NRR/DLP/PRLB/PM
NAME	MGavello	LTran	NParker	GCasto	LTran
DATE	10/15/19	10/15/19	10/15/2019	10/16/2019	10/17/2019

OFFICIAL RECORD COPY

LIST OF ATTENDEES

SEPTEMBER 10, 2019, MEETING WITH EDEN RADIOISOTOPES, LLC.

1:00 P.M. - 4:10 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
Mary Jane Ross-Lee	U.S. Nuclear Regulatory Commission
Joseph Staudenmeier	U.S. Nuclear Regulatory Commission
James Hammelman	U.S. Nuclear Regulatory Commission
Joseph McManus	U.S. Nuclear Regulatory Commission
Alexander Adams	U.S. Nuclear Regulatory Commission
Jacob Zimmerman	U.S. Nuclear Regulatory Commission
Mitzi Young	U.S. Nuclear Regulatory Commission
Yawar Faraz	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
William Rautzen	U.S. Nuclear Regulatory Commission
Kevin Folk	U.S. Nuclear Regulatory Commission
Robert Hoffman	U.S. Nuclear Regulatory Commission
Jeffrey Rikhoff	U.S. Nuclear Regulatory Commission
Michael Balazik	U.S. Nuclear Regulatory Commission
Nancy Martinez	U.S. Nuclear Regulatory Commission
Chris Hoxie	U.S. Nuclear Regulatory Commission
Charles Teal	U.S. Nuclear Regulatory Commission
Tarek Zaki	U.S. Nuclear Regulatory Commission
Phyllis Clark	U.S. Nuclear Regulatory Commission
Ed Parma	Eden Radioisotopes, LLC
Paul Helmick	Eden Radioisotopes, LLC
Bennett Lee	Eden Radioisotopes, LLC
Dick Coats	Eden Radioisotopes, LLC
Milton Vernon	Eden Radioisotopes, LLC
Jessica Bridges	Eden Radioisotopes, LLC
Anthony Baca	Eden Radioisotopes, LLC
Carolyn Haass	Northwest Medical Isotopes, LLC

Enclosure