

ENVIRONMENTAL IMPACT STATEMENT SCOPING PROCESS

SCOPING SUMMARY REPORT

**Proposed Termination of NRC Materials License SUB-1435 for the
Jefferson Proving Ground Depleted Uranium Impact Area in
Jefferson County, Indiana**

July 2015

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1 INTRODUCTION AND BACKGROUND

This report describes the scoping process conducted by the U.S. Nuclear Regulatory Commission (NRC) staff, in accordance with Sections 51.26(a), 51.26(b), 51.27, 51.28, and 51.29 of Title 10 of the *Code of Federal Regulations* (10 CFR), for the NRC's Environmental Impact Statement (EIS) for the U.S. Department of the Army's (Army's) proposed termination of NRC Materials License SUB-1435 for the Jefferson Proving Ground (JPG) Depleted Uranium Impact Area (DU Impact Area) in Jefferson County, Indiana. In addition, this report summarizes comments received from stakeholders and other interested parties on the scope of the EIS and on other matters related to the project, and identifies issues and concerns that will be addressed in the EIS based on these comments and any issues raised that are considered to be outside the scope of the EIS.

1.1 Overview

The Army submitted a license amendment application on August 28, 2013, to the NRC (U.S. Army, 2013a), which included a Decommissioning Plan (DP) (U.S. Army, 2013b) and an Environmental Report (ER) (U.S. Army, 2013c) requesting that NRC terminate Materials License SUB-1435 (NRC, 2013) for JPG under restricted conditions in accordance with 10 CFR 20.1043. JPG is located in Jefferson, Jennings, and Ripley Counties in southeastern Indiana. Figure 1 shows the regional location of JPG. NRC Materials License SUB-1435 currently authorizes possession onsite, for the purpose of decommissioning, of up to 80,000 kilograms [kg] (176,370 pounds [lb]) of DU metal, alloy, and/or other forms within the restricted area known as the DU Impact Area. The DU Impact Area is located within JPG, entirely within Jefferson County (see Figure 1).

A detailed review of the Army's license termination request by NRC staff is in process, and consists of both an environmental review and a safety review. As part of the environmental review, NRC staff is preparing an EIS in accordance with NRC's regulations in 10 CFR Part 51. These regulations implement the requirements of the National Environmental Policy Act of 1969 (NEPA), Public Law (P.L.) 91-190, as amended, which requires federal agencies, as part of their decision-making process, to consider the environmental impacts of actions under their jurisdiction. The Army's proposal for termination of NRC Materials License SUB-1435, as stated above and described in greater detail in Section 1.3, is the "proposed action" that NRC staff is evaluating in the EIS. Conducted in parallel with the environmental review, NRC staff's safety review includes preparation of a separate Safety Evaluation Report (SER) to evaluate radiological consequences of the Army's proposed action to determine if that action can be accomplished safely and in compliance with applicable NRC regulations.

An initial step in developing an EIS is the scoping process. The EIS scoping process is designed to help NRC staff determine the range of issues, alternatives, and potential environmental impacts to be considered in the EIS and to identify significant issues related to the proposed action. NRC solicits input from the public and from government and private sector agencies and organizations to focus the scope of its review and evaluation in the EIS on areas of genuine concern.

On November 3, 2014, the NRC published a Notice of Intent (NOI) in the *Federal Register* (FR) (79 FR 65256) to prepare an EIS to evaluate potential environmental impacts of the proposed license termination at JPG and to conduct a scoping process for the EIS. Through this NOI, NRC encouraged federal, state, and local government agencies, tribal governments, private sector agencies and organizations, and members of the public to provide input for the EIS.

Publication of the NOI opened a 45-day public comment period (November 3 through December 18, 2014) during which stakeholders and other interested parties were able to submit comments to the NRC on the scope of the EIS. In addition, the NOI announced a Public Scoping Meeting to be held on December 3, 2014, near JPG in Madison, Indiana, where members of the public could present oral and written comments.

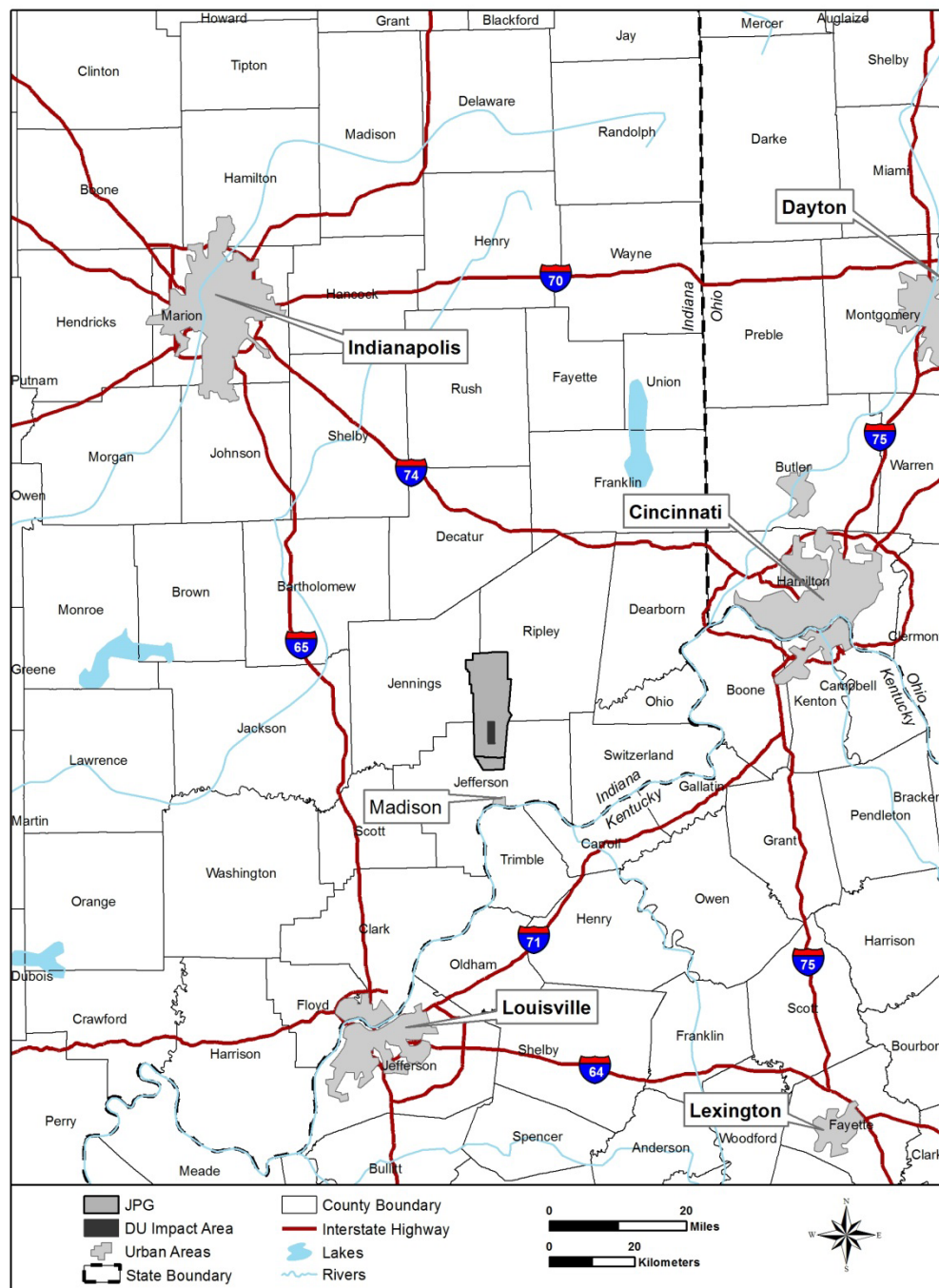


Figure 1. Location of JPG and the DU Impact Area in Southeastern Indiana

1.2 JPG and DU Impact Area Description and History

The descriptive and historical information on JPG and the DU impact Area presented in this section are taken largely from the Army's ER (U.S. Army, 2013c) and DP (U.S. Army, 2013b). Figure 2 shows the JPG site layout, including the location of the DU Impact Area.

JPG was established in 1941 on 224 square kilometers (km²) [55,264 acres (ac)]. A firing line with 268 fixed-gun positions separated JPG into two areas: a 17.5-km² [4,314-ac] southern portion and a 206-km² [50,950-ac] northern portion. JPG was used by the Army between 1941 and 1994 for the test-firing of a wide variety of conventional explosive munitions into the area north of the firing line. During that time, more than 24 million rounds were fired. Approximately 1.5 million rounds did not detonate upon impact, remaining as unexploded ordnance (UXO) on or beneath the ground surface, along with an additional 3 to 5 million rounds with live detonators, primers, or fuzes.

As part of its munitions testing program, the Army also test fired DU projectiles (also known as DU penetrators) into the 8.4-km² [2,080-ac] DU Impact Area, which is located north of the firing line (see Figure 2). DU projectiles were and are used by the U.S. military as armor-piercing, anti-tank weapons. DU test firings, which were conducted under an earlier version of NRC Materials License SUB-1435, began on March 18, 1984, and concluded on May 2, 1994. Approximately 100,000 kg [220,462 lb] of DU projectiles were fired at soft targets and mostly remained intact. Approximately 73,500 kg [162,040 lb] of DU remain in the DU Impact Area as DU projectiles, projectile fragments, and degradation products. Also, the Army suspects that a "very high" density of UXO (i.e., 85 UXO/acre) is present in the DU Impact Area.

JPG was closed in September 1995 under the Defense Authorization Amendments and Base Realignment and Closure Act of 1988, P.L. 100-526. Under a 2000 Memorandum of Agreement (MOA) between the Army, U.S. Fish and Wildlife Service (USFWS), and U.S. Air Force (USAF) (U.S. Army, 2000), the Army retains ownership of all real property north of the firing line. Also under the MOA, the USFWS operates the Big Oaks National Wildlife Refuge (BONWR) on approximately 206 km² [50,950 ac] in the northern part of JPG (including the DU Impact Area and the other areas north of the firing line) and the Indiana Air National Guard operates a bombing practice range for the USAF on 4.2 km² [1,038 ac] within the BONWR, both under 25-year leases with 10-year renewal options.

1.3 Proposed Action

In its August 28, 2013 license termination request (U.S. Army, 2013a–c), the Army proposed to decommission the DU Impact Area under restricted conditions, leaving the DU and UXO in place, while maintaining institutional controls in the area north of the firing line at JPG (which includes the DU Impact Area). Institutional controls, which are already in place, include physical access restrictions to prevent unauthorized entry into the area (e.g., perimeter chain-link fence with pad locked chain-link fence gates around the area north of the firing line, and security warning signs on the fence and around the DU Impact Area cautioning persons not to enter); legal controls (e.g., the Army, as an agency of the Federal Government and an enduring entity, retains property ownership of JPG north of the firing line); and administrative controls (e.g., restricted and limited public access and hunting prohibitions) over the DU Impact Area. In addition, concurrent with license termination, the Army proposed to discontinue its

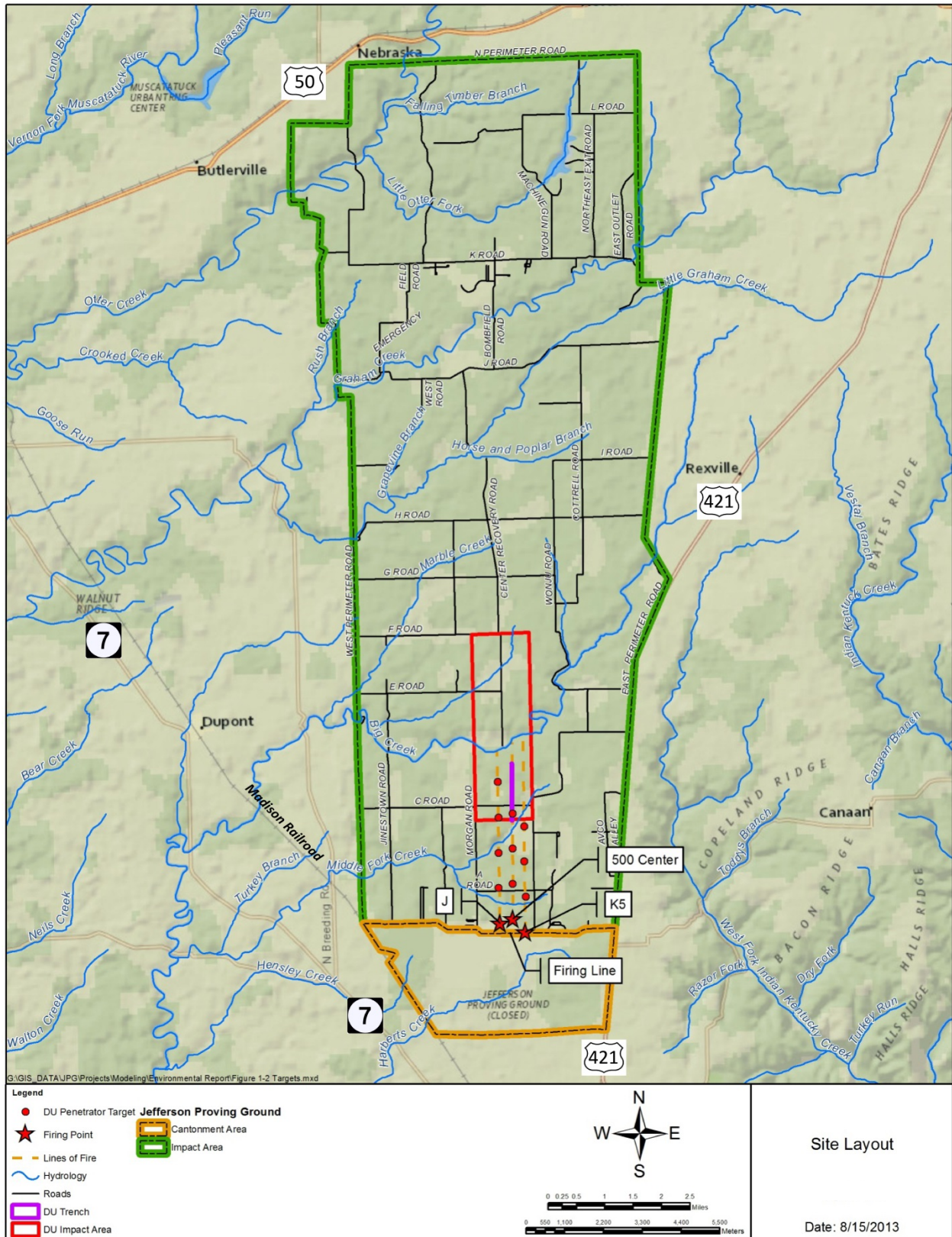


Figure 2. JPG Site Layout (modified from U.S. Army, 2013c)

semi-annual Environmental Radiation Monitoring (ERM) program at JPG (U.S. Army, 2003, 2004) and also proposed that NRC inspections and enforcement to ensure that the Army's controls and other activities under the license are effective (NRC, 2006) would no longer be conducted.

The Army concluded that removal of DU would be hazardous and prohibitively expensive based on the need for UXO clearance, radiological soil treatment, and offsite transportation and disposal of the DU and DU-contaminated soil as low-level radioactive waste (U.S. Army, 2013c). The Army also is leaving the UXO in place in the other areas north of the firing line.

2 EIS SCOPING PROCESS

As discussed in Section 1.1, on November 3, 2014, NRC published an NOI in the *Federal Register* to prepare an EIS to evaluate potential environmental impacts of the proposed license termination and to conduct a scoping process for the EIS. Principal goals of NRC staff's scoping process for the EIS, as identified in the NOI, were to:

- Ensure that important issues and concerns are identified early and are properly studied
- Identify alternatives to be examined
- Identify significant issues to be analyzed
- Eliminate unimportant issues from detailed consideration
- Identify public concerns

Publication of the NOI opened a 45-day public comment period, ending on December 18, 2014, during which stakeholders and other interested parties were able to submit comments to NRC on the scope of the EIS. Comments could be submitted through the Federal Rulemaking Website, *Regulations.gov* (<http://www.regulations.gov>), under Docket ID NRC-2014-0097, or via postal mail. In addition, the NOI announced a Public Scoping Meeting to be held on December 3, 2014, near JPG in Madison, Indiana, where members of the public could present oral and written comments.

Shortly after publication of the NOI, NRC staff contacted several federal, state, and local elected officials; federal government agencies; tribal governments; state and local government agencies; and private sector agencies and organizations. The purpose of these interactions was to provide copies of the NOI, request scoping comments, and provide invitations to the December 3, 2014, Public Scoping Meeting. Contacts were made with the groups and organizations identified in Table 1.

Furthermore, in advance of the Public Scoping Meeting, NRC staff made several efforts to raise public awareness of the meeting and to solicit public comments. To accomplish this objective, in addition to the NOI and the contacts described above, NRC staff issued public meeting announcements/advertisements in the following venues:

- The NRC's Public Meeting Schedule Website (<http://meetings.nrc.gov/pmns/mtg>) (see meeting announcement in NRC, 2014a)
- NRC Press Release No. II-14-041, NRC News, Office of Public Affairs, Region III, "NRC Seeks Comment On Proposed License Termination At Jefferson Proving Ground" (NRC, 2014b)
- Newspapers
 - Cincinnati Community Press (Ohio)
 - Indianapolis Star (Indiana)
 - Louisville Courier-Journal (Kentucky)
 - Madison Courier (Indiana)
 - North Vernon Plain Dealer (Indiana)
 - North Vernon Sun (Indiana)
 - Versailles Republican (Indiana)
- WORX Radio (Madison, Indiana)

Table 1. EIS Scoping Process Contacts

<p><u>Indiana Elected Officials</u></p> <ul style="list-style-type: none"> • Governor • U.S. Senators • U.S. Representatives* • State General Assembly Members* • Commissioners, Jefferson County • Commissioners, Jennings County • Council Members, Ripley County • Mayor, City of Madison • Mayor, City of North Vernon • Mayor, City of Vernon • Mayor, Town of Batesville • Council President, City of Versailles • Council Members, Town of Holton • Council Members, Town of Osgood 	<p><u>Indiana State Government Agencies</u></p> <ul style="list-style-type: none"> • Department of Agriculture, Executive Director • Department of Environmental Management <ul style="list-style-type: none"> ○ Commissioner ○ Office of Compliance Support, Southeast Regional Office ○ Office of Land Quality, Federal Programs Section • Department of Homeland Security (Radiation Safety Officer) • Department of Natural Resources <ul style="list-style-type: none"> ○ Executive Director ○ Fish & Wildlife ○ Forestry ○ Historic Preservation & Archaeology • Geological Survey • Native American Indian Affairs Commission
<p><u>Federal Government Agencies</u></p> <ul style="list-style-type: none"> • U.S. Department of the Army, Rock Island Arsenal (Licensee) • U.S. Army Installation Management Command - IMCOM Radiation Safety Officer for JPG • U.S. Department of Agriculture, Natural Resources Conservation Service • U.S. Environmental Protection Agency Region 5 (NEPA Section) • U.S. Environmental Protection Agency Region 5 (Superfund Division) • U.S. Fish and Wildlife Service, Big Oaks National Wildlife Refuge • U.S. Fish and Wildlife Service, Bloomington Ecological Services Field Office 	<p><u>Other State Agencies</u></p> <ul style="list-style-type: none"> • Kentucky Cabinet for Health and Family Services (Administrator, Radiation Health Branch) • Ohio Emergency Management Agency (Radiological Branch Chief)
<p><u>Tribal Governments†</u></p> <ul style="list-style-type: none"> • Citizen Potawatomi Nation, Oklahoma • Delaware Nation • Forest County Potawatomi • Hannahville Indian Community • Kickapoo Tribe in Kansas • Kickapoo Tribe of Oklahoma • Miami Tribe of Oklahoma • Ottawa Tribe of Oklahoma • Peoria Tribe of Indians of Oklahoma • Pokagon Band of Potawatomi • Prairie Band Potawatomi Nation • The Shawnee Tribe • United Keetoowah Band of Cherokee Indians in Oklahoma • Wyandotte Nation 	<p><u>Private Agencies and Organizations</u></p> <ul style="list-style-type: none"> • Hoosier Environmental Council • Jefferson County Industrial Development Corporation • JPG Regional Development Board • Knob and Valley Audubon Society • Mullett, Polk & Associates • Leidos Inc. • Ohio River Keeper • Save The Valley, Inc. • Sierra Club, Indiana Chapter
<p>*For districts proximate to Jefferson Proving Ground †These include Native American Tribes with religious or cultural ties to the area of JPG and vicinity</p>	

On December 3, 2014, NRC staff held the Public Scoping Meeting from 7:00 PM to 10:00 PM at The Livery Stable, 309 Broadway Street, Madison, Indiana 47250. In addition, NRC staff hosted informal discussions with meeting attendees for 1 hour prior to the start of the public meeting. The public meeting began with a slide presentation by NRC staff (NRC, 2014c). The slide presentation provided a description of NRC's role, responsibilities, and mission; overviews of the JPG and DU Impact Area site description and history; NRC's license termination review process; the NRC staff's safety review and environmental review processes; information on opportunities for public involvement; information on the EIS; and information on the EIS scoping process and on how to provide scoping comments and obtain additional information. Following the presentation, NRC staff responded to questions and received comments from meeting attendees.

At the meeting, 37 individuals signed in as attendees (some attendees chose not to sign in). In addition, 11 NRC personnel and 6 personnel from the NRC's contractor, the Center for Nuclear Waste Regulatory Analyses (CNWRA[®]), were in attendance. NRC staff presentations, participant questions and NRC staff responses, and participant's oral comments at the public meeting were transcribed and have been recorded in the *Official Transcript of Proceedings* (NRC, 2014d). No written comments were presented at the meeting.

NRC staff will prepare a draft EIS that will be based, in part, on the scoping comments received during the 45-day public comment period and at the Public Scoping Meeting. Staff will invite the public to comment on that document, and a draft EIS public meeting will be held. NRC staff will subsequently prepare a final EIS, with consideration of all comments received on the draft EIS. The staff's final EIS and SER together will provide sufficient evidence and analysis to support NRC's final decision and action on the Army's proposed license termination request.

The remainder of this report is organized as follows. Section 3 summarizes issues and concerns raised by government officials, government and private sector agencies and organizations, and members of the public during the public comment period. Section 4 identifies issues that will be addressed in the draft EIS, including those based on scoping comments received, and also identifies any issues raised that are not within the scope of the EIS. Section 5 provides a list of references cited in this report.

All documents associated with the EIS scoping process for the Army's proposed license termination for the JPG DU Impact Area, including the Army's license amendment application documents, all comment correspondence documents, and the official transcript of the Public Scoping Meeting, are available for public inspection in the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, or from NRC's Agencywide Documents Access and Management system (ADAMS). ADAMS is accessible at <http://www.nrc.gov/reading-rm/adams.html>. Persons who encounter problems in accessing documents in ADAMS should contact the NRC's PDR by telephone at 1-800-397-4209 or 301-415-4737, or via e-mail at pdr.resource@nrc.gov. Documents associated with the EIS scoping process are identified within this report or in the list of references in Section 5 of the report.

3 ISSUES AND CONCERNS RAISED DURING THE EIS SCOPING PROCESS

During the public scoping comment period for the EIS for the proposed JPG DU Impact Area license termination, comments were received from government officials, government and private sector agencies and organizations, and members of the public. This section summarizes issues raised in those comments. Section 3.1 describes NRC staff's review of comments and how comments were subsequently organized and categorized by subject area. Section 3.2 identifies the commenters and where their comments can be found in ADAMS and are summarized in this report. Section 3.3 summarizes comments received by category and how NRC staff will use the comments in developing the scope of the EIS.

3.1 Review and Organization of Scoping Comments

NRC staff, assisted by CNWRA, reviewed all comments received in writing through *Regulations.gov* and via postal mail during the public comment period that began on November 3, 2015, and ended on December 18, 2015, as well as all of the oral comments in the official transcript from the December 3, 2014, Public Scoping Meeting (NRC, 2014d). Because there was no clear differentiation at the scoping meeting between the question and answer and comment portions of the meeting, both the participant questions and comments are considered "comments" for the purposes of this report and scoping the EIS. Staff identified individual comments (i.e., comments in different subject areas) within each comment document and then determined whether each comment was within or outside the scope of the EIS. (Comments that were considered by staff to be outside the scope of the EIS related to issues and concerns that were not directly related to the assessment of potential impacts or to the decision-making process, as discussed in further detail in Section 4.3.) Then, comments were categorized according to specific subject matter topics or as general comments. Comments from different commenters that addressed similar specific issues, objectives, or concerns were further grouped and consolidated to capture common issues that had been raised in those comments.

The following subject areas categorize comments received during the public scoping comment period:

- NEPA Process, Agency Consultations, and Public Participation
- Regulatory Issues and Requirements
- Alternatives
- Land Use
- Water Resources (Groundwater and Surface Water) and General Transport Modeling Issues
- Ecological Resources
- Climatology
- Public and Occupational Health
- Mitigation Measures
- Costs, Benefits, and Cost-Benefit Analysis
- Comments Opposing the Army's Proposed Action
- Miscellaneous Topics

3.2 List of Commenters and Other Scoping Process Participants

The NRC received a total of 18 pieces of comment correspondence via *Regulations.gov* (Docket ID NRC-2014-0097) and via postal mail. In addition, the NRC received oral comments (some in the form of questions) from 10 individuals at the December 3, 2014, Public Scoping Meeting, as recorded in the official transcript of that meeting (NRC, 2014d). After reviewing and categorizing comments, staff determined that a total of approximately 70 comments were received from all sources. Table 2 contains an alphabetized listing of individuals who provided comments, their affiliation (if provided), the ADAMS Accession Number that can be used to locate each individual's comment document in ADAMS, and section(s) of this report where each comment is summarized.

Table 2. List of Commenters			
Commenter Name (Last, First)	Affiliation (if provided)	ADAMS Accession Numbers*	Sections Where Comments are Summarized in This Report
Amick, Mark	Indiana Department of Environmental Management	ML14345A256†	3.3.3, 3.3.4, 3.3.9
B, K (name unreadable)		ML14356A187	3.3.8, 3.3.11
Binford, Joe		ML14357A066	3.3.3
Brown, Kate Doyle		ML14356A190	3.3.3, 3.3.8
Chapo, Sherry		ML14345A256†	3.3.1, 3.3.2, 3.3.3, 3.3.5,
Ellis, Nick		ML14345A256†	3.3.1, 3.3.3, 3.3.5
Hall, James		ML14345A256†	3.3.1, 3.3.5
Hastings, Tom		ML14345A753	3.3.11
Hellman, Stephanie		ML14345A256†	3.3.1, 3.3.5, 3.3.12
Herring, Richard		ML14345A256†	3.3.12
Hill, Richard	Save the Valley and Hoosier Chapter Sierra Club	ML14357A065 ML14345A256†	3.3.2, 3.3.3, 3.3.8
Knouf, Ken		ML14345A256†	3.3.4, 3.3.12
Lutz, Raymond	Citizens' Oversight	ML14345A751	3.3.3
Moore, Michael S.	Jefferson Proving Ground Heritage Partnership	ML15008A221 ML15008A219 ML14345A256†	3.3.5, 3.3.12
Mullins, Mike		ML14356A189	3.3.3
Payne, Tom		ML15005A038	3.3.11
Perfect, Chip	Indiana State Senator	ML14345A752	3.3.8, 3.3.10, 3.3.12
Richardson, Larry		ML14345A256†	3.3.3, 3.3.5, 3.3.8, 3.3.11
Ryan-Hotchkiss, Mary		ML14345A845 ML14356A188	3.3.3
Stacier, John		ML14345A844	3.3.3, 3.3.4

Table 2. List of Commenters (Cont'd)			
Commenter Name (Last, First)	Affiliation (if provided)	ADAMS Accession Numbers*	Sections Where Comments are Summarized in This Report
Trout, Rebecca		ML14345A754	3.3.3
Watkins, Roselyn J.		ML15005A037	3.3.3, 3.3.11
Weir, Doug		ML14357A064	3.3.3, 3.3.8, 3.3.13
Westlake, Kenneth	U.S. Environmental Protection Agency, Region 5	ML15005A030	3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.10, 3.3.9
Wurtz, Sarah		ML14357A063	3.3.3
<p>*ADAMS, the NRC's Agencywide Documents Access and Management system, is accessible at http://www.nrc.gov/reading-rm/adams.html.</p> <p>†This is the official transcript of the December 3, 2014, Public Scoping Meeting.</p>			

3.3 Summary of Issues and Concerns Raised

Comments presented in the individual pieces of comment correspondence and in the official transcript of the scoping meeting addressed several subject areas related to proposed termination under restricted conditions of Materials License SUB-1435 for the JPG DU Impact Area. These comment subject areas, or categories, and major topics and issues of concern raised in the comments within each category are identified in Sections 3.3.1 through 3.3.12. Comments and groups of similar comments are summarized in each subsection and are not repeated verbatim. Each subsection includes comments found by the NRC staff to raise issues that would be within the scope of the EIS, or which contain information relevant to the scope of the EIS. Each comment or group of comments below is followed by a brief description (in *italics*) of how NRC staff will use the comment and groups of comments in developing the scope of the EIS (i.e., "*NRC Consideration in the EIS*"). Comments that raised issues that are considered by NRC staff to be outside the scope of the EIS are discussed in Section 4.3.

3.3.1 NEPA Process, Agency Consultations, and Public Participation

Comment: One commenter urged the NRC to include copies of consultation documents in the EIS, including those for historic resources, wetlands, and federal or state listed or endangered species. The commenter also requested the EIS explain what efforts were made to engage the public, other government agencies, and local community groups.

NRC Consideration for the EIS: *As applicable, the draft EIS will include copies of agency consultation documents, as well as a description of the NRC's outreach efforts to engage the public, other government agencies, and local community groups and consultation with other agencies.*

Comment: Another commenter asked who prepares the EIS, who has requested the EIS, whether the applicant would have input into the EIS, and whether the NRC would consider the accuracy of the applicant's documents, including whether the NRC would substitute other or its own analyses into the EIS. The commenter also asked about the timeframe for completion of the EIS.

NRC Consideration for the EIS: *The EIS is being prepared by NRC staff with contract support from CNWRA. The EIS is being prepared in accordance with NEPA and NRC's NEPA-implementing regulations in 10 CFR Part 51, to evaluate potential environmental impacts of the Army's proposed license termination request and alternatives to that request as part of its decision-making process.*

The EIS is required based on information presented in NRC's decommissioning guidance in NUREG-1757, "Consolidated Decommissioning Guidance," Vol. 1, Rev. 2 (NRC, 2006). This document classifies facilities undergoing decommissioning into seven groups, and the JPG DU Impact Area decommissioning as proposed by the Army falls under Group 6—"Licensed material was used in a way that resulted in residual radiological contamination of building surfaces, and/or soils, and possibly groundwater; and the licensee demonstrates that the site meets restricted use levels derived from site-specific dose modeling" (see Table 1-1 and Section 13.1 in NUREG-1757, Vol 1, Rev. 2, for a complete description). Additional information in NUREG-1757 indicates that Group 6 decommissioning sites require an EIS [e.g., see NUREG-1757 (Vol. 1, Rev.2) Table 1.2, bullet #3 in Section 13.4.2, Section 15.7, and Table 15.3]. Furthermore, Section 15.7.4 states, "If there are potentially significant impacts, an EIS must be prepared," and "Decommissioning of facilities that plan to use the restricted release criteria (10 CFR 20.1403–1404) for license termination typically require an EIS." The Army's proposed license termination under restricted conditions for the JPG DU Impact Area would be implemented under the requirements of 10 CFR 20.1403.

In preparing the EIS, NRC and CNWRA staff will evaluate information in the ER and DP provided by the Army (U.S. Army, 2013b, c) and also will consider information in other relevant sources, including supplementary information provided by the Army in response to requests for additional information from NRC and in documentation obtained independently by NRC and CNWRA staff. NRC and CNWRA staff will independently evaluate and verify the accuracy of all information provided by the Army that will be included in the EIS. Where necessary, NRC staff would incorporate its own analyses or other, NRC-validated analyses in the EIS.

Completion of the EIS is approximately a 2-year process. However, this schedule is subject to change based on factors such as NRC staff's finding of the completeness and quality of the Army's ER and DP, the Army's responsiveness to requests for additional information from NRC, conduct of an adjudicatory hearing if requested and granted, availability of federal funding, and unplanned higher priority operational safety or environmental work within the NRC.

Comments: *Two commenters asked who would be paying for the EIS, and one of these commenters asked whether budget issues would affect the schedule or prioritization of completing the EIS.*

NRC Consideration for the EIS: *The Omnibus Budget Reconciliation Act of 1990, as amended, requires the NRC to recover through fees to its applicants and licensees approximately 90 percent of its annual fiscal year budget authority. For the NRC staff's preparation of the JPG EIS, the Army is periodically invoiced by the NRC for its labor and contract expenses. The NRC is required to deposit all fees collected from applicants and licensees in the United States Treasury. The NRC uses congressionally appropriated funds to prepare the EIS as part of NRC's decision-making process. The Army's programs also are based on funds appropriated by Congress. Changes in budget appropriations to the NRC or the Army from Congress or budgetary priorities within the NRC or the Army could affect the schedule or prioritization for completing the EIS.*

Comments: One commenter asked what topics would be covered in the EIS, noting several that were mentioned in the NRC slide presentation, and whether review documents would be publicly available. Another commenter asked about how accessible the report was going to be.

NRC Consideration for the EIS: Topics that will generally be covered in the EIS are identified in Chapter 5 of NRC's environmental review guidance in NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs"¹ (NRC, 2003). Additional information on topics to be covered in the EIS is described in Sections 4.1 and 4.2 of this Scoping Summary Report.

As discussed in Section 2 of this Scoping Summary Report, NRC staff will initially prepare a draft EIS. The draft EIS will be made publicly available in ADAMS and on the NRC's public website, "Publications Prepared by NRC Staff," at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/>, and its availability will be announced in the Federal Register and in other venues. In addition, NRC staff will invite the public to comment on that document, and a draft EIS public meeting will be held. NRC staff will subsequently prepare a final EIS, with consideration of all comments received on the draft EIS. As with the draft EIS, the final EIS also will be made publicly available in ADAMS and NRC's public website, and will be announced in the FR. Copies of the draft and final EIS, when available, will also be mailed to persons and agencies on NRC's mailing list for the JPG project, and will be sent to the Madison Branch of the Jefferson County Public Library, located at 420 W. Main Street, Madison, Indiana 47250. Members of the public also may examine and purchase copies of the draft and final EIS at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

3.3.2 Regulatory Issues and Requirements

Comments: One commenter urged the NRC to list required permits associated with the proposed action in the EIS. Another commenter asked for clarification regarding regulatory enforcement, specifically if there is a regulatory body that oversees the Army's activities and would identify or be responsible for future concerns. Another commenter asked if any other site has ever been decommissioned or had an NRC possession license, like the one the Army currently holds for the DU Impact Area, terminated under restricted conditions.

NRC Consideration for the EIS: The draft EIS will address regulatory requirements, including any required permits associated with the proposed action. As part of its analysis in the EIS, NRC staff will consider the potential for future conditions that may require regulatory action. The NRC has not previously terminated a possession-only license under restricted conditions.

3.3.3 Alternatives

Comments: Two commenters requested clarification on possible alternatives and how factors, such as monitoring and institutional controls (and who would be responsible for those), would be considered, especially in the case of license termination.

¹NMSS is the Office of Nuclear Materials Safety and Safeguards. NMSS is the NRC office that has responsibility for conducting the review of and reaching a decision on the Army's license termination request.

Many commenters called for site cleanup, partial site cleanup in areas where DU is concentrated, or removal of DU and/or UXO from the site. Several commenters requested that site cleanup be considered or evaluated as an alternative in the EIS, with two of these commenters noting the area has not yet been returned to or made accessible to the local community. One of these commenters requested site cleanup because of concerns about health and safety impacts, while another commenter indicated hope that improved technology may reduce the costs and impacts of cleanup. Another commenter stated hope that future technology would allow for the site to be remediated and returned to beneficial use.

Several commenters compared potential costs of site cleanup with U.S. taxpayer dollars spent on decontamination or demilitarization efforts in foreign countries, with one of these commenters expressing opposition to the Army's proposed action to do less than it is currently doing in these countries. *[NRC NOTE: The issues raised in the comments summarized in the preceding sentence are considered outside the scope of the EIS, as discussed in Section 4.3 of this Scoping Summary Report.]* Several commenters stated the Army (or NRC) should take responsibility for site clean-up, rather than abandoning the site, with one of the commenters requesting that NRC require the Army to clean up the site.

Many commenters expressed concern regarding discontinuation of the environmental monitoring program or expressed support for continued monitoring. One commenter stated that because more is known about the behavior of DU than a decade ago, and because the behavior of DU is highly variable in the environment, it is short-sighted to discontinue monitoring. The commenter further noted the outcome of monitoring programs could be used to benefit contaminated sites in other locations. One commenter specifically asked about continued monitoring of dissolved chemicals and radioactivity in the water. Two commenters recommended that continued monitoring be included as an alternative, citing factors such as extremely long half-life of uranium, potential for environmental changes, potential for migration of contaminants offsite through sediment or water, and use of local well water as a drinking water source. One commenter indicated an interest in the no-action alternative (i.e., license continuation) so that the Army would have to continue monitoring. Another commenter stated the draft EIS should explain if monitoring would continue as part of the proposed action, clarify which parties would be responsible for ensuring that contaminants did not migrate offsite, what parameters would be monitored, for what time period monitoring would continue, and which parties would be responsible for ensuring safety at the site. The commenter also requested that if environmental monitoring was not included as an alternative, a rationale should be provided.

A number of commenters expressed concerns regarding security measures, including long-term access management to restrict people from entering the DU Impact Area. Some commenters questioned adequacy of the signs used to identify boundaries of the DU Impact Area, and asked who will enforce access restrictions to the DU Impact Area far into the future (decades to hundreds of years). One commenter wanted to know what kind of assurances are in place regarding access restrictions if the property were to be transferred to a different owner in the future. The commenter also stated that they did not believe license termination (the proposed action) was appropriate until security and institutional controls, such as physical access, were no longer needed. Another commenter suggested increasing public awareness of munitions risks at JPG, and public oversight or community stewardship regarding improvements to signage around the DU Impact Area and improvements to physical barriers on roads that can be used to access the DU Impact Area.

NRC Consideration for the EIS: *The scope of the NRC's EIS will include a detailed evaluation of potential environmental impacts of license termination under restricted conditions (i.e., the*

proposed action); the no-action alternative, in which the license would not be terminated and the Army would continue its present environmental monitoring program; and any reasonable alternatives to the proposed action that may be identified. The draft EIS will outline specific assumptions that informed the analyses of the alternatives, and will provide a rationale for a preliminary recommendation by staff regarding the proposed action. In addition, NRC staff will determine whether additional alternatives, such as total cleanup of the DU in the DU Impact Area or partial cleanup of portions of the DU Impact Area where DU is concentrated, would be reasonable to evaluate in detail in the EIS based upon its independent analysis of information provided in the Army's license termination application, other relevant information sources, and feedback received during the EIS scoping period. Regarding comments about security and access controls at JPG, issues concerning site security and potential environmental impacts associated with loss of institutional controls, as contemplated in the license termination under restricted conditions criteria at 10 CFR 20.1403(e), also will be addressed in the EIS.

3.3.4 Land Use

Comments: Several commenters expressed concerns regarding land use at JPG. Two commenters remarked that the contamination on the site makes the land indefinitely unusable. Another commenter requested the EIS discuss how the proposed action fits into existing local or county land use plans. One commenter requested the land be maintained as a refuge operation.

NRC Consideration for the EIS: The issue of current and future land use will be addressed in the draft EIS. Chapter 2 of the draft EIS will evaluate whether partial or total cleanup of DU is reasonable based on economic, safety, and environmental considerations. Chapter 3 of the draft EIS will include a description of existing land use within and surrounding JPG. Chapter 4 will include a discussion of potential impacts of the proposed action, the no-action alternative, and reasonable alternatives to the proposed action with regard to existing and future land use.

3.3.5 Water Resources (Groundwater and Surface Water) and General Transport Modeling Issues

Comments: Several commenters expressed concern about contamination of local ground and surface waters. One commenter specifically requested the EIS analyze how the proposed action could affect Clean Water Act Section 303(d) listed surface water bodies and impact their listing status as impaired, whether positively or negatively. Several commenters stated they live near JPG and are concerned about DU, UXO, or munitions shells or contaminants in the water, particularly those moved downstream of JPG after storms. Several commenters also recommended that NRC staff visit the local streams and creeks. Another commenter asked about the public availability of groundwater hydrology maps included in the Army's documentation.

NRC Consideration for the EIS: Chapter 3 of the draft EIS will include a description of the affected environment, including, but not limited to, the present condition of ground and surface waters and description of any impaired water bodies. Chapter 4 will discuss potential impacts of proposed action and alternatives on groundwater and surface waters. In developing the draft EIS, NRC staff will review and independently evaluate information in the Army's ER and DP (U.S. Army, 2013b, c), other information provided by the Army, and other relevant information sources to assess the impacts of proposed action and reasonable alternatives to proposed action on surface water and groundwater resources. This review and evaluation also will include an analysis of data from the Army's current ERM program, and of impacts of flood

events on contaminant migration and physical movement of DU. In addition, NRC and CNWRA staff visited and observed conditions in local streams and creeks both onsite at JPG and downgradient of the facility. With regard to public availability of groundwater hydrology maps and other information in the Army's documents, NRC staff notes that the Army's ER and DP (U.S. Army, 2013b, c) are publicly available documents, as described in Section 2 of this Scoping Summary Report, and information used in the EIS analysis, as well as the draft and final EIS, also will be made publicly available by NRC.

Comments: Several commenters remarked on certain assumptions regarding groundwater, surface water, sediment fate, and transport models used by the Army and projections that the Army made in its license termination application documents or that the NRC may make in the EIS. In particular, commenters asked about modeling of future contaminant transport, size of the affected area, the projections made by the models, how the NRC will rely on those models and projections, and how projections will be verified in the future. One of the commenters also asked about what historical data is included in the models. Two of the commenters expressed concern about increased decomposition of munitions and subsequent transport of contaminants from munitions.

NRC Consideration for the EIS: The draft EIS will include a detailed discussion of NRC staff's independent evaluation and verification of models used and projections made by the Army in its license termination application and supporting documents, including, but not limited to, assumptions and inputs used to develop and run the models and reliability of the modeling results for use in reaching conclusions in the EIS regarding contaminant fate and transport. For example, NRC staff will evaluate whether site-specific information based on JPG site characterization studies and historic environmental monitoring programs was appropriately utilized in the modeling. The draft EIS also will include an evaluation of projections made by the models, including future contaminant transport projections, and NRC staff will consider the need for future environmental monitoring to verify the results of the projections. The potential impacts from munitions (i.e., UXO) constituents will be evaluated in the cumulative impacts analysis in the EIS. If NRC staff finds that additional information is needed to complete any of the above analyses, necessary information will be requested from the Army and independently evaluated and verified by staff, as described above.

3.3.6 Ecological Resources

Comment: As part of a comment regarding alternatives, one commenter expressed concern about who is responsible for ensuring the safety of wildlife. The commenter also expressed concern regarding the presence of a federally endangered bird, the Henslow's sparrow, at the DU Impact Area.

NRC Consideration for the EIS: Chapter 3 of the draft EIS will include a description of ecological resources in the vicinity of JPG, including any federal and state listed species of concern. Chapter 4 will consider potential impacts to ecological resources in the vicinity of JPG from proposed action and alternatives under evaluation, including any threatened or endangered species. It should be noted that Henslow's sparrow is not a federally-listed endangered species, but is a USFWS species of concern (USFWS, 1997) and is listed by the State of Indiana as a state endangered bird (Hellmich, 2015). The draft EIS also will include a discussion of federal agency roles and responsibilities (including those regarding wildlife safety) at JPG.

3.3.7 Climatology

Comment: One commenter noted the EIS needs to address climate change; specifically, the EIS should use climate change modeling to estimate the frequency and duration of future flooding events that could occur at JPG that have the potential for physical or chemical impacts on the UXO or DU present at the site.

NRC Consideration for the EIS: The draft EIS will address the potential effects of climate change at the site, including potential increases in frequency and intensity of future flooding events, and will analyze impacts of future flood events on contaminant migration and physical movement of DU. The potential for physical or chemical impacts on the UXO present at the site will be evaluated in the cumulative impacts analysis in the draft EIS.

3.3.8 Public and Occupational Health

Comments: Several commenters expressed concerns about radiological and chemical (metal toxicity) impacts on members of the public if DU and UXO are not removed or are disturbed, and the potential for offsite transport of DU and UXO constituents. One commenter raised a concern that an accident at the site would result in expensive remedial actions and harmful human effects. Several commenters expressed concerns about airborne releases of radiological and toxic metal constituents when controlled burns are conducted at the DU Impact Area, including how burns affect transport of contaminants and how hazards to offsite persons and workers would be addressed. Another commenter expressed concern that chemical toxicity of DU might be of greater concern than its radiological hazard. One commenter noted that health effects may already be affecting those living close to the site.

NRC Consideration for the EIS: The draft EIS will address the potential effects of both DU and UXO constituents on public and occupational health and safety, including, but not necessarily limited to, NRC staff's evaluation of the Army's projected radiological and non-radiological release modeling. Potential releases that will be evaluated include releases through air, surface water, and groundwater. Although potential contamination resulting from possible release of toxic, non-radiological chemicals from the UXO at JPG will be addressed in the EIS, such non-radiological contamination is not under the NRC's jurisdictional authority and instead falls under the jurisdiction of other government agencies [e.g., the U.S. Environmental Protection Agency (EPA) and the State of Indiana]. The draft EIS will explain the roles that other federal and state regulatory agencies have with respect to potential contamination from the UXO remaining at JPG.

3.3.9 Mitigation Measures

Comments: One commenter stated hope that future technology would allow for the site to be remediated and returned to beneficial use. Another commenter suggested the EIS should describe existing or planned measures that will remediate or contain UXO constituents and any other hazardous wastes, including implementation of one or more non-hazardous passive waste treatment systems described in EPA, "Technology Reference Guide for Radioactively Contaminated Media" (EPA, 2007). The same commenter also requested, in association with a climate change comment (see Section 3.3.7), that if physical or chemical impacts on the UXO or DU could occur at the site due to future flooding events, the EIS should address potential mitigation strategies for those impacts.

As part of a comment regarding continued monitoring alternatives (see Section 3.3.3), one commenter requested that if monitoring is not continued, the EIS should explain what plans are in place to ensure that any future contaminant movement is remediated before migrating offsite. As part of another comment on continued monitoring alternatives (see Section 3.3.3), another commenter recommended an independent investigation of the environmental impact of leaving DU at JPG and identifying actions to reduce impacts.

NRC Consideration for the EIS: *The draft EIS will include a discussion of mitigation measures and strategies that would be implemented by the Army to reduce potential impacts to human health and environment from the proposed action. The draft EIS also will include a discussion of additional mitigation measures and strategies identified by NRC staff that could be implemented to reduce potential human health and environmental impacts from the proposed action and alternatives to the proposed action.*

3.3.10 Costs, Benefits, and Cost-Benefit Analysis

Comments: Two commenters asked about costs associated with conducting an annual environmental monitoring program at the DU Impact Area on JPG and of potential license termination. Commenters asked who pays for current monitoring, whether monitoring currently affects the community or area jobs, and what real and perceived benefits of terminating the Army's license to possess DU at the DU Impact Area are. One commenter requested the EIS should include a cost-benefit analysis for each alternative, with special emphasis on modeled future potential health and environmental costs to society that may occur as a direct result of water or air pollution resulting from each alternative.

NRC Consideration for the EIS: *The draft EIS will address costs associated with the proposed action and alternatives to the proposed action, and also will include a cost-benefit analysis. Further, the draft EIS will include a discussion on economic and social costs and benefits, including how the proposed action and alternatives may affect area jobs.*

3.3.11 Comments Opposing the Army's Proposed Action

Comments: Several commenters expressed opposition to the Army's proposed action to terminate NRC Materials License SUB-1435, leaving the DU and UXO in place in the DU Impact Area and discontinuing the present environmental monitoring program. Many of these comments were expressed as part of comments on alternatives (see Section 3.3.3). Some commenters expressed their particular concerns regarding security enforcement for the DU Impact Area if the NRC license is terminated. Other commenters do not approve of leaving any contaminants or radioactive materials in place and want to see all contamination and radioactive materials removed before the license is terminated. One commenter stated that license termination is inappropriate because of radioactivity concerns at the site. Another commenter expressed concern about the precedent that might be set for other DU contaminated sites if the Army discontinues monitoring.

NRC Consideration for the EIS: *These comments expressing opposition to the Army's proposed action are useful for NRC staff to understand public opinion about the licensing action. A number of these comments relate to the topic of Alternatives, such as future environmental monitoring and site cleanup, which will be evaluated in the draft EIS as discussed in Section 3.3.3 of this Scoping Summary Report.*

3.3.12 Miscellaneous Topics

Historical Documents: The NRC received historical documents from one commenter, including a historical briefing presented to the Military Toxics Network and a three-part book prepared for the JPG Heritage Partnership (Moore, 2014).

NRC Consideration for the EIS: *NRC staff will review documents provided by the commenter as part of the EIS development process. If these documents are used in development of the EIS, they will be noted, as appropriate, as references.*

JPG Site Visit: Several commenters encouraged NRC staff to visit JPG in person. Commenters stressed importance of first-hand visits to the site.

NRC Consideration for the EIS: *NRC staff notes that several NRC and CNWRA staff members have made two site visits to JPG. The second site visit also included visiting several areas in the JPG vicinity outside the facility, including downgradient areas.*

General Comments: Several commenters provided positive comments regarding the NRC's visit to Madison, Indiana.

NRC Consideration for the EIS: *These comments are useful for NRC staff to understand public opinion about the NRC's Public Scoping Meeting and stakeholder interactions, although these comments do not provide specific information relevant to the scope of the EIS for NRC staff to evaluate.*

4 SUMMARY AND CONCLUSIONS

This section describes the general scope of the EIS for the proposed termination of NRC Materials License SUB-1435 for the JPG DU Impact Area (Section 4.1); summarizes issues to be addressed in the scope of the EIS based on comments received during the EIS scoping comment period (Section 4.2); and discusses comments received that are considered by the NRC staff to be outside the scope of the EIS (Section 4.3). In addition, Section 4.4 discusses alternatives to be evaluated in the EIS, Section 4.5 addresses the preliminary schedule for EIS completion, Section 4.6 discusses the role of cooperating agencies, and Appendix A provides the list of participants in the scoping process.

4.1 General Scope and Content of the EIS

NEPA and NRC's NEPA-implementing regulations in 10 CFR Part 51 specify, in general terms, what should be included in an EIS prepared by NRC staff. Regulations established by the President's Council on Environmental Quality (CEQ) (40 CFR Parts 1500–1508), while not binding on the NRC, provide useful guidance. NRC staff also has prepared environmental review guidance for its staff and contractors for meeting NEPA requirements associated with licensing actions in the NMSS [NUREG-1748, *“Environmental Review Guidance for Licensing Actions Associated with NMSS Programs”* (NRC, 2003)].

Pursuant to 10 CFR 51.71(a), in addition to public comments received during the EIS scoping process, contents of the draft EIS for the proposed JPG DU Impact Area license termination will depend in part on information in the Army's ER (U.S. Army, 2013c), which the Army submitted pursuant to 10 CFR 51.45. Contents of the EIS will depend in part on information in the Army's DP (U.S. Army, 2013b), and on supplementary information provided by the Army in response to NRC staff requests for additional Information and on other information collected by the staff. This information will be independently evaluated and verified by NRC staff. In accordance with 10 CFR 51.71(b), the draft EIS also will consider and analyze major points of view, significant problems, and objections concerning environmental impacts of the proposed action and alternatives raised by other federal, state, and local government agencies, any affected Native American Tribes, and other interested persons. Pursuant to 10 CFR 51.71(c), the draft EIS will list all federal permits, licenses, approvals, and other entitlements, which must be obtained in implementing the proposed action, and will describe the status of compliance with these requirements, and any uncertainty as to the applicability of these requirements will be addressed.

Pursuant to 10 CFR 51.71(d), the draft EIS will include a preliminary analysis that considers and weighs environmental effects, including any cumulative effects, of the proposed action; environmental impacts of alternatives to the proposed action; and alternatives available for reducing or avoiding adverse environmental effects (i.e., mitigation measures). Additionally, the draft EIS will include a consideration of economic, technical, and other benefits and costs of the proposed action and alternatives. The draft EIS will indicate what other interests and considerations of federal policy, including factors not related to environmental quality, if applicable, are relevant to the consideration of environmental effects of the proposed action. In the draft analysis, due consideration will be given to compliance with environmental quality standards and regulations that have been imposed by federal, state, regional, and local agencies having responsibilities for environmental protection. Environmental impacts of the proposed action will be evaluated in the draft EIS with respect to matters covered by such standards and requirements, regardless of whether a certification or license from the appropriate authority has been obtained. Compliance with applicable environmental quality

standards and requirements does not negate the requirement for the NRC to weigh all environmental effects of the proposed action, including degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects (i.e. mitigation measures). While satisfaction of NRC standards and criteria pertaining to radiological effects will be necessary to meet requirements of the Atomic Energy Act of 1954, as amended, the draft EIS also will, for the purposes of NEPA, consider radiological and non-radiological effects of the proposed action and alternatives.

Pursuant to 10 CFR 51.71(f), the draft EIS normally will include a preliminary recommendation by NRC staff with respect to the proposed action. This preliminary recommendation will be based on information and analysis described above and will be reached after considering environmental effects of the proposed action and reasonable alternatives. In lieu of a recommendation, NRC staff may indicate in the draft EIS that two or more alternatives remain under consideration.

The draft EIS also will contain a discussion of cumulative impacts of the proposed action and alternatives. Development of the draft EIS will be closely coordinated with the SER prepared by NRC staff to evaluate radiological health and safety impacts and regulatory compliance of the proposed action.

The goal in writing the EIS is to present impact analyses in a manner that is easy for the public to understand. This EIS will provide the basis for the NRC decision on the proposed licensing action with regard to potential environmental impacts. Significant impacts will be discussed in greater detail in the EIS, and explanations will be provided for determining the level of detail for different impacts. Conversely, certain issues will be eliminated from detailed study in the EIS because they would not be affected by the proposed action or by any of the alternatives. This approach will allow readers of the EIS to focus on issues that were determined to be important in reaching conclusions supported by the EIS.

4.2 Summary of Significant Issues and Concerns Raised During the Scoping Process and Other Issues to be Addressed in the EIS

The scoping process summarized in this report assisted the NRC staff in determining scope of the draft EIS for the proposed licensing action. After all comments were reviewed and grouped according to subject area, as described in Section 3.1, staff determined how these comments would be used in developing the scope of the draft EIS, as summarized in Sections 3.3.1–3.3.12. The general scope and content of the EIS is discussed in Section 4.1. In addition, based on scoping comments received, as well as regulatory requirements and guidance identified in Section 4.1, topical areas and issues listed and summarized below will be included and analyzed in the draft EIS. Alternatives to be evaluated in the EIS are discussed in Section 4.4. Additional topical areas may be included as the draft EIS is developed. Subject areas discussed in the draft EIS also may include levels of detail or aspects of subjects that were not specifically raised by commenters. Furthermore, issues and alternatives detailed in this Scoping Summary Report may be revised at any time before publication of the draft EIS, in accordance with 10 CFR 51.29(c).

- Agency Consultations
The draft EIS will discuss NRC staff efforts made to engage government agencies to obtain information for the EIS and for other purposes including, but not limited to required agency consultations under Section 7 of the Endangered Species Act of 1973,

as amended, P.L. 93-205, and Section 106 of the National Historic Preservation Act of 1966, as amended, P.L. 89-665. In addition, copies of documentation of agency consultations and other government interactions will be included, as appropriate, in the draft EIS.

- Public Participation
The draft EIS will discuss NRC staff efforts made to engage the public, local community groups, and other private organizations in the NEPA process.
- Regulatory Issues and Requirements
The draft EIS will list required permits, licenses, approvals, and other entitlements that must be obtained in implementing the proposed action and will describe the status of compliance with these requirements.
- Land Use
The issue of current and future land use will be addressed in the draft EIS, including whether partial or total cleanup of DU is reasonable based on economic, safety, and environmental considerations; a description of existing land use within and surrounding JPG; and a discussion of potential impacts of the proposed action, the no-action alternative, and reasonable alternatives to the proposed action with regard to existing and future land use. The draft EIS also will discuss potential impacts on land use associated with existing institutional controls that are being implemented and that will continue to be implemented under the proposed action to control access to and activities on the DU Impact Area, and agreements that have been instituted for the management of the JPG site (including the DU Impact Area) under present site conditions, including the MOA that led to the establishment of the BONWR.
- Geology and Soils
While not raised directly as an issue by the scoping comments, the draft EIS will describe geologic and soil characteristics of the JPG site, and will describe and evaluate existing and potential soil contamination at JPG associated with degradation of DU penetrators.
- Water Resources (Groundwater and Surface Water) and General Transport Modeling Issues
The draft EIS will describe current groundwater and surface water quality conditions at JPG and will assess potential impacts on groundwater and surface water quality. The draft EIS also will assess groundwater, surface water, and sediment transport fate, and transport modeling conducted by the Army to estimate future transport of DU within the DU Impact Area to the surrounding environment.
- Ecological Resources
The draft EIS will assess potential environmental impacts on ecological resources, including listed threatened and endangered species.
- Meteorology, Climatology, and Air Quality
The draft EIS will assess potential environmental effects of climate change at the JPG installation, including potential effects of increased precipitation and flooding events on DU transport in surface water and suspended sediment. Although not specifically

addressed by scoping comments, the draft EIS also will address air quality issues, specifically potential emissions and compliance with environmental standards.

- Public and Occupational Health

The draft EIS will include an evaluation of radiological and chemical (e.g., metal toxicity) effects on human health if DU remains within the DU Impact Area. The assessment will include an analysis of human health effects from potential offsite transport of DU in groundwater, surface water, and sediment. In addition, human health effects from potential offsite transport of DU in smoke from controlled burns conducted at the DU Impact Area will be assessed. The draft EIS also will assess radiological dose models developed by the Army to estimate future radiation exposures to receptors at sites located inside and outside the DU Impact Area.

- Cumulative Impacts

Although not specifically identified in the scoping comments, the draft EIS also will address potential cumulative impacts from past, present, and reasonably foreseeable future actions (other than the proposed action and identified alternatives to the proposed action) at or near the DU Impact Area and the JPG site. The cumulative impacts analysis will involve an assessment of impacts on the environment, which result from the incremental impact of the proposed action and alternatives to the proposed action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7). For example, the cumulative impacts analysis will examine the incremental impact of the proposed action and alternatives when added to that of the UXO that exists within the DU Impact Area and elsewhere within JPG installation north of the firing line (U.S. Army, 2013b, c).

- Mitigation Measures

The draft EIS will discuss mitigation measures proposed by the Army to reduce potential environmental impacts from the proposed action. The draft EIS also will discuss potential additional mitigation measures identified by NRC staff.

- Environmental Justice

Although not specifically identified in the scoping comments, the draft EIS will identify and address, as appropriate, disproportionately high and adverse human health or environmental effects, if any, from the proposed action and alternatives to the proposed action on minority and low-income populations. Issues that may have environmental justice implications may include impacts on health, ecological, water resources (including water quality and water availability), social, cultural, economic, and aesthetic resources.

- Costs, Benefits, and Cost-Benefit Analysis

The draft EIS will describe and assess costs associated with the proposed action, the no-action alternative, and reasonable alternatives to the proposed action. The draft EIS also will include an analysis of costs and benefits from monetary and environmental impacts perspectives.

The scope of the EIS also will address several additional issues identified by NRC staff based on (i) its review and independent evaluation and verification of the Army's ER and DP (U.S. Army, 2013b, c) and supplementary information provided by the Army; (ii) collection, review,

and analysis of additional information from other sources; (iii) site reconnaissance conducted by NRC and CNWRA staff at JPG and in the vicinity; (iv) consultations and discussions with other federal, state, and local government agencies and private entities; and (v) NRC staff's experience at other NRC-licensed facilities. In addition, the draft EIS will address the following resource areas that were not specifically mentioned by commenters during the scoping process: transportation, minerals, noise, historic and cultural resources, visual and scenic resources, socioeconomics, and waste management.

4.3 Issues That Will Not be Addressed in the EIS (Considered to be Outside the Scope of the EIS)

The purpose of an EIS is to assess the potential environmental impacts of a proposed action and alternatives to the proposed action as part of the decision-making process of an agency—in this case, an NRC licensing decision. In some instances, issues and concerns raised during the scoping process are not relevant to an EIS because they are not directly related to the assessment of potential impacts or to the decision-making process. The lack of in-depth discussion in the EIS, however, does not mean that an issue or concern lacks value. Issues beyond the scope of the EIS either may not yet be ripe for resolution or are more appropriately discussed and decided in other venues.

As discussed in Section 3.1 of this report, staff evaluated comments received during the scoping period to determine whether issues raised in the comments were within the scope of the EIS. Some comments or parts of comments indirectly or tangentially raised issues that were determined to be out of scope. In particular, some comments requested that the NRC require the Army to clean up the site or that NRC clean up the site (see Section 3.3.3). Although cleanup of the DU Impact Area will be discussed in the draft EIS as an alternative (see Section 3.3.3), the NRC does not currently have statutory authority for the entirety of JPG, nor does the NRC have authority to require the Army to clean up the UXO in the DU Impact Area or elsewhere on the JPG site. These comments indirectly raise the issue of changes to the existing statutory and regulatory framework that establishes the authority of the NRC, the Army, or other government agencies, which is considered outside the scope of the EIS. Further, while other Army obligations may be described in the EIS, an evaluation of the existing framework is outside the scope of the EIS.

In addition, comments received that expressed (i) concerns regarding potential costs of site cleanup with U.S. taxpayer dollars spent on decontamination or demilitarization efforts in foreign countries and opposition to the proposed action because it is less than the Army is currently doing to conduct cleanups in foreign countries (summarized in Section 3.3.11), and (ii) that expressed positive opinions regarding the NRC's visit to Madison, Indiana, for the Public Scoping Meeting (summarized in Section 3.3.12) are useful for NRC staff to understand public opinion about the proposed licensing action and about the scoping meeting and stakeholder interactions, respectively. However, these comments do not provide specific information relevant to the scope of the EIS for NRC staff to evaluate.

4.4 Alternatives to be Evaluated in the EIS

In accordance with NEPA, the draft EIS will consider the alternatives listed below, and will assess and compare the potential environmental impacts of these alternatives:

- The proposed action (license termination under restricted conditions)
- The no-action alternative (license continuation)
- Other reasonable alternatives to the proposed action that may be identified

Other alternatives to be considered in the draft EIS are:

- License termination with continued monitoring and onsite inspections
- License termination and total cleanup of the DU Impact Area to meet NRC requirements for unrestricted use, as specified in 10 CFR 20.1402
- License termination and partial cleanup of the DU Impact Area in areas where DU is concentrated, to meet NRC requirements for unrestricted use in those areas, as specified in 10 CFR 20.1402
- Additional institutional controls to restrict unauthorized entry into the DU Impact Area
- Implementation of an NRC-Army legal agreement and a restrictive covenant (LA/RC) that provides a legally enforceable and durable institutional control, with the NRC having an oversight role (NRC, 2006)

4.5 Preliminary Schedule for EIS Preparation

The EIS development process occurs in three steps. The first step is the scoping process, which is summarized in this Scoping Summary Report. NRC staff is now in the process of the second step, developing the draft EIS. When the draft EIS is complete, it will be published for public comment and a public comment meeting will be held. Following the end of the public comment period on the draft EIS, NRC staff will begin the third step, preparing the final EIS. All comments received on the draft EIS will be reviewed and considered by NRC staff in preparing the final EIS. Upon completion, the final EIS also will be made publicly available.

Preparation of the EIS is approximately a 2-year process, which began in late October 2014. Thus, the preliminary schedule for the EIS would have the final EIS being issued in the fall of 2016. However, this schedule is subject to change, based on factors such as NRC staff's finding of the completeness and quality of the Army's ER and DP; the Army's responsiveness to requests for additional information from the NRC; the conduct of an adjudicatory hearing, if requested and granted; the availability of federal funding; and unplanned higher priority work within the NRC.

4.6 Role of Cooperating Agencies in EIS Preparation

CEQ regulations in 40 CFR 1501.6 emphasize agency cooperation early in the NEPA process. CEQ defines a "cooperating agency" as any federal agency other than a lead agency (in this case, the NRC), which has jurisdiction by law or special expertise with respect to any environmental impact involved in a major federal action significantly affecting the quality of the human environment (40 CFR 1508.5). Upon request of the lead agency, any other federal agency falling under this definition shall be a cooperating agency. In addition, an agency may request the lead agency to designate it a cooperating agency (40 CFR 1501.6).

To date, the NRC has neither identified any cooperating agencies for development of the EIS for the proposed JPG DU Impact Area license termination nor received any requests for cooperating agency status.

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APPENDIX A

LIST OF PARTICIPANTS IN THE SCOPING PROCESS

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Listed below are participants in the scoping process for the Environmental Impact Statement (EIS) for the proposed Jefferson Proving Ground (JPG) Depleted Uranium (DU) Impact Area license termination. These include staff of federal and state elected officials; staff of federal and state government agencies; members of local citizens' groups and environmental groups; and other stakeholders (including members of the general public). Additional contacts made by NRC staff during the EIS scoping process are listed in Table 1 in Section 2 of this Scoping Summary Report.

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