UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 14 2013

REPLY TO THE ATTENTION OF:

7/1/2013
78 FR 39343

E-19J

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Cindy Bladey
Chief, Rules, Announcements and Directives Branch
Office of Administration
Mail Stop: TWB-05-B01M
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

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2013 AUG 21 PM 2:26
RULES AND DIRECTIVES BRANCH USNRC

**Re: Scoping for SHINE Medical Technologies Radioisotope Production Facility, Janesville, Wisconsin**

Dear Ms. Bladey:

The U.S. Environmental Protection Agency has received the scoping request provided by the Nuclear Regulatory Commission (NRC) for the proposed SHINE Medical Technologies radioisotope production facility in Janesville, Wisconsin. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

SHINE Medical Technologies (SHINE) proposes to construct, operate, and decommission a radioisotope production facility (facility) to produce molybdenum-99, iodine-131, and xenon-133, for use in diagnostic medical isotope procedures. The facility is proposed at a site four miles south of Janesville, Wisconsin on U.S. Highway 51. The proposed site is 91 acres, which is currently used for agriculture. NRC, as grantor of the license, will prepare an EIS analyzing potential impacts as a result of the proposed project.

EPA participated in the scoping meetings held July 17, 2013 and reviewed parts of the Environmental Review (ER). Based on the information, we recommend the following be addressed in the forthcoming EIS.

Waste Management

- EPA notes that both diesel and natural gas are identified as fuel sources in the ER. The draft EIS should include why two sources are necessary. Further, we recommend SHINE consider the use of renewable energy sources either in lieu of or to supplement the

**SUNSI Review Complete**
**Template = ADM – 013**
**E-RIDS= ADM-03**
**Add=** M. Moser (mrm1)

proposed diesel and natural gas sources. If SHINE or NRC dismisses the use of alternative energy sources, the draft EIS should state why.

- The Draft EIS should describe how the facility will comply with Underground Storage Tanks (UST) regulations under the Resource Conservation and Recovery Act (RCRA) for underground storage of fuel.
- The Draft EIS should include a "for official government use" document that provides details of proprietary information that is otherwise withheld from public disclosure, such as the details on "Waste generated by the target vessel solution cleanup process" described in Section 19.2.5.1.1 of the ER and information on the other waste streams.
- The Draft EIS should describe the disposal facility options available in the event that an anticipated disposal or storage facility is no longer available. Waste stream and disposal facility availability should be reviewed on an annual basis to confirm knowledge of the waste streams relative to the disposal options available and to avoid a situation of accumulating waste without a disposal path. The availability of options for each solid and liquid waste stream should also be discussed.
- Section 19.2.5.3.1 (Solid Radioactive Waste Handling System) discusses the generation and management of a used resin classified as Greater than Class C (GTCC) waste that would be shipped to Waste Control Specialists (WCS) of Texas for long-term storage. The Draft EIS should acknowledge that currently there is not a permanent disposal option available for commercially-generated GTCC waste, hence the need for long-term storage at WCS. The Draft EIS should evaluated whether it is possible to modify the system so that the used resin is generated as either Class A, B, or C low-level radioactive waste, which currently have available disposal options.
- The Draft EIS should provide information on the radionuclide inventory anticipated at the site during typical operations, with information on what would be considered process material, waste material temporarily stored on site for eventual off-site transport and disposal, or other site-specific material/product/waste designations. Radionuclide inventory limits under the NRC license should also be described.

Air Quality

- The draft EIS should describe how diesel emissions will be minimized throughout construction and decommissioning of the facility. EPA suggests the following diesel emission reduction techniques be employed to further minimize impacts:
    - Using low-sulfur diesel fuel (15 parts per million sulfur maximum) in construction vehicles and equipment.
    - Retrofitting engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
    - Positioning the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.

- Using catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Ventilating wherever diesel equipment operates indoors at the Meredosia and injection well sites. Roof vents, open doors and windows, roof fans, or other mechanical systems help move fresh air through work areas. As buildings under construction are gradually enclosed, remember that fumes from diesel equipment operating indoors can build up to dangerous levels without adequate ventilation
- Attaching a hose to the tailpipe of diesel vehicles running indoors and exhaust the fumes outside, where they cannot re-enter the workplace. Inspect hoses regularly for defects and damage.
- Using enclosed, climate-controlled cabs pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Regularly maintaining diesel engines, which is essential to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance. For example, blue/black smoke indicates that an engine requires servicing or tuning.
- Reducing exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Purchasing new vehicles that are equipped with the most advanced emission control systems available.
- Using electric starting aids such as block heaters with older vehicles to warm the engine reduces diesel emissions.
- Using respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a National Institute of Occupational Safety and Health (NIOSH) approval number. Never use paper masks or surgical masks without NIOSH approval numbers.

<u>Indirect and Cumulative Impacts</u>

- The Draft EIS should identify any traffic management or infrastructure improvements to US Highway 51 that will be required to handle increased capacity of truck and employee traffic. Any improvements and resultant impacts should be considered connected actions.

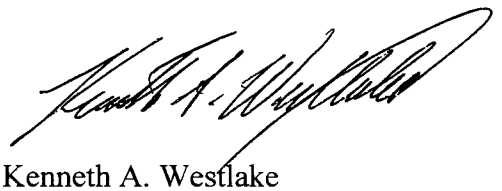
- The Draft EIS should indicate whether SHINE intends to use the adjacent Southern Wisconsin Regional Airport as a means of shipping and receiving materials. If yes, any improvements to the airport should be disclosed and considered connected actions.

Emergency Response

- The Draft EIS should discuss facility and system features to ensure safety and minimize off-site releases in the event of an accident or other unanticipated event.

Thank you in advance for your consideration of our comments. We appreciate early involvement in the process and look forward to reviewing the Draft EIS. Please feel free to contact me or Elizabeth Poole of my staff at (312) 353-2087 or poole.elizabeth@epa.gov with any questions.

Sincerely,



Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance

cc: Michelle Moser, U.S. Nuclear Regulatory Commission