



DEPARTMENT OF THE ARMY
ANNISTON ARMY DEPOT
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14 JULY 2016

Directorate of Risk Management

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713

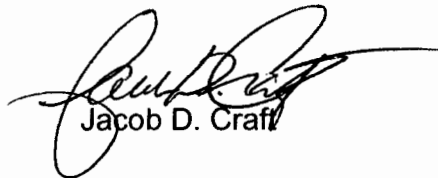
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Dear Sir or Madam:

Anniston Army Depot hereby submits our response to the U.S. Nuclear Regulatory Commission's (NRC's) comments received June 8, 2016 in reference to the license amendment request for our NRC License SUB-1602, Docket No. 040-38364, Mail Control No. 590965. ANAD's response is attached as Enclosure 1 to this letter.

If you have any questions regarding this matter, please contact the License Radiation Safety Officer, Mr. Jacob D. Craft at 256-235-7544 or by email at jacob.d.craft.civ@mail.mil.

Sincerely,


Jacob D. Craft

Enclosure

REC'D IN LAT 7-15-16

590965
NMSS/RGN1 MATERIALS-002

NRC Comment 1: In Supplement E, Section 2, of your application, you indicated that initially quarterly radiological surveys will be performed and documented.

a. Please specify the action levels for contamination that will prompt you to take additional precautions. At what level of contamination will you decontaminate an area and at what level will you perform bioassays for an employee?

Response: We will decontaminate areas to concentrations less than those found in Table 1 of ANSI/HPS N13.12-2013. Bioassays per NRC DG-8054, Applications for Bioassay for Uranium, would be performed only in an unusual incident and would be determined by air sample results or if there was a concern of exposure. Contamination will not be a routine occurrence for the licensed mission and is an exception occurring in unusual circumstances. This has been proven at another Army location doing the same mission under their NRC license (JSMC Lima NRC License. 21-21068-01). The contamination surveys and air sampling are being performed to document any contamination. Initial robust survey/sampling programs capture the working conditions for the new mission. The quantities of DU that would constitute a significant surface contamination in an unusual circumstance will be visible on hard surfaces. Survey levels that would prompt additional precautions would be as indicated in Table 1 of ANSI/HPS N13.12-2013. As described in Annex B of ANSI/HPS N13.12-2013 standard, a generic consideration of As Low As Reasonably Achievable (ALARA) process has been applied in the development of the derived screening levels. The mission area is a restricted area. Even if an unusual circumstance occurs where there is contamination, it is not likely that the workforce would receive an external dose of 10% of the limits of 10 CFR Part 20 or declared pregnant women having a deep dose equivalent greater than or equal to 0.1 rem. The mission area is not a high or very high radiation area. Also, the internal exposure is not expected to be 10% of the 10 CFR Part 20 ALI. The mission does not involve welding or working directly on the DU.

b. You indicated that based on radiological survey results, the frequency of radiological surveys may be adjusted to a less frequent timeline. Please describe your criteria for reducing the survey frequency to a less frequent timeline. Please be advised that routine surveys should be effective at identifying contamination but they also confirm that contamination control procedures are proving effective.

Response: As indicated in the license amendment application, the frequency of radiological surveys initially are robust to capture the initial mission exposures. It is anticipated that the surveys will show that standards of 10 CFR 20.1502 will not be met or exceeded requiring such surveys. However, the intent is to perform surveys to document contamination control and effectiveness of the radiation safety program. Based over time, if the radiological surveys show contamination levels below ANSI 13.12 and air sampling results in levels below the 10 CFR Part 20 DAC; the radiological survey frequency may be reduced.

c. Please describe the surveys that will be performed if an employee identifies that the stainless steel casing on a DU armor package appears to have been breached and address the timing of those surveys.

Response: The breach of a stainless steel casing of a DU armor package will be considered an unusual circumstance and will require immediate notification of the License RSO. The DU package in the breached casing will be containerized in a storage/disposal coffin for disposition as radioactive waste. The immediate area is then surveyed by instrument and wipe tests to capture the contamination levels. If contamination is present, the area will be decontaminated. The resulting decontamination waste is placed inside the storage/disposal coffin with the DU package and its casing. These actions and surveys will take place prior to the removal of the turret from the bay where the work is performed.

NRC Comment 2. In Supplement E, Section 2, of your application, you state that air sampling will be performed and operating procedures and PPE will be adjusted based on the results of the initial air sampling.

a. Please describe your methods for air sampling and specify how you will assure that the sampling is representative of the breathing zone of the workers.

Response: Anniston Army Depot will perform personal and/or area air sampling for uranium particulates. Personal (lapel) samples will be representative of the breathing zone of the workers. Any other samples collected will be compared against bioassay results, lapel samples, and/or multiple samplers as laid out in the NRC Regulatory Guide 8.25.

b. Please specify your criteria for modifying operating procedures and PPE based on air sampling results. Describe your action levels for air sampling results and what are the actions to be taken.

You may want to consult NUREG-1400 "Air Sampling in the Workplace" that is available in ADAMS at ML13051A671

Response: If the airborne uranium concentrations meet or exceed the action level of one half of the occupational exposure level (10 CFR 20 DAC), then air controls and processes will be re-evaluated to ensure worker's safety. Respiratory protection will be selected utilizing NRC Regulatory Guide 8.15. Supplied Air Helmets/Hoods with an APF of 1000 will be utilized in the initial process. Anticontamination clothing will be utilized to reduce the risk of workers skin exposure.

Please note that it is ANAD's intent to begin with more protective PPE and use air sampling to move to less protective if warranted. ANAD will utilize Supplied Air Helmets/Hoods initially. If air sampling results are well below established Derived Air Concentrations or Annual Limits of Intake for DU, ANAD may evaluate other PPE such as regular welding hoods.