



Nevada Site Specific Advisory Board

January 21, 2015

Mr. Scott A. Wade
Environmental Management
U.S. Department of Energy, Nevada Field Office
P. O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Recommendation for Annual Nevada National Security Site
Environmental Report (NNSER) ~ Work Plan Item #5

Dear Mr. Wade,

The Nevada Site Specific Advisory Board (NSSAB) was asked to provide a recommendation, from a community perspective, to the U.S. Department of Energy (DOE) on how the Annual NNSER could be enhanced (i.e., readability, presentation of information, likes and dislikes between NNSER and other DOE sites Annual Site Environmental Reports).

After an educational session, a briefing, and Board discussion during the November 19, 2014 Full Board meeting, the NSSAB divided into four groups to review the following sections of the NNSER and compare to other DOE Environmental Reports that pertain to Environmental Management activities: 1) Summary, 2) Chapter 5, Section 5.1: Water Monitoring, 3) Chapter 10, Section 10.1: Waste Management, and 4) Chapter 11: Environmental Restoration.

In regard to the summary, the NSSAB felt that the document is at the right technical level and that the varied format, i.e. text, sequence, graphs, figures, pictures, colors, etc., enhances the report for readability by the public. In comparison, the NSSAB thought that the NNSER summary's overall presentation is better than other DOE environmental reports.

Overall, the majority of the NSSAB felt that the information included in the chapters is very technical for the general lay person without a science background. However, the NSSAB understands that a technical tone is required, but recommends that the reading level of the chapters meets the expected reading level of the general public. In addition, the NSSAB felt that it was difficult to refer from each chapter to the appendices and recommends adding hyperlinks to the online NNSER.

In both the summary and chapters, the NSSAB would like to see a glossary or sidebar of acronyms and to limit the use of acronyms and technical use of terms. Also, the tables, maps, and figures are valuable to explain/illustrate the subject matter, although some captions need additional detail and information and suggest that the font size in legends be increased for readability.

Members

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Administration

Barbara Ulmer, Administrator
Navarro-Intera
Kelly Snyder, DDFO
*U.S. Department of Energy,
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The NSSAB, from a community perspective, makes the following recommendations by summary/chapter:

— Summary:

- Cross reference the material in the full NNESSER to the summary in the Table of Contents
- Note for clarity in the first and not the third paragraph that it is a summary document (page 1)
- Change the phrase “released into the community” to “made available to the general public” (page 4, Emergency Planning and Community Right to Know Act)
- Clarify the last sentence, *“Was the reference only to Lake Mead and Boulder City? What impact does global atmospheric testing have on surface water? Can you separate the impact of the global testing from the NNESS activities? Additionally, it appears that the focus of the last paragraph was the low detectable level of tritium and the last two sentences introduce a different thought.”* (page 12)
- Move “Understanding Radiation Dose” section before radiological monitoring sections
- Improve phrasing of, “..seven were moved out of harm’s way off roads.” to “.. seven were moved off NNESS roads.” (page 20)
- Eliminate the word “successfully” in last sentence about pumas as it implies that NNESS killed some pumas while attempting to capture them (page 21)
- Utilize U.S. customary units or list both measurements (metric system) as the picocuries per liter measurement is not understood by the general public
- Mention that all appropriate radionuclides in groundwater are sampled and explain the reason that tritium is the primary contaminant of concern
- Add small symbols to indicate the end of a section similar to newspaper and magazine articles
- Print, “Continued on Page xx...”, right after the text of the article as it currently appears that the phrase is floating at the bottom of the page and it looks like the graphs continue and not the article (page 13)
- Improve uniformity of format as the different column widths and lengths is confusing, i.e. on page 20, an article breaks and it is difficult to follow where the article continues and the small print indicating where to continue reading made it more confusing at first glance as it looks cluttered
- Increase the size of the maps to a full page (page 12)
- Add mileage distance of each community to the NNESS of the map, 2013 CEMP Water Monitoring Locations (page 12)
- Change the colors for the labels on the Types of Groundwater Sampling Locations table and the colors for the well locators on the adjacent NNSA/NFO Water Sampling Network map so they match (page 11)

— Chapter 5, Section 5.1: Water Monitoring:

- Limit the use of cross-referencing to other sections and attachments
- Standardize color-coding in figures (for example, in Figure 5-3, the color red signifies >100; in Figure 5-2, the color red signifies “Early Detection” and purple signifies “Source”; recommend changing purple to red as a danger color in Figure 5-2 which would be consistent with Figure 5-3 graphic color representation)
- Address concerns about all radionuclides found in groundwater (for example, plutonium has been detected on Pahute Mesa in Wells ER-20-5 and ER-20-7 (Kersting), but is not listed as a concern on Table 5-2, page 5-6; no mention of monitoring for increases in the amount of plutonium that has migrated 1.3 kilometer from Benham)

— Chapter 5, Section 5.1: Water Monitoring (continued):

- Change to read, "...most mobile in groundwater and are presently produced..." or "...are produced..." (page 5-4, section 5.1.1.1, first paragraph, last sentence)
- Utilize U.S. customary units or list both measurements (metric system) as the picocuries per liter measurement is not understood by the general public
- Apply percent of maximum contaminant level rather the picocuries per liter for tritium concentration results
- Mention that all appropriate radionuclides in groundwater are sampled and explain the reason that tritium is the primary contaminant of concern
- Highlight statements of great importance in a different font color, such as, "Tritium has not been detected in any NNSS PWS wells."
- Add mileage distance of each community to the NNSS (page 7-12, section 7.2.2, Figure 7-7. 2013 CEMP water monitoring locations)

— Chapter 10, Section 10.1: Waste Management:

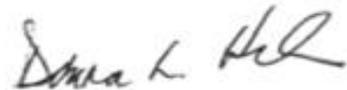
- Include a paragraph at the end of the section with a status update if the goals were met that are listed at the beginning of Chapter 10 in the green box, "Waste Management Goals"
- Add a list of Corrective Action Sites for each Corrective Action Unit
- Utilize a corresponding chart/map to illustrate the seven craters configured into five disposal cells (page 10-3, section 10.1.3, first sentence)
- Add an introduction for Section 10.4 Solid and Sanitary Waste Management

— Chapter 11: Environmental Restoration:

- Change "protective" to "that protects the public" (page 11-2, section 11.1, first paragraph-last sentence)
- Define "institutional controls" (page 11-2, , section 11.1, second paragraph-last sentence)
- Change "Western and Central" to "Central and Western" for consistency (page 11-7, section 11.1.2.2, first paragraph, first sentence)
- Change to read, "...characteristics, and hydrologic properties..." (page 11-7, section 11.1.2.2., last paragraph, first sentence)
- Update the status of tasks mentioned in 2013 Annual NNSSER in report for 2014 (page 11-9, sections 11.1.2.3 and 11.1.2.4, last sentence in both)
- Review discussion of closures completed before 2013 and consider removing from future NNSSERs as it is confusing and unnecessary as information may be accessed from previous years' reports
- Add conclusions in lay terms to the green paragraphs that explain the objectives of each activity; therefore the public may decide whether to continue pursuing the technical narrative, charts, and graphs
- Utilize both section, figure, and table numbers when referencing figures and tables from another chapter
- Employ footnotes to reference research papers rather than incorporating into the text for readability
- Increase visual aids, lists, and charts, i.e. utilize a 1,000-year timeline to reinforce the restoration activity, the current year, and the radiologic component disappearing below the horizon of safe, background levels within that time period

The NSSAB appreciates the presentations and the professionalism that Cathy Wills, the NNSER main author and editor, displayed in support of this work plan item and for the opportunity to review the Annual NNSER and provide these recommendations to the DOE on how to enhance the document for the public.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna L. Hruska". The signature is fluid and cursive, with the first name "Donna" being the most prominent.

Donna L. Hruska, Chair

cc: K. G. Ellis, DOE/HQ (EM-3.2)
M. R. Hudson, DOE/HQ (EM-3.2)
E. B. Schmitt, DOE/HQ (EM-3.2)
R. F. Boehlecke, NFO
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