

MAR 9 1994

Mr. F. Kevin Reilly
DLA/DNSC-0
1745 Jefferson Davis Highway
Suite 100, Crystal Square #4
Arlington, VA 22202

Dear Mr. Reilly:

On December 7, 1993, the Nuclear Regulatory Commission staff forwarded our comments on the Defense Logistics Agency's (DLA's) proposed remediation plan for the Anne Arundel County property in Curtis Bay, Maryland to your office. In a letter dated January 25, 1994, DLA responded to the NRC staff's comments. NRC staff has completed its review of your responses to the comments contained in our December 7, 1993 letter.

Based on its review, NRC staff believes that DLA will need to supply additional information to NRC in order to fully address the NRC staff's comments. In order to assist you in providing this information, I have enclosed the relevant comments from our December 7, 1993 letter, as well as the NRC staff's comments on DLA's responses to these comments. In addition, statements made in DLA's responses indicate that revisions to the remediation plan will be made while in many cases the actual revisions are not included in the response. When these revisions have been incorporated into the final remediation plan, the plan should be submitted to NRC. Finally, it appears that DLA intends to provide several additional documents to the NRC staff for review prior to being used during the remediation. NRC staff will need to review those documents and procedures related to site health and safety, characterization, and regulatory compliance, such as training and radiation exposure limitation. However, NRC staff will not need to review those documents relating to all site remediation activities, such as Radiation Work Permits.

Please review these comments and provide the additional information, or an estimate of when you anticipate providing the information, within 30 days of the date of this letter. If you have any questions, please contact me at (301) 504-2566.

Sincerely,

Dominick A. Orlando, Project Manager
Decommissioning and Regulatory
Issues Section
Division of Low-Level Waste Management
and Decommissioning
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

Ticket:N/A

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SUBJECT ABSTRACT:RESPONSE TO DLA RESPONSES ON CURTIS BAY REMEDIATION PLAN

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NRC STAFF COMMENTS ON THE
DEFENSE LOGISTICS AGENCY'S D & D PLAN
FOR THE ANNE ARUNDEL COUNTY PROPERTY IN CURTIS BAY, MD
March 1994

1) 12/7/93 Comment:

2. Page 3-2, it is unclear if the radiologically controlled area (RCA) will encompass the 9 contaminated buildings or merely be set up at the entrance to the county property at the Defense Logistics Agency (DLA) fence. Please indicate how the RCA will be established and maintained.

Comment on DLA's response:

It is not clear from your response if the RCA will be enclosed within a fence or whether it will merely be a gate at the DLA/AACo property boundary. Statements made in the D & D plan indicate that an important component of the contamination control program is the control of access to the RCA. As such it is important for NRC staff to understand the extent of the fencing planned for the remediation project.

2) 12/7/93 Comment:

4. Page 3-3, statements indicate that the roofs and walls will be removed concurrent with the characterization survey. Prior to removal, roofs and walls should be surveyed to determine if they are affected or unaffected areas. Determination of affected and unaffected areas should be performed as described in NUREG/CR-5849.

Comment on DLA's response:

It is unclear from your response if DLA intends to classify the exterior of the buildings as affected or unaffected areas prior to demolition. Please indicate how the exterior walls and roofs will be classified and how DLA intends to substantiate the classification of these areas.

3) 12/7/93 Comment:

9. Page 3-6, the descriptions of the remediation personnel does not include a description of the qualifications necessary for the positions outlined in the remediation plan. In addition, there is no indication of the type or number of health physics, radiation safety or industrial hygiene technicians that will be involved at the site. Please provide this information.

Enclosure

Comment on DLA's response:

It is not clear from your response if the minimum qualifications for each position within the framework of the remediation staff have been established. NRC staff typically evaluates these minimum qualifications to determine if they are suitable for the position on the remediation staff, as well as whether the individuals occupying these positions meet these qualifications. Please provide the minimum qualifications for the remediation staff positions.

4) 12/7/93 Comment:

10. Page 3-7, it appears that several of the individuals responsible for ensuring site radiological and industrial hygiene safety will only be at the site during the startup and shutdown phases. As the greatest risk to workers and members of the public would reasonably be expected to occur during remediation operations, the rationale for this limited oversight should be explained. In addition, the Radiological Control Supervisor/Site Safety and Health Supervisor appears to report to 3 individuals: the Project Manager, the Division Industrial Hygienist and the Corporate Health Physicist. In that the Division Industrial Hygienist and Corporate Health Physicist will not be onsite during remediation activities, there is a potential for miscommunication or misunderstanding of any problems encountered during remediation activities. Please provide assurance that a sufficient number of qualified management personnel will be present during remediation to ensure that site safety and health issues are addressed in an expeditious and efficient manner.

Comment on DLA's response:

The rationale is for the limited on-site presence during remediation activities of the Division Industrial Hygienist and Corporate Health Physicist is not clear. Please provide this rationale.

5) 12/7/93 Comment:

12. Page 3-9, statements indicate that buildings will be razed after decontamination, surveyed and released for unrestricted use. This is inconsistent with statements made on page 3-3 which indicate that the walls and roofs will be removed as part of the characterization survey. Please clarify how the characterization and razing of the buildings will be accomplished.

Comment on DLA's response:

It is not apparent how DLA's response addresses the NRC staff's comment. Please clarify how the characterization and razing of the buildings will be accomplished.

6) 12/7/93 Comment:

17. Page 4-3, statements indicate that standard operating procedures will be developed for minimizing worker contact with hazardous substances. However, no mention is made of procedures that will be developed for minimizing worker contact with radioactive material. Please provide this information.

Comment on DLA's response:

It does not appear that DLA's response addresses the NRC staff's comment. Please indicate whether standard operating procedures will be followed to minimize employee contact with radioactive material .

7) 12/7/93 Comment:

19. Page 4-5, statements indicate that only one member of the ALARA Committee will review and approve ALARA procedures. This is inconsistent with the rationale for establishing and maintaining an ALARA Committee. In addition, the membership of the ALARA Committee is unclear as it is referenced to a RUST internal document that was not provided with the remediation plan. Please provide the rationale for allowing only one member of the ALARA Committee to review and approve ALARA procedures as well as describe the membership of the ALARA Committee.

Comment on DLA's response:

DLA's response indicates that the purpose of the review procedure is to ensure that at least one member of the ALARA committee reviews each procedure. However, NRS-AD-006 indicates that the committee reviews procedures. Please clarify that the ALARA committee will review and approve procedures as indicated in NRS-AD-006.

8) 12/7/93 Comment:

20. Page 4-6, statements indicate that the radiation protection program is comprised of all RUST radiological standard operating procedures. As these procedures were not provided or described in the remediation plan, NRC staff cannot determine if they are adequate to ensure protection of the public health and safety or the safety of the workers involved in remediation activities. Please include a description of these procedures in the remediation plan or provide a copy of the relevant RUST documents to NRC for review.

Comment on DLA's response:

Please see NRC staff comment #6 above.

9) 12/7/93 Comment:

22. Page 4-7, statements indicate that radiation work permits (RWPs) are "initiated" (developed?) by any individual responsible for a given operation and the RWPs are reviewed and approved by the Radiation Control Supervisor/Site Safety and Health Supervisor (RCS/SSHS). It is not clear if RWPs will be reviewed by the Project Manager or DLA personnel, who are ultimately responsible for ensuring that remediation activities are carried out in accordance with the procedures described in the remediation plan. Please clarify that RWPs will be reviewed by all appropriate RUST and DLA personnel prior to being used at the site.

Comment on DLA's response:

It is unclear from your response if DLA will review and approve RWPs used during the remedial activities. During a meeting between NRC, DLA, RUST, Anne Arundel County and the Maryland Department of the Environment (MdDE) DLA indicated that they felt it was appropriate for RUST to conduct remedial activities under the DLA's NRC radioactive materials license. If RUST performs the remedial activities under DLA's license it will be DLA's responsibility to ensure that all remedial activities are conducted in accordance with an approved RWP.

10) 12/7/93 Comment

25. Page 4-8, please clarify where the RWPs will be located during the remediation activities.

Comment on DLA's response:

The document cited in the response, NRS-RP 007, was not provided to NRC.

11) 12/7/93 Comment:

27. Page 4-9, it is unclear what type of HEPA ventilation system will be used to prevent radioactive material from being exhausted to the site and site environs. In addition, there is no discussion of the system calibration, filter replacement or filtered effluent monitoring procedures for the HEPA ventilation system. Please provide this information.

Comment on DLA's response:

Please indicate which remedial operations are expected to require the use of HEPA filtered ventilation equipment.

12) 12/7/93 Comment:

36. Page 4-12, the rationale for performing air monitoring surveys only every four hours and only when airborne radioactivity is expected to be maximized should be discussed.

Comment on DLA's response:

Please indicate how the remediation plan will be revised to reflect this response.

13) 12/7/93 Comment:

39. Page 4-13, would the requirement outlined in #6 be in effect when the walls and roofs are removed?

Comment on DLA's response:

Please indicate how this response is affected considering DLA's response to #12 above.

14) 12/7/93 Comment:

42. Page 4-15, the description of the radioactive waste management procedures are inadequate as it refers to internal RUST documents that were not provided with the remediation plan. In addition, an estimate of the volume of waste expected to be generated by remediation activities, as well as an indication of the disposal facility that the waste will be sent for disposal should be included in the plan. In that heavy metals are expected to be present in the soil (from sewer sludge application adjacent to the buildings), the plan should included a description of the activities that will be used to ensure that if mixed waste is generated by remediation activities it is managed in accordance with all applicable State and Federal regulations. Finally, the meaning of the term "A-Unstable" waste is not clear.

Comment on DLA's response:

The response fails to completely address all the issues raised in NRC staff's 12/7/93 comment. Please indicate how much radioactive waste is expected to be generated as a result of remediation activities, what the procedure for managing mixed waste will be, and the meaning of the term "A-Unstable."

15) 12/7/93 Comment:

43. Page 7-1, the interior and exterior walls and roofs have been designated as unaffected areas. The interior walls should be considered affected areas unless the characterization survey of the walls proves otherwise. In addition, it is not clear if the characterization survey described in this section is consistent with statements made in section 3 as this section indicates that the walls and roofs will be removed and placed on the ground before characterization while section 7 seems to indicate that characterization will occur while the roofs and walls are in place. Please clarify these statements.

Comment on DLA's response:

During the meeting on January 19, 1994, between NRC, DLA, RUST, Anne Arundel County and the MdDE, DLA indicated that it felt it was appropriate to classify the lower walls (i.e., below 6 feet) and floors as affected areas and classify the upper walls and ceilings as unaffected areas. NRC and MdDE staff indicated that this would be acceptable. Please clarify if DLA still intends to classify the lower walls and floors as affected areas and classify the upper walls and ceilings as unaffected areas or does DLA intend to classify the entire building interior as an affected area.

16) 12/7/93 Comment:

44. Page 7-3, Previous discussions with DLA staff and the conceptual remediation plan submitted to NRC in February 1993, indicated that the intent of the remediation activities was to remove all residual radioactive material above unrestricted release limits from the building surfaces and soil and to dispose of this material in a radioactive waste disposal facility. Statements on this and subsequent pages indicate that radioactive contamination will be averaged over the area of the survey blocks established as part of the characterization survey. In that the activity of the residual contamination on building surfaces is generally low and the areal extent of contamination is limited, this method could allow building or soil contamination in excess of the allowable limits to be released for unrestricted use. At this site, contamination exists in discrete patches, rather than being homogeneously distributed. Therefore, it appears that biased sampling would be preferable to sampling on a coarse grid as described in NUREG\CR-5849. Please clarify that the intent of the remediation activities is to remove radioactive material contamination above the unrestricted use limits and that building surfaces and soil in excess of the limits for unrestricted release will be disposed of as radioactive waste.

Comment on DLA's response:

It does not appear that DLA's response addresses the NRC staff's comment. Please clarify that the intent of the remediation activities is to remove radioactive material contamination above the unrestricted use limits and that building surfaces and soil in excess of the limits for unrestricted release will be disposed of as radioactive waste.

17) 12/7/93 Comment:

56. Page 8-2, statements indicate that final status surveys will not be performed on structures that have been razed as part of the remediation process. It appears that DLA intends to use the information gathered during the characterization survey to support the assertion that structures meet the unrestricted use guidelines.

Please clarify that the data obtained during the characterization survey of the buildings will be sufficient to comply with NRC's unrestricted release criteria and NUREG/CR-5849 and that this information will be submitted to NRC as part of the documentation of the termination survey.

Comment on DLA's response:

Please clarify that the data obtained during the characterization survey of the buildings will be sufficient to comply with NRC's unrestricted release criteria and NUREG/CR-5849 and that this information will be submitted to NRC as part of the documentation of the termination survey.

18) 12/7/93 Comment:

57. What measures will be taken to prevent trespassing at the site during off hours?

Comment on DLA's response:

It is not clear if this response is consistent with the response to item 1 above. Please clarify how DLA intends to prevent trespassing on the site during off hours.

19) 12/7/93 Comment:

58. What are the estimated projected average and maximum worker and public doses, if any, from remediation activities? In addition, what is the total estimated worker radiation dose from the remediation activities?

Comment on DLA's response:

Your response summarizes an estimated public dose from residual radioactive material at the site and estimated worker dose from remedial activities. However, instead of discussing these estimates in terms of actual doses, it indicates that these doses will be less than the NRC's public dose limit of 100 mRem/yr. Please provide an estimate of the dose to a member of the public from remedial activities as well as an estimate of the dose to workers from remedial activities expressed as an actual discrete dose.

20) 12/7/93 Comment:

61. Please describe what additional surveying activities will occur if contamination in excess of unrestricted use limits is detected during the termination survey.

Comment on DLA's response:

Your response indicates the additional remedial activities that will be performed at the site if contamination in excess of unrestricted use

limits is detected during the termination survey. Please describe the additional surveying activities that will occur if contamination in excess of unrestricted use limits is detected during the termination survey.

Anne Arundel County/Curtis Bay
Docket No. 40-341

Letter dated MAR 09 1994

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