

# Preliminary Results of the Environmental Review for Construction of the Proposed NWMI Medical Radioisotope Production Facility

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December 6, 2016

# Meeting Background

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- Northwest Medical Isotopes, LLC (NWMI) submitted an application for construction of a medical radioisotope production facility at Discovery Ridge Research Park.
- The NRC:
  - is reviewing that application & performing an environmental review
  - is reviewing the environmental impacts of constructing, operating, and decommissioning the proposed facility
  - has developed preliminary results of that review
  - wants your comments on those results

# Meeting Rules & Format

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- Rules
  - Sign in
  - Silence personal electronics
  - Yellow cards for speakers
- Meeting format
  - Introduction
  - Environmental review & draft EIS briefing
  - Questions
  - Comments

# Overview

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- NRC presentation
  - NRC's regulatory role
  - Summary of the construction permit review process
  - Overview of the draft EIS
  - Upcoming milestones and how to submit comments
- Questions/Answers on NRC presentation
- Your comments

# NRC's Regulatory Role

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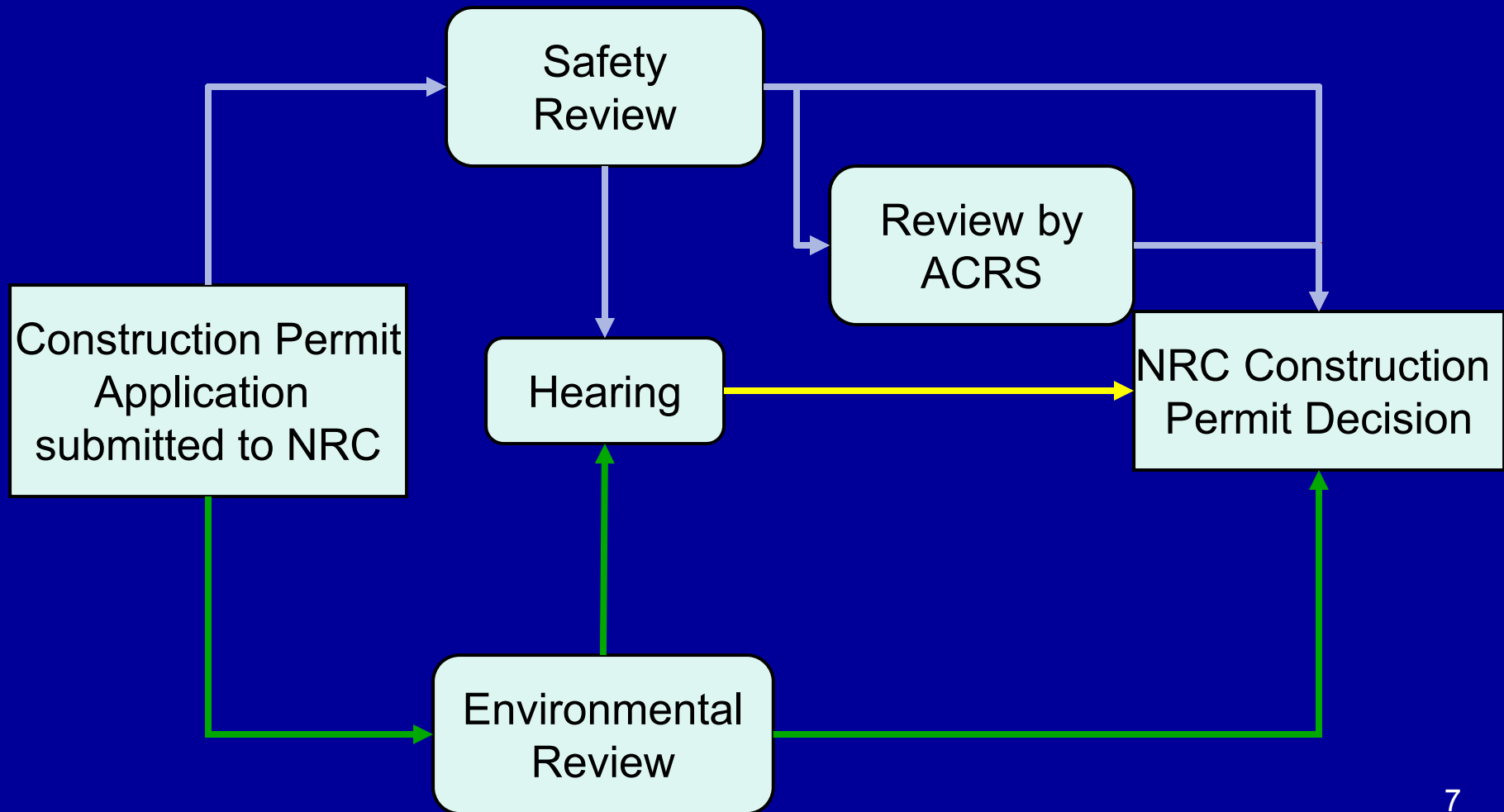
- NRC regulates civilian use of nuclear materials and facilities
- NRC's mission:
  - Protect public health and safety
  - Promote common defense and security
  - Protect the environment

# Environmental Review

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- National Environmental Policy Act (NEPA)
  - Informs Federal decision making
  - Public disclosure of environmental impacts and other considerations
- NRC's Environmental Regulations
  - 10 CFR Part 51
- Provide NRC staff recommendation on whether or not to issue construction permit

# Construction Permit Review Process



# Safety Review Milestones

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Application Received	July 20, 2015
Notice of Acceptance	January 4, 2016
Requests for Additional Information	Mar & Sep 2016
Draft Safety Evaluation Report	June 2017
Advisory Committee for Reactor Safeguards Meetings	Summer 2017
Final Safety Evaluation Report	Fall 2017



# Environmental Review Milestones

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Application Received	February 5, 2015
Notice of Intent	November 18, 2015
Public Scoping Meeting*	December 8, 2015
Environmental Site Audit	September 16-17, 2015
Draft EIS	October 31, 2016
Draft EIS Public Meeting*	December 6, 2016
Draft EIS Comments Due*	December 29, 2016
Final EIS	May 2017

\* Opportunity for Public Participation

# Overview of the draft Environmental Impact Statement

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- Purpose and Need
- Affected Environment
- Environmental Impacts of Proposed Action
- Environmental Impacts of Alternatives to Proposed Action
- NRC's staff preliminary recommendation

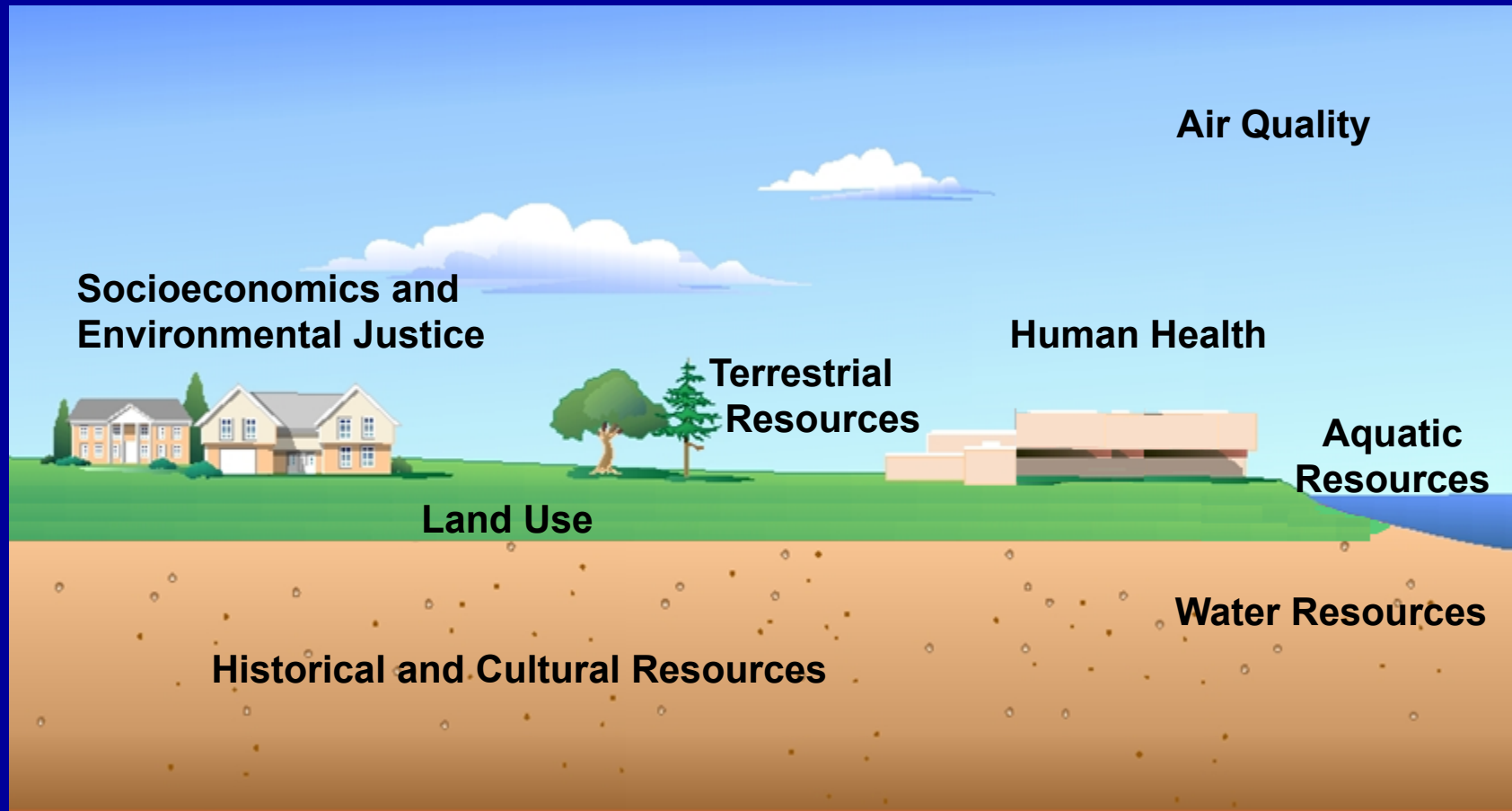
# Purpose and Need for Proposed Federal Action

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- The proposed Federal Action:  
Whether or not to issue construction permit
- The purpose and need is to provide a medical radioisotope production option that could help fill the need for a domestic source of medical radioisotopes.

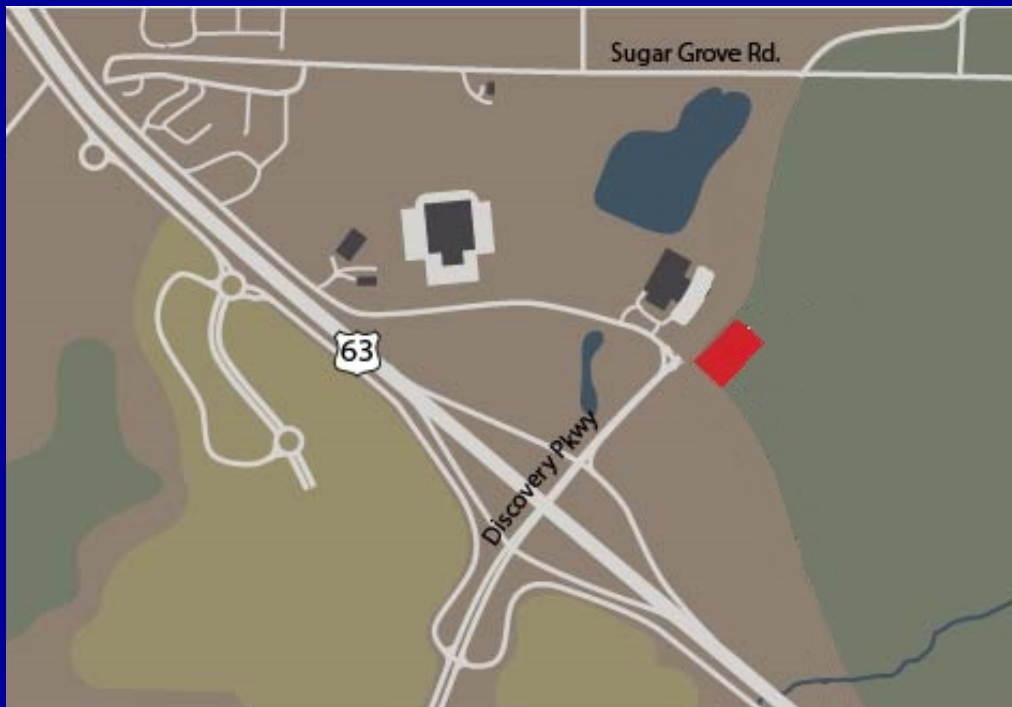
# Environmental Resource Areas

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# Proposed Site Location

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- Discovery Ridge Research Park, Columbia, MO
- 7.4 acres

# Definition of Impacts

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- NRC-defined impact levels:
  - **SMALL** - Effects are not detectable or are so minor that they will neither destabilize nor noticeably alter an important attribute of the resource.
  - **MODERATE** - Effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.
  - **LARGE** - Effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

# Impacts of the proposed NWMI facility as determined in the Draft EIS

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Resource Area	Impact
Land Use and Visual Resources	SMALL
Air Quality and Noise	SMALL
Geologic Environment	SMALL
Water Resources	SMALL
Ecological Resources	SMALL
Socioeconomics	SMALL
Human Health	SMALL
Waste Management	SMALL
Transportation	SMALL

# Other Environmental Requirements

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- Endangered Species Act (Section 7)
- National Historic Preservation Act (Section 106)
- Environmental Justice (Executive Order 12898)



# Impacts of the Proposed NWMI Facility Other Environmental Requirements

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Resource Area	Impact
Endangered & Threatened Species	No Effect
Historic Properties	No Adverse Effect
Environmental Justice	Not Expected to Experience Disproportionately High and Adverse Impacts

# Cumulative Impacts

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- Overall environment impacts including past, present, and reasonably foreseeable future actions
- Cumulative impacts on environment mostly small
- Impacts from the proposed NWMI facility would be an unnoticeable or minor contributor to cumulative impacts

# Alternatives

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- One Alternative Site
  - University of Missouri Research Reactor
    - SMALL to MODERATE: Noise
- Two Alternative Technologies
  - Linear Accelerator-based at Discovery Ridge
    - SMALL: all resource areas
  - Subcritical Fission at Discovery Ridge
    - SMALL: all resource areas
- No action alternative
  - SMALL: all resource areas

# Preliminary Recommendation

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The preliminary recommendation of the NRC staff's environmental review is to issue a construction permit to NWMI, unless safety issues mandate otherwise.

# Submitting Comments After the Meeting

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By mail: Chief, Rules, Announcements, and  
Directives Branch (RADB)  
Division of Administrative Services  
Mailstop OWFN-12-H08  
U.S. NRC, Washington, D.C. 20555-0001

In person: 11545 Rockville Pike  
Rockville, Maryland

Internet: [www.regulations.gov](http://www.regulations.gov)  
Docket ID: NRC-2013-0235

Comments due by **December 29, 2016**

# Additional Information

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- Environmental Project Manager:  
**David.Drucker@nrc.gov, (800) 368-5642, Ext. 6223**
- The draft EIS can be viewed at:  
**Daniel Boone Regional Library**  
100 W Broadway, Columbia, Missouri 65203
- NRC's Web site ([www.nrc.gov](http://www.nrc.gov)):
  - <http://www.nrc.gov/info-finder/nonpower/nw-medical-isotopes.html>
- NWMI Draft EIS is NUREG-2209