SUB-348
04006377

From: Kouretas, Malgorzata E CIV USARMY RDECOM ARDEC (US)
To: Lawyer, Dennis
Subject: [External_Sender] RE: Department of the Army, Application for a License Amendment, Control 601500, Lic. No. SUB-348, Docket No. 04006377
Date: Tuesday, December 18, 2018 3:06:20 PM
Attachments: Radiological Survey Plan for Structures at Picatinny Arsenal - NRC comments 12-11-18 updated (3).docx

Mr. Lawyer,

Please see the attached document regarding the telephone discussion we had about the final survey plan for Building 315, former DU machine shop, at Picatinny Arsenal. The contractor has replied to the questions/ concerns you had provided to me over the phone during the last week of November. Please take a look and let me know if you'd like to schedule a telecom to discuss it further.

V/r,
Margaret

Malgorzata Kouretas
Health Physicist/ Radiation Safety Officer
RDAR-CRM
Bldg. 355, Picatinny Arsenal, NJ 07806
Comm: 973-724-6518
DSN: 880-6518

-----Original Message-----
From: Kouretas, Malgorzata E CIV USARMY RDECOM ARDEC (US)
Sent: Wednesday, November 7, 2018 9:04 AM
To: 'Lawyer, Dennis' <Dennis.Lawyer@nrc.gov>
Subject: RE: Department of the Army, Application for a License Amendment, Control 601500, Lic. No. SUB-348, Docket No. 04006377

Mr. Lawyer,

Attached please find a memo requesting a review of our revised final status survey plan for Building 315 & amendment if needed to license SUB-348. When the contractors from Hidden Water & Leidos began performing the survey plan as written, they realized several scanning locations were now covered by new sheetrock and that the building had been reconfigured during renovations to previously surveyed portions of facility. As a result a revised survey plan was generated which will utilize historical surveys in those areas now inaccessible without significant demolition. If this request cannot be accepted over e-mail, please advise and I will mail it into to Region 1 for a request for a revised amendment.

V/r,
Margaret

Malgorzata Kouretas
Health Physicist/ Radiation Safety Officer RDAR-CRM ARDEC Risk Management Office Bldg. 355, Picatinny Arsenal, NJ 07806
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DSN: 880-6518

Rec'd. in LAT-12/19/2018

6/04/17

-----Original Message-----
From: Lawyer, Dennis [mailto:Dennis.Lawyer@nrc.gov]
Sent: Monday, December 18, 2017 8:09 AM
To: Kouretas, Malgorzata E CIV USARMY ARDEC (US) <malgorzata.e.kouretas.civ@mail.mil>
Subject: [Non-DoD Source] RE: RE: Department of the Army, Request for Additional Information Concerning Application for a License Amendment, Control 601500, Lic. No. SUB-348, Docket No. 04006377

Ms. Kouretas,

That would not allow me sufficient time to review the response by my management's deadline. Please request withdrawal of the amendment and you may resubmit the amendment request when you have the additional information.

Dennis Lawyer
U.S. NRC Region 1
Health Physicist
610-337-5366

-----Original Message-----
From: Kouretas, Malgorzata E CIV USARMY ARDEC (US) [mailto:malgorzata.e.kouretas.civ@mail.mil]
Sent: Friday, December 15, 2017 9:54 AM
To: Lawyer, Dennis <Dennis.Lawyer@nrc.gov>
Subject: [External_Sender] RE: Department of the Army, Request for Additional Information Concerning Application for a License Amendment, Control 601500, Lic. No. SUB-348, Docket No. 04006377

Mr. Lawyer,

After discussing with the Health Physicist at Joint Munitions Command (JMC)-Rock Island, a response in 20 calendar days (which is ~January 3rd) is not feasible right now as a result of the holiday schedule and other high priority disposal projects that JMC is working. We'd like to ask that the deadline be extended until January 26th for the formal RAI response.

Thank you,
Margaret Kouretas

Malgorzata Kouretas
Health Physicist/ Radiation Safety Officer RDAR-CRM Bldg. 355, Picatinny Arsenal, NJ 07806
Comm: 973-724-6518
DSN: 880-6518

-----Original Message-----
From: Lawyer, Dennis [mailto:Dennis.Lawyer@nrc.gov]
Sent: Thursday, December 14, 2017 6:59 AM
To: Kouretas, Malgorzata E CIV USARMY ARDEC (US) <malgorzata.e.kouretas.civ@mail.mil>
Subject: [Non-DoD Source] Department of the Army, Request for Additional Information Concerning Application for a License Amendment, Control 601500, Lic. No. SUB-348, Docket No. 04006377

Dear Ms. Kouretas,

This is in reference to your letter dated October 24, 2017, requesting for approval of a survey plan and an

amendment to Nuclear Regulatory Commission License No. SUB-348, Docket No. 04006377. In order to continue our review, we need the following additional information:

1. From your request, it appears that the building will be remodeled as office space, except for the Metallography Laboratory. To meet the alternate resuspension factor as given in NUREG-1720, Re-Evaluation of the Indoor Resuspension Factor for the Screening Analysis of the Building Occupancy Scenario for NRC's License Termination Rule, Draft Report, please confirm that the building and its rooms will have similar activities to light industrial use or less, that the ventilation in the building will be comparable ventilation to support light industrial, that surfaces went through cleaning or washing processes to ensure that contamination adheres to the building surfaces.

2. In section 1.3.3 of your survey plan, you state there is potentially contaminated Depleted Uranium (DU) asbestos containing floor tile under the sole plates in the DU room. Based upon the description, it appears this area is not open for surveying. Please state the status of this potentially DU and how it will be removed or surveyed to ensure it meets the release criteria.

3. In section 3.3, you state that you calculated the Derived Concentration Guideline Level (DCGL) as 2,240 disintegrations per minute/100 square centimeters utilizing DandD, Version 2.1. Please submit a copy of that calculation.

4. In section 4.7.1, it states that sections of epoxy will be removed to measure the existing floor. Most methods to remove the epoxy would cause further decontamination and may not reflect an accurate measurement of the remaining level of contamination on the floor. Please state how you will control or ensure an accurate reading of the floor that has epoxy covering the floor to ensure the DCGL is met.

5. In section 4.2, you state that sink drains, fume hoods, and ventilation in the Metallography Lab will be a class one survey. Please describe in detail how you would implement such a survey in these area.

6. In section 3.4.6, it states that you will use WRS Test or Sign Test. Based upon the amount of scoping surveys that have been performed, it would appear that one would have enough information to state which areas would need WRS test if any. Please provide more information on the need to perform WRS testing.

7. Please describe how you will pick random points for surveying. Also please provide maps and survey points associated with the proposed plan.

We will continue our review upon receipt of this information. Please reply to my attention at the Region 1 Office (Address below) and refer to Mail Control No. 601500. If you have technical questions regarding this letter, please call me at (610) 337-5366.

Your reply must be an originally signed and dated letter. The letter may be scanned and submitted as a pdf document attached to an email; or it may be transmitted by facsimile to (610) 337-5269; or it may be sent by regular mail. If we do not receive a reply from you within 20 calendar days from the date of this e-mail, we will assume that you do not wish to pursue your application OR amendment request.

Please respond by e-mail to acknowledge that you have received the e-mail request for additional information.

Region 1 Office Mailing Address: Licensing Assistance Team, US Nuclear Regulatory Commission Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406-2713.

Dennis Lawyer

U.S. NRC Region 1

Health Physicist

610-337-5366

Document: Hidden Water Responses to Nuclear Regulatory Commission Comments on the Radiological Survey Plan for Structures at Picatinny Arsenal (September 2018)

	Page/ Section/ Paragraph	Comment	
1.	Pg 5	Plates are discussed with regards to old survey criteria but later in section 3.1 reassessing against current DCGL is somewhat implied. This area needs to be re-evaluated and shown possibly through a dose evaluation that the sole plates meet current DCGL.	The sill plates discussed in the comment are in the DU Machine Shop. In 2010 surveys were performed on 100% of the floor and wall areas in the DU Machine Shop and adjacent rooms including the surfaces directly adjacent to the sill plates. There was no indication of contamination directly adjacent to the sill plates. There was no indication of contamination in any of the grids on either side of the sill plate in the 2010 surveys performed and it is reasonable to conclude that if the grids adjacent to the sill plates are clean, there is likely no contamination under the sill plates. Additionally the sheetrock on the walls that covered the side of the sill plates was not contaminated, and no indications of any spills that could have seeped under the plates. If a historic spill had seeped under the sill plates, it is reasonable to assume that some or all of the grids adjacent would have indications of contamination. All data used for the final status survey will be compared to the DCGL.

	Page/ Section/ Paragraph	Comment	
2.	Section 4.7.4	In section 4.7.4, NRC does not concur with the statement that the roof is a non-impacted area.	Actual survey data was collected in 2010. In the 2010 Building 315 radiological survey report it states that *"HWI utilized a boom lift to access the outside of the roof and performed a survey of the two roof stacks and surrounding areas at the base of the stacks obtaining directs frisks and smears."* A total of 12 direct and removable measurements were collected in the 2010 roof survey. The results of these surveys were a small fraction of the DCGL developed in Section 3.3 of the plan. Using results from ventilation exhaust stacks and the surrounding area of the roof is a standard approach for determining if an area should be classified as impacted or non-impacted. Section 4.7.4 for the radiological survey plan will be revised to clarify that the results are compared to the DCGL and not Regulatory Guide 1.86 criteria. The plan will be revised to state: *"Historical assessment and review of previous survey results indicate fixed and removable contamination surveys of the exterior roof stacks and the area on the roof directly adjacent to the roof stacks, and removable contamination surveys of the horizontal beam at the roof peak inside the*

	Page/ Section/ Paragraph	Comment	
			building from the 2010 building surveys are a small fraction of the DCGL."
3.	Section 4.2	Ventilation/parts that aren't being removed from the building must meet building surface criteria in accordance with NUREG 1757 vol. 2, appendices G.1.1 and G.1.2. Thus you can't compare it against equipment release criteria.	Ventilation or other items or materials that are part of the remaining structure will be compared to the DCGL and not to Regulatory Guide 1.86 criteria. Note that during site mobilization in early 2018, the fume hood, drain lines, pump, and other associated piping were removed and the all materials were disposed of as radioactive material. Table 4-2 Summary of Radiological Surveys to be performed for the Metallography Lab will be revised to state: *"Representative accessible surfaces of any remaining floor drains and the ventilation system in the mezzanine overhead area will be surveyed and compared to the DCGL."* Table 4-2 Summary of Radiological Surveys to be performed for the DU Machine Shop will be revised to include a survey of the remaining ventilation system exhaust. The following will be added to the table: *Representative accessible surfaces of any ventilation system in the overhead area will be surveyed and compared to the DCGL.*

Document: Hidden Water Responses to Nuclear Regulatory Commission Comments on the Radiological Survey Plan for Structures at Picatinny Arsenal (September 2018)

	Page/ Section/ Paragraph	Comment	
4.	General	Drain lines need to be surveyed at entrance access points to get an indication if they will add to dose.	Floor and sink drains will be surveyed as discussed in Section 4.7.5 and Table 4.2. The drain lines in the Metallography Lab were removed during the mobilization to the site in early 2018 and disposed of as radiological waste. There are no other above ground historical drain lines in the building.