

July 9, 2013

MEMORANDUM TO: License File
U.S. Department of Army, Jefferson Proving Ground
License No.: SUB-1435
Docket No.: 040-08838

THRU: Robert Orlikowski, Branch Chief *RSD 7/10/2013*
Materials Control, ISFSI, and Decommissioning Branch
Division of Nuclear Materials and Safety

FROM: Lionel Rodriguez, Reactor Inspector (Decommissioning) *LR 7/10/13*
Materials Control, ISFSI, and Decommissioning Branch
Division of Nuclear Materials and Safety

SUBJECT: MEMO TO FILE: INSPECTION RELATED DOCUMENTS USED
TO SUPPORT INSPECTION REPORT
04008838/2013001(DNMS) FINDINGS

This memorandum contains, as enclosures, inspection related documents for the inspection documented in inspection report 04008838/2013001(DNMS) (ML13149A365) of the Jefferson Proving Ground site in Madison, Indiana. The records are included in the license file in accordance with the requirements of Inspection Manual Chapter 0620, "Inspection Documents and Records."

ENCLOSURES:

1. Email from NRC to licensee on April 9, 2013, "Questions related to NRC inspection at JPG"
2. Email from licensee to NRC on April 17, 2013, "Army Responses to NRC Inspector's Questions (UNCLASSIFIED)," including attachment, "20130417 Army Responses to NRC Inspector Questions.docx"
3. Email from licensee to NRC on April 25, 2013, "FW: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)"

CONTACT: Lionel Rodriguez, RIII/DNMS/MCID
630-829-9609

Rodriguez, Lionel

From: Rodriguez, Lionel
Sent: Tuesday, April 09, 2013 5:22 PM
To: joe_robb@fws.gov
Cc: Rodriguez, Lionel; Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US)
Subject: Questions related to NRC inspection at JPG

Hello Dr. Robb,

I'm the Nuclear Regulatory Commission inspector that was at the Jefferson Proving Ground site last Thursday April 4, 2013. I received the Memorandum of Agreement that you emailed, thank you.

I wanted to know whether I could be emailed a blank copy of the form that one needs to fill out to gain access to the site (acknowledgment of danger agreement I believe). Per the Public Access Plan, there's also a pamphlet that you would provide persons as part of the safety briefing. If you have a readily available digital version of that, I would also appreciate a copy of it. Although I sat through the orientation video, I'm trying to get a better sense of the safety briefing provided on the DU at the site.

I also wanted to know whether you've had any instances in the past where persons (i.e. hunters) have wandered into the DU Impact area. If so, do you have an estimate of how many? Also, what actions did you take or would you take after it was discovered that a person was in the DU Impact area?

I greatly appreciate your time.

Thanks,
Lionel Rodriguez
NRC/RIII/DNMS/MCID
630-829-9609

Rodriguez, Lionel

From: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US) [robert.n.cherry.civ@mail.mil]
Sent: Wednesday, April 17, 2013 4:21 PM
To: Rodriguez, Lionel
Subject: Army Responses to NRC Inspector's Questions (UNCLASSIFIED)
Attachments: 20130417 Army Responses to NRC Inspector Questions.docx

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Rodriguez,

Please see the attached.

Bob

Bob Cherry
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Attachment Classification: UNCLASSIFIED
Attachment Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: NONE

Inspector Question	Response to NRC
<p>1. About when did the JPG three-person site management team get smaller?</p>	<p>Personnel History:</p> <ul style="list-style-type: none"> • Phil Mann – caretaker maintenance (fence repair, roads and grounds), retired in September 2007 • Ken Knouf – site manager/garrison manager’s representative, retired in September 2010. • Paul Cloud – RSO/Base Transition Coordinator (BTC)/Base Environmental Coordinator (BEC), was non-resident (stationed at Aberdeen Proving Ground, MD), retired in November 2010 <p>The three above personnel authorizations were eliminated in conjunction with their retirements. Yvette Hayes, administrative assistant and, after Mr. Knouf and Mr. Cloud retired, site manager/garrison manager’s representative, herself retired January 31, 2013.</p> <p>Personnel replacements and site reorganization: The BEC position/site manager currently is filled by Joe Germano. The RSO position currently is filled by Bob Cherry. The BTC position was not filled; it was abolished as all except one property parcel has been disposed.</p> <p>The fence repair transitioned to the Indiana Air National Guard (INANG) and their contract to maintain/repair the fences.</p> <p>Maintenance of roads transitioned to INANG and FWS in accordance with MOAs.</p> <p>Action: License RSO will rewrite the Security Plan to reflect the current reality and include it as part of a comprehensive Radiation Safety Plan (RSP). The Army will submit the new RSP to the NRC as part of a license amendment application.</p>
<p>2. What responsibilities, other than those shown in the Security Plan, did the three-person site management team have?</p>	<p>Caretaker Maintenance: Phil Mann performed caretaker maintenance (roads and grounds) south of the firing line.</p> <p>Site Manager: Ken Knouf supported the RSO/BTC/BEC as required. He performed Personal Property inventory as well as caretaker functions north and south of the firing line.</p> <p>Administrative Assistant/Site Manager: Yvette Hayes performed real and personal property inventory, coordinated with contractors for access north and south of the firing line, coordinated with investigators on asbestos release south of firing line; MOU coordinator with FWS and INANG; impact credit card holder.</p> <p>RSO/BTC/BEC: Paul Cloud served as BTC and BEC in addition to being the RSO. As BTC, he performed public outreach. As BEC, he developed/processed environmental documentation for land transfers south of the firing line.</p>
<p>3. What Security Plan-related functions did the</p>	<p>The on-site management team monitored caretaker functions. They coordinated and ensured FWS and INANG compliance with their respective MOUs. The team routinely checked gates, fences, and signage,</p>



Inspector Question	Response to NRC
three-person site management perform?	and made sure interior barricades to the DU area were locked.
4. How did JPG access control transfer to the FWS and when did it happen?	The transfer from Army to FWS JPG access control occurred in June 2000 in accordance with the MOA. ¹ FWS access control started in 2000 with the establishment of the national wildlife refuge.
5. Is it true that only INANG or INANG personnel enter through gates in the north for access to the bombing range and the control tower areas?	The INANG controls the key access to the gates in the north. The INANG controls all access to the range tower complex.
6. Does the INANG have keys to the DU impact area gates?	Yes. The INANG is responsible for key control in accordance with the MOA for all of JPG. The FWS and Army hand-receipt keys from the INANG. The INANG performs and documents key control accountability and inventories. The INANG has keys to those areas in which they maintain the roads and fences in accordance with the MOA. The FWS has keys to areas in which they maintain roads in accordance with MOA.
7. How does the INANG restrict access to the DU impact area by its personnel?	Access to the DU area is restricted to all ANG personnel unless there is an issue with signage or barricades.
8. How do Indiana State and local law enforcement personnel gain access to JPG north of the firing line?	The FWS provided keys to the Indiana Conservation Officer and the Indiana Refuge Officer. These officers have viewed the video and signed the Acknowledgement of Danger Form. Other Indiana State and local law enforcement personnel gain access in coordination with FWS. If timely coordination cannot be accomplished, Indiana State and local law enforcement officers can cut the locks to gain access in an emergency, which has not happened to date.
9. Does contractor (SAIC) provide their own EOD support during environmental monitoring?	Yes, in general. The contractor's project manager provided this information: <p style="margin-left: 40px;">"We don't have escorts when we're driving and staying on the roads (e.g., site tours). In addition, the routes to the wells have been cleared many times before that we don't typically have UXO escort for groundwater purging or sampling. We do have escorts when downloading data from stream/cave spring gauges and sampling surface soil,</p>

¹ From <http://www.nrc.gov/info-finder/decommissioning/complex/jefferson-proving-ground-facility.html>:

In 1998, a Memoranda of Understanding (MOU) was signed by the Department of the Army (U.S. Army), the Air National Guard (ANG), and the INANG. The MOU states that in exchange for continued use of the 418 ha [1,033 ac] bombing range, the ANG would maintain and operate the northern firing range area. The 1998 MOU was superseded by a May 2000 MOA signed between the U.S. Army, the Department of Air Force (U.S. Air Force), and the FWS. The MOA authorized future use by FWS and continued use by the U.S. Air Force of the firing range for 25 years, with 10-year extensions thereafter. Due to UXO, DU and other environmental contamination from past U.S. Army activities, the firing range is not suitable for commercial or residential development, yet part of it contains wildlife habitat of regional and national significance. In June 2000, the FWS established the Big Oaks National Wildlife Refuge.

Inspector Question	Response to NRC
	<p>sediment, and surface water. They escort all field personnel who leave the road. The UXO technicians are with them from the time they leave the road until they get back to the road.”</p> <p>SAIC provides on-site certified UXO technicians to escort monitors, as necessary. UXO technicians ensure safe passage in, during, and out for monitoring. SAIC UXO technicians do not perform UXO demolition. Fort Knox EOD performs UXO demolition. One exception was when the wells were dug: SAIC UXO technicians performed UXO demolition to clear well sites.</p>
<p>10. Who authorizes access to the DU impact area for such activities as road clearance and bird census-taking?</p>	<p>FWS authorizes access to DU impact area in accordance with MOU. The FWS personnel performing actions such as bird census-taking and prescribed burns stay on or near the roads due to increased UXO off-road hazards. The FWS service authorizes access to the DU impact area for roads, bridges, and culvert maintenance in accordance with the MOU.</p>
<p>11. When was the last time the license RSO provided formal DU safety training as Security Plan, paragraph 9e, requires?</p>	<p>Although it was apparent during the inspection that all site personnel are aware of DU safety requirements, we cannot find records of formal training.</p> <p>The current license RSO provided formal DU safety training to the Mr. Germano on April 3, 2013. He will provide and document formal training on DU safety requirements during his next site visit (date to be determined).</p>
<p>12. Does the INANG provide any DU awareness training to its visitors?</p>	<p>The INANG does not bring visitors into the DU impact area. Indeed, INANG on-site personnel have no reason to enter the DU impact area except for sign and gate maintenance on the perimeter. The Army is not aware of any INANG visitors that entered the DU impact area.</p>
<p>13. Do INANG visitors ever go into the DU impact area?</p>	<p>INANG visitors may include contractors required to conduct operational range clearance around the target located just north of the DU impact area. Due to beaver activity common in this part of JPG, they may need to transit to or from the area using the western gate on F Road, which serves as the northern boundary of the DU impact area. The INANG should not bring visitors into the DU impact area, especially without Army knowledge, except for sign and gate maintenance on the perimeter.</p>
<p>14. Who provides DU training for Indiana State and local law enforcement personnel?</p>	<p>FWS provides training (training video) and obtains signatures on the “Acknowledgement of Danger Form in accordance with MOA. An exception to the training, in accordance with the MOA, is that the briefing is not required for visitors when FWS personnel accompany them.</p>
<p>15. Please provide fence inspection documentation for the last six months. Include records of what repairs occurred and how long was the time between detections and repairs.</p>	<p>The Army provided a zipped file of numerous fence inspection reports to the NRC inspector on April 17. The INANG provided the reports.</p>
<p>16. What are the criteria for repairing the fence?</p>	<p>Fence repair is the responsibility of the INANG under the MOA. The INANG has a contract for fence maintenance. If FWS/Army/INANG observes fence requiring repair, they contact the INANG. The INANG</p>

Inspector Question	Response to NRC
	contacts its contractor, who has a fixed time (72 hours after notification for holes that could allow human access) to make the repair.
17. Referring to the hole in the outer fence the inspector saw during his visit, was it documented in a fence inspection report? How long did the hole exist? Why it was not repaired?	As the fence contractor was unavailable to correct the deficiency during the time of the inspection, Mr. Germano performed an initial repair using light gauge wire. We do not know for certain how long the hole existed before we saw it. We can only speculate that we were the first to notice the hole. We expect to receive images of the fence repair on Thursday, April 18, and will forward them to the NRC inspector immediately.
18. Referring to Paul Cloud's end of tenure as license RSO when he retired on 31 October 2010, why did the Army deem Dr. Goldblum to not be qualified to become license RSO?	The initial effort replaced Mr. Cloud with Dr. Goldblum as the RSO. After Dr. Goldblum's name was forwarded to the NRC as Mr. Cloud's replacement, the Army discovered and determined that Dr. Goldblum did not have the minimum qualifications for an RSO described in NRC guidance and the license. His doctorate is in chemical engineering and work experience is in environmental engineering. Beyond the basic INANG Nuclear, Biological, Chemical (NBC) course, he did not have the requisite academic, health physics experience, and specialized knowledge required by the NRC. Thus, the appointment of Dr. Goldblum as RSO was withdrawn and Dr. Cherry appointed.
19. How many intruders were in the DU impact area over the years? If any, were they surveyed for DU contamination?	In the past, FWS has apprehended one or two poachers in the DU impact areas, who were fined and their access privileges were revoked. Other (unknown number) intruders were miss-oriented turkey or deer hunters, who were in the DU impact area by mistake. They were instructed by FWS personnel to leave the area. None of the intruders were checked for DU contamination.

Rodriguez, Lionel

From: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US) [robert.n.cherry.civ@mail.mil]
Sent: Thursday, April 25, 2013 2:01 PM
To: Rodriguez, Lionel
Subject: FW: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Rodriguez,

I think we have answers for your latest two questions. Recommend you start at the bottom (first) message and read up.

Let me know if you need anything else.

Bob

Bob Cherry
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-----Original Message-----

From: Joe Robb [mailto:joe_rob主@fws.gov]
Sent: Thursday, April 25, 2013 1:50 PM
To: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US)
Subject: RE: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)

No, they were on the edge (but not within the Delta Impact area). There was another one caught in a buffer area off of the DU site (area east of Hunt Unit 52), which is closed due to the proximity of the DU area, but that even before 2006 (2004?).

Joe

Joseph R. Robb
Refuge Manager
Big Oaks National Wildlife Refuge
1661 West JPG Niblo Road
Madison, Indiana 47250
812-273-0783

-----Original Message-----

From: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US)

[mailto:robert.n.cherry.civ@mail.mil]

Sent: Thursday, April 25, 2013 2:27 PM

To: Joe Robb

Cc: Golden, Jerry J CIV (US); Himsl, Joel G CIV (US); Lineer, Thomas A CIV USARMY HQDA ACSIM (US); Germano, John J CIV (US); Evens, Andrew B LRL; Kopp, Frederick P CIV USARMY ASC (US)

Subject: RE: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Thanks, Joe.

Regarding your answer to #1, did the intruder enter the DU impact area itself?

Bob Cherry

IMCOM Radiation Safety Staff Officer

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-----Original Message-----

From: Joe Robb [mailto:joe.robbs@fws.gov]

Sent: Thursday, April 25, 2013 12:34 PM

To: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US)

Cc: Golden, Jerry J CIV (US); Himsl, Joel G CIV (US); Lineer, Thomas A CIV USARMY HQDA ACSIM (US); Germano, John J CIV (US); Evens, Andrew B LRL; Kopp, Frederick P CIV USARMY ASC (US)

Subject: RE: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)

Just saw this e-mail after I replied...

1. When did the most recent unauthorized entry to the DU impact area occur? I believe that was in November 2006. It was in a closed area adjacent to the DU area.

2. When did the FWS begin using the current safety video that Mr. Rodriguez and I saw during his visit? I believe it went live in 2002 (been using it for a while).

Let me know if you have other questions...

Joe

Joseph R. Robb

Refuge Manager

Big Oaks National Wildlife Refuge

1661 West JPG Niblo Road

Madison, Indiana 47250

812-273-0783

From: Cherry, Robert N (Bob) JR CIV USARMY IMCOM HQ (US)
[mailto:robert.n.cherry.civ@mail.mil]
Sent: Thursday, April 25, 2013 11:25 AM
To: Joe Robb
Cc: Golden, Jerry J CIV (US); Hims1, Joel G CIV (US); Lineer, Thomas A CIV
USARMY HQDA ACSIM (US); Germano, John J CIV (US); Evens, Andrew B LRL; Kopp,
Frederick P CIV USARMY ASC (US)
Subject: NRC Questions for Dr. Robb, FWS (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Dr. Robb,

Mr. Rodriguez, our NRC inspector, still has two questions. You are probably the best person to answer them, but if anyone else knows, I would like to hear from you.

1. When did the most recent unauthorized entry to the DU impact area occur?
2. When did the FWS begin using the current safety video that Mr. Rodriguez and I saw during his visit?

Thanks.

Bob

Bob Cherry

IMCOM Radiation Safety Staff Officer

210-466-0368

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Classification: UNCLASSIFIED

Caveats: FOUO

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Caveats: NONE