

From: Kowal, Kathleen <kowal.kathleen@epa.gov>
Sent: Wednesday, August 17, 2022 7:44 PM
To: Rakovan, Lance
Cc: randy.howell@nnsa.doe.gov; Jim.Costedio@shinemed.com; freitagm@ci.janesville.wi.us; bethaney.bacher-gresock@dot.gov; ian.chidister@dot.gov; jay.waldschmidt@dot.wi.gov; smithr@ci.janesville.wi.us
Subject: [External_Sender] USEPA comments re Supplement 1 to the Final EIS Related to the Operating License for the SHINE Medical Isotope Production Facility – Draft Report for Comment, Janesville, Wisconsin - NUREG-2183
Attachments: USEPA SHINE Supplement 1 to FEIS Comment Letter.pdf

Greetings,

Attached please find USEPA's comment letter re the above-mentioned project. Please do not hesitate to contact me if you have any questions or comments.

Please send an e-copy of future correspondence re the NEPA portion of this project.

Thanks,

Kathy Kowal | NEPA Reviewer | Healthy Communities Team
US EPA Region 5 Tribal and Multi-media Programs Office
77 West Jackson Blvd., Chicago, IL 60604
Tel: 312-353-5206 | kowal.kathleen@epa.gov

Federal Register Notice: 87FR40868
Comment Number: 4

Mail Envelope Properties (SA1PR09MB87992CA081A86D2A32DA0EA19A6A9)

Subject: [External_Sender] USEPA comments re Supplement 1 to the Final EIS Related to the Operating License for the SHINE Medical Isotope Production Facility – Draft Report for Comment, Janesville, Wisconsin - NUREG-2183

Sent Date: 8/17/2022 7:44:27 PM

Received Date: 8/17/2022 7:44:41 PM

From: Kowal, Kathleen

Created By: kowal.kathleen@epa.gov

Recipients:

"randy.howell@nnsa.doe.gov" <randy.howell@nnsa.doe.gov>

Tracking Status: None

"Jim.Costedio@shinemed.com" <Jim.Costedio@shinemed.com>

Tracking Status: None

"freitagm@ci.janesville.wi.us" <freitagm@ci.janesville.wi.us>

Tracking Status: None

"bethaney.bacher-gresock@dot.gov" <bethaney.bacher-gresock@dot.gov>

Tracking Status: None

"ian.chidister@dot.gov" <ian.chidister@dot.gov>

Tracking Status: None

"jay.waldschmidt@dot.wi.gov" <jay.waldschmidt@dot.wi.gov>

Tracking Status: None

"smithr@ci.janesville.wi.us" <smithr@ci.janesville.wi.us>

Tracking Status: None

"Rakovan, Lance" <Lance.Rakovan@nrc.gov>

Tracking Status: None

Post Office: SA1PR09MB8799.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	523	8/17/2022 7:44:41 PM
USEPA SHINE Supplement 1 to FEIS Comment Letter.pdf		227784

Options

Priority: Normal

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON
BOULEVARD CHICAGO,
IL 60604-3590

August 17, 2022

VIA Electronic Mail Only

Lance Rakovan, Senior Environmental Project Manager
U.S. Nuclear Regulatory Commission
Office of Administration
Mail Stop: TWFN-7-A60M
Washington, D.C. 20555-0001

**Re: Supplement 1 to the Final Environmental Impact Statement Related to the
Operating License for the SHINE Medical Isotope Production Facility – Draft
Report for Comment, Janesville, Wisconsin - NUREG-2183
CEQ No. 20220091**

Dear Mr. Rakovan:

The U.S. Environmental Protection Agency has reviewed the 2022 Supplement 1 Draft Report (Draft Report) for the SHINE Medical Radioisotope Production Facility (Facility) in Janesville, Wisconsin, as prepared by the Nuclear Regulatory Commission (NRC). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations found at 40 CFR 1500-1508, and Section 309 of the Clean Air Act.

In 2015, the NRC and the U.S. Department of Energy, National Nuclear Security Administration (DOE-NNSA) issued a Final EIS which analyzed the environmental impacts of constructing, operating, and decommissioning the Facility. EPA provided project recommendations in a November 30, 2015, comment letter. In 2016, the NRC issued a construction permit for the Facility. In July 2019, SHINE Medical Technologies, LLC (Applicant) submitted an operating license application to the NRC to operate the Facility for a period of 30 years. The Facility accelerates the commercial production of medical radioisotopes without the use of highly enriched uranium.

NRC policy requires preparation of a supplement to the Final Environmental Impact Statement (EIS) in connection with the issuance of an operating license. The Draft Report updates the Final EIS and evaluates the environmental impacts of the Facility, particularly with respect to any changes in design, the radioisotope production process, or the environment, since the Final EIS was released for public comment. Based on SHINE's operating license application, the NRC and DOE-NNSA have not identified any information that presents "a seriously different picture of the environmental

consequences of constructing, operating, and decommissioning the SHINE facility” beyond those discussed in the Final EIS.

Following our review of the Draft Report, we offer the following comments concerning radioactive waste disposition and ensuring there is a clear waste disposition path for all materials generated during operation and decommissioning (i.e., facility cleanup and dismantlement)¹.

- Regarding Greater-than-Class-C (GTCC) waste generation and disposition, Section 2.5.3 (*Waste Minimization and Pollution Prevention Program*) of the Draft Report states: “No GTCC waste is generated during normal operations. The neutron multipliers are designed for the life of the SHINE facility and would be GTCC waste at the end of their life. SHINE has executed a lease and take-back contract with DOE (SHINE 2020a). During decommissioning, the DOE would take title to and be responsible for the final disposition of the neutron multipliers (SHINE 2020a).”

Recommendations for the Final Report: Explicitly describe and reference the lease and take-back contract. EPA recommends the Final Report (1) provide the date the lease and take-back contract was signed, and (2) include the reasons for the contract, including that the contract is necessary since SHINE GTCC waste does not have a commercial waste disposal option available. In addition, we recommend that the Final Report discuss how NRC and SHINE would ensure the minimization of GTCC, Class B, and Class C radioactive waste generation and avoid generating waste without a clear treatment and disposal path.

- Section 2.5.1.2 (*Other Liquid and Solid Waste*) of the Draft Report states: “The low-level waste generated by the SHINE facility during operation is expected to be classified as Class A, Class B, or Class C waste.”

Recommendations for the Final Report: Briefly describe (1) how the low-level waste would be managed prior to shipment for off-site disposal, (2) the period of time that low-level waste would be stored on site prior to shipment, (3) the commercial waste disposition options that would be available and may be used, and (4) whether any potential Class B and C materials could be processed so they can be reclassified as Class A low-level waste.

- Section 2.6 (*Facility Decommissioning*) of the Draft Report states that “Class B/C Components” and “Low-Level Mixed Waste” would be generated during decommissioning of the SHINE facility.

Recommendations for the Final Report: Clarify the classification of “Low-Level Mixed Waste” (i.e., whether it would be Class A, B, and/or C low-level waste), and discuss the anticipated Resource Conservation and Recovery Act hazardous waste components.

¹ <https://www.energy.gov/nnsa/articles/doe-offices-and-shine-sign-first-ever-contracts-under-uranium-lease-and-take-back>

Thank you in advance for your consideration of our recommendations to reduce environmental impacts of the project and to improve the quality of the document. Please be aware that we reserve the right to provide additional comments or recommendations under future permitting processes. If you have any questions, please feel free to contact Kathy Kowal of my staff at 312-353-5206 or kowal.kathleen@epa.gov.

Sincerely,

Jennifer Tyler
Acting NEPA Program Supervisor
Office of Tribal and Multi-media Programs

Cc (via email): Randy Howell, Department of Energy
Jim Costedio, SHINE Medical Technologies, Inc. Mark Freitag,
City of Janesville
Bethaney Bacher-Gresock, Federal Highway Administration - Wisconsin
Ian Chidester, Federal Highway Administration - Wisconsin
Jay Waldschmidt, Wisconsin Department of Transportation
Roseanne Meer, Wisconsin Department of Transportation - Southwest
Rebecca Smith, Janesville Transit System
Alice Halpin, Department of Agriculture, Trade, and Consumer Protection