

## Letter For Electronic Distribution

Original signed letter on file at the following address:

Nevada Division of Environmental Protection,  
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April 4, 2000

Mr. John Dirickson, P.E.  
Environmental Engineer  
Naval Air Station, Fallon  
Public Works Department  
Environmental Division-Code 187JD  
4755 Pasture Rd.  
Fallon, NV 89496

RE: NDEP Response to Site 7, Napalm Burn Pit  
Draft Final Decision Document, August 27, 1999, Sites 4, 7, 9, 10, 11, 12, 17, 18, 19, 23, and 24  
Remedial Investigation/Feasibility Study  
Naval Air Station Fallon

Dear Mr. Dirickson:

Nevada Division of Environmental Protection (NDEP) staff has reviewed NAS Fallon's Report entitled *Decision Document, Sites 4, 7, 9, 10, 11, 12, 17, 18, 19, 23, and 24, Draft Final*, dated August 27, 1999. This report was prepared in response to a series of NDEP letters which commented on NAS Fallon's report entitled *Record of Decision, Sites 4, 5, 7, 8, 9, 10, 11, 15, 17, 18, 19, 23, 24, 25, 26, 27 Naval Air Station Fallon* (ROD), dated June 5, 1998. Due to significant changes between the Draft Final Decision Document and the Record of Decision, the referenced Draft Final Decision Document was reviewed as a draft document instead of a draft final. NDEP's comments on Site 7, Napalm Burn Pit, are addressed in this letter.

Based on NDEP's review of site conditions and supporting documentation to verify information provided in the Draft Final Decision Document, the NDEP remains concerned that significant data gaps remain. NAS Fallon has asserted that Site 7 does not exist and that groundwater contamination is not associated with Site 7. However, the Draft Final Decision Document does not provide sufficient detail or supporting documentation to make these conclusions. In particular, soil and groundwater samples used to support the conclusion that contamination does not exist downgradient of Site 7 appear to have been collected considerable distances from the site and may not be representative of site conditions. Also, data indicate that trash and rubble were buried at Site 7. These conditions could have a significant influence on contaminant transport, but were not discussed in the Draft Final Decision Document and do not appear to have been evaluated during the Remedial Investigation/Feasibility Study (RI/FS). Due to a lack of site-characterization data, Site 7 cannot be adequately evaluated.

This document needs to be available to the public for review, as appropriate, and an accurate record in the

Decision Document is required so that an informed decision can be made. The conclusions in the Draft Final Decision Document cannot be drawn for the extent of RI/FS activities conducted at Site 7. It is important that data collected during the RI/FS be presented accurately and completely. Appropriate, data analyses need to be presented to support conclusions. These deficiencies are discussed in the comments attached to this letter and need to be corrected in a revised Decision Document.

Formal approval of a “No Further Action” Decision Document is based on the extent of the investigation and remediation, an understanding of the nature and extent of contamination, documentation in the administrative record, and post closure care which includes institutional controls, land use restrictions, and/or post-closure monitoring. Of considerable concern to the NDEP is that documentation to support the “No Further Action” recommendation in the Draft Final Decision Document does not appear to be included in the administrative record, and very little data from Site 7 are available. In a letter dated January 20, 1999, the NDEP requested that supporting documentation (including logs of abandoned borings, air photos used to evaluate the presence of the Napalm Pit, the September 4, 1991 testimony by the NAS Fallon Fire Chief, and the Sampling and Analysis Plan) be provided to the NDEP. However, only a memorandum from the NAS Fallon Fire Chief, dated February 17, 1999, was provided to replace the September 4, 1991 testimony. The NDEP has not previously concurred with “No Further Action” for Site 7, and in consideration of the factors described above, cannot do so at this time.

During the summer of 1998, NAS Fallon performed additional investigation work at Site 21 (Receiver Site landfill). Based on data provided to the NDEP, soil and groundwater samples were collected near the location of Site 7 during the investigation. The NDEP has not yet received a characterization report which summarizes results of the investigation. The NDEP will consider concurrence with “No Further Action” for Site 7 after this characterization report is submitted to the NDEP for review. The final Decision Document for Site 7 will need to address the attached NDEP comments on the Draft Final Decision Document. NAS Fallon has not responded to many of NDEP’s comments presented in the letter dated January 20, 1999. Comments in that letter which were not addressed in the Draft Final Decision Document are reiterated in the attached comments.

Since these issues have been on-going and unresolved for an extended period of time, please provide a time frame for addressing the comments in this letter within 30 days. If we as project managers cannot agree on a process to resolve these issues, the NDEP will need to initiate the dispute resolution process. If you have any questions, or need further clarification, please do not hesitate to contact me at (775) 687-4670, extension 3053.

Sincerely,

Jeffrey J. Johnson, P.E.  
Geological Engineer  
Bureau of Federal Facilities

JJJ/js

cc:

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**COMMENTS ON THE DRAFT FINAL DECISION DOCUMENT  
SITE 7, NAPALM BURN PIT**

1. Page 1, third paragraph: The Draft Final Decision Document states: “*The decision not to undertake a remedial action for this site is consistent with the factors set forth in the National Contingency Plan (NCP) 40 CFR part 300, and Nevada Administrative Code (NAC) Sections 444.570 through 444.7499 and 445A.226 through 445A.22755. This decision was based on one or more of the following*” (three bulleted reasons follow).

The NDEP cannot concur with the above statement for the following reasons:

- C Supporting documentation appears to be missing from the administrative record. Therefore, NAS Fallon does not appear to be in full compliance with 40 CFR Part 300, Subpart I: Administrative Record for Selection of Response Action. See comments **3, 5, 6** and **15**.
  - C NAC 444.570 through 444.7499 apply to solid waste disposal. Although Site 7 is located within a landfill (Site 21, Receiver Site Landfill), the environmental concern at Site 7 is the presence of Napalm in soil and groundwater. Compliance with landfill regulations that may be applicable for the Receiver Site Landfill will be managed under Site 21, not Site 7. Therefore, NAC 444.570 through 444.7499 are not applicable for Site 7.
  - C An investigation to evaluate the extent of soil and groundwater contamination at Site 7 has not been completed. Therefore, the statement after the second bullet, which states that no contamination is present or the concentrations of contaminants are below the regulatory guidelines, cannot be verified. See comments **3, 8** and **9**.
  - C There is no basis for the statement after the first bullet because neither a complete investigation nor a risk assessment were conducted for Site 7. See comments **3, 8** and **9**.
  - C Human health and ecological risks for soils at Site 7 were not evaluated (Remedial Investigation (RI) Report, Volume III, Baseline Risk Assessment). Therefore, the last bullet is not applicable and should be omitted.
2. Page 1, last paragraph in Section I: The Draft Final Decision Document states: “*The Nevada Division of Environmental Protection (NDEP) has reviewed this document and concurred with this decision. There are not any nationally significant or precedent setting issues for this site.*”

The NDEP has not previously concurred with “No Further Action” for Site 7. Also, numerous issues which are detailed in the comments in this letter have not been acceptably supported by documentation. The NDEP cannot sign a “No Further Action” Decision Document for Site 7 until the issues detailed in this letter are resolved and supporting documentation is provided

3. Page 2, Section A, last paragraph: “*The Phase II remedial investigation failed to confirm the presence of the Napalm Burn Pit and testimony by the NAS Fallon Fire Chief refuted the existence of the site. A memo from the NAS Fallon Fire Chief stating this is on file. Also, No groundwater contamination was detected down gradient from the investigation site*”.

Documentation to support the assertion that the Napalm Burn Pit does not exist appears to be missing

from the administrative record. The RI Report states on page 8-1 *“The pit could not be located by the PA/SI team during the Phase I study nor was it identified on air photos of the area.”* Based on documentation in the NDEP’s files, the air photos used to assess the presence of the Napalm Burn Pit have not been presented to the NDEP for review, and do not appear to be included in the administrative record. It also appears that the only work conducted during the Phase II remedial investigation to evaluate the presence of the Napalm Burn Pit was to drill four groundwater test holes that were subsequently abandoned. Also, according to Figure 8-6 in the Preliminary Assessment/Site Inspection (PA/SI) Report, Site 7 was located approximately 500 feet west of the area where the four groundwater test holes were drilled. Based on documentation in the NDEP’s files, the basis for the location of the test holes to evaluate the presence of Site 7 has not been presented to the NDEP for review and does not appear to be included in the administrative record. Additionally, the PA/SI Report recommended the installation of a monitoring well at Site 7 (see page 3-8). However, the RI Work Plan dated August 1989 does not appear to address the issue of locating Site 7 or installing a groundwater monitoring well.

The only document present in NDEP’s files concerning the location of Site 7 is a memo dated February 17, 1999 from the NAS Fallon Fire Chief. The memo states *“I have worked at the Naval Air Station Fallon’s Fire Department since August 1966. During this time the burning of napalm was conducted at Site 1, the old crash crew training area. To the best of my knowledge, napalm was not burned at any other location.”* This statement alone does not confirm that napalm wasn’t burned at Site 7.

It appears that no clear investigation program was implemented during the Remedial Investigation/Feasibility Study (RI/FS) to locate Site 7, and that no supporting documentation exists in the administrative record to verify that Site 7 does not exist. Unless appropriate supporting documentation is presented to the NDEP for review, additional work may be needed to assess the presence of Site 7.

In regards to the last sentence in the comment 3 quotation, analytical results were not presented in the Draft Final Decision Document to support the conclusion that groundwater contamination was not detected downgradient of Site 7. As stated in NDEP’s letter dated January 20, 1999 (under comment 1), analytical results and detection limits for soil and groundwater samples collected from Site 7, and from samples collected at Sites 21 and 22 used to support a decision for Site 7, must be presented in the Decision Document. Locations of soil and groundwater samples used to support a decision need to be located on drawings in the Decision Document and laboratory reports need to be available for review. (Note: Headspace results from groundwater test holes cannot be used to assess contaminants in groundwater.)

4. Page 2, Section 1.2 Geology: Site-specific geological data do not appear to have been collected at Site 7 which is located within the Receiver Site Landfill (IRP Site 21). However, the RI Report does state on page 8-15 that buried trash and rubble fouled drilling augers while attempting to drill groundwater test holes at Site 7. The buried trash and rubble are probably contents of the Site 21 landfill which extends eastward (downgradient) from Site 7 to the boundary on the east side of the base. The hydraulic conductivity of this landfill material can be relatively high which may increase the transport rate of contaminants to the base boundary. This information should be addressed in the Decision Document so that the reader can understand site conditions.
5. Page 4, second paragraph in Section C: The Draft Final Decision Document states: *“.... the pit could not be identified on base air photos and could not be located during the PA/SI, Phase I study.”*

In a letter dated January 20, 1999 (under comment 2), the NDEP stated that supporting documentation,

including the air photos, could not be located in NDEP's files, and that supporting documentation must be presented to the NDEP to support the conclusion that the site does not exist. NAS Fallon needs to either provide the supporting documentation or state in writing that this documentation does not exist in the administrative record. For additional NDEP concerns, see comment 3.

6. Page 4, Section C, last paragraph on page: The Draft Final Decision Document states "*Testimony by the NAS Fallon fire Chief at a public meeting held in Fallon September 4, 1991 refuted the existence of this site. He stated that napalm was burned at Site 1, the Crash Crew Training Area. A memo from the NAS Fallon Fire Chief stating this is on file. (ORNL 94 (I))*"

The testimony dated 1991 is not listed in the references in the Draft Final Decision Document and does not appear to be in the administrative record. In a letter dated January 20, 1999 (under comment 2), the NDEP stated that supporting documentation including the 1991 testimony could not be located in NDEP's files, and that supporting documentation must be presented to the NDEP to support the conclusion that Site 7 does not exist. NAS Fallon needs to either provide the supporting documentation or state in writing the documentation does not exist in the administrative record. Alternatively, the Decision Document can be revised to reference the February 1999 memo instead of the 1991 testimony. See comment 3.

7. Page 5, Section F, last paragraph: The Draft Final Decision Document states "*The Draft Decision Document for 11 sites including Site 7 will be published in the Lahontan Valley News and the Fallon Eagle Standard. These community participation activities fulfill the requirements of the CERCLA: Section 113(k)(2)(B)(I-v) and 117(a)(2). The Administration Record is available for review at the Churchill County Library.*"

Based on Appendix A in the Draft Final Decision Document (Administrative Record), the documents listed below were not included in the administrative record. These documents should be listed because they contain data, factual information, and analyses that form the basis for the selection of the response action.

- C Progress reports that included data or interpretations for Site 7.
- C Air photos used to evaluate the presence of the Napalm Burn Pit.
- C The September 4, 1991 testimony by the NAS Fallon Fire Chief.
- C Logs for the four abandoned borings.
- C Laboratory analytical reports.

8. Page 6, Section III, Investigation Summary: The Draft Final Decision Document states "*The Phase II RI for Group II Sites consisted of drilling 88 groundwater test borings, 11 monitoring wells, and 15 piezometers.*"

The investigation activities described above were not located near Site 7 and cannot be used to evaluate the nature and extent of contamination at Site 7. Those activities pertinent to Site 7 should be pointed out in this section. For Site 7, onsite investigation activities during the RI/FS included drilling four borings which were abandoned. Apparently, no data were collected from these borings as indicated by the RI Report which states on page 8-15 "*An attempt to locate the napalm burn pit by drilling ground-water test holes was unsuccessful because buried trash and rubble fouled the drilling augers.*" This information needs to be clarified in the Decision Document.

9. Page 6, Section A, Vadose Zone and Soil: The Draft Final Decision Document states "*Several ground water test borings were drilled within the Receiver Site Landfill area to locate Site 7, the Napalm Burn*

*Pit and were unsuccessful because buried trash and rubble fouled the drilling augers. The Phase II investigations for Site 21 and Site 22 also failed to confirm the presence of the Napalm Burn Pit. Also, no contaminant was detected down gradient from the investigation area. Soil samples taken in September 1998 found no contamination supporting the existence of a napalm burn pit. (ORNL 94 (I)).”*

first sentence: The phrase “*Several ground water test borings*” should be changed to *four abandoned borings*. The Decision Document also needs to state that the borings did not reach the water table (see Volume II of the RI Report, page C-24), no data were collected from the borings, and that copies of the boring logs are not included in the administrative record. If this documentation exists, then it needs to be provided to the NDEP. See comment **15**.

second sentence and third sentence: The Draft Final Decision Document needs to clarify that the nearest well drilled to Site 7 is PW03, located approximately 1600 feet to the southeast, and that the nearest ground water test boring to Site 7 was located approximately 500 feet to the south. It should also be clarified that ground water samples collected from the ground water test borings were not analyzed. Instead, the presence of volatile organic compound (VOC) vapors in the head space above water samples was qualitatively assessed. This method may not detect petroleum hydrocarbons that are not VOCs. This information needs to be included in the Decision Document. The NDEP does not consider the lack of contamination from the Phase II investigations for Site 21 and Site 22 as evidence that the Napalm Burn Pit does not exist or that groundwater is not contaminated from the Napalm Burn Pit.

last sentence: The NDEP has not received a report summarizing the 1998 investigation. The NDEP needs to review this report before data collected from the 1998 investigation can be used to support the “No Further Action” decision.

10. Page 6, Section B, Groundwater: The Draft Final Decision Document states: “*Groundwater test borings drilled along Perimeter Road just south of area of the proposed location of Site 7, the Napalm Burn Pit were analyzed and indicated no significant contamination down gradient. The Phase II investigations failed to confirm the presence of the Napalm Burn Pit. Water samples taken in September 1998 found no contamination supporting the existence of a napalm burn pit. (ORNL 94 (I))”*

See comments **3**, **8**, and **9**.

11. Page 6, Section D, Conclusion: The Draft Final Decision Document states “*Phase II investigations failed to confirm the presence of the Napalm Burn Pit, and testimony by the NAS Fallon Fire Chief refuted the existence of the site. No contaminant was detected in or down gradient from the investigated area. No quantitative risk assessments for soil and ground water were conducted due to the absence of data confirming the existence of the site. Based on these conclusions, the remedial decision for Site 7, Napalm Burn pit, is NO FURTHER ACTION.”*

For the reasons stated in this letter, the NDEP cannot concur with the conclusion for Site 7. The NDEP will consider “No Further Action” for Site 7 after the report summarizing results of the 1998 investigation are provided to the NDEP for review, and after a revised Decision Document is submitted which addresses the issues presented in this letter.

12. Page 6, Section IV, Proposed Action: The Draft Final Decision Document states “*The Napalm Burn Pit, Site 7 is recommended for NO FURTHER ACTION. The soil and groundwater sampling for Group II, Sites could not confirm the existence of this Site. No risk assessment was necessary.”*

See comment **11**.

13. Page 7, Section V, Future Activity at Site 7: Site 7 is being placed on the NAS Fallon Master Plan which is used to assess potential contact with contaminated soil and groundwater during future construction projects. Please be advised that these administrative controls are subject to future audit.

The NDEP will consider recommendations for future activity at Site 7 after the report which summarizes the 1998 investigation is submitted to the NDEP for review and concurrence.

14. Page 7, Section VI, Recommendations: The Draft Final Decision Document states “*This decision document represents the selection of a no action alternative and subsequent closure for Site 7 at NAS Fallon, Fallon, Nevada. The no action alternative was developed in accordance with CERCLA as amended and is consistent with the NCP. This decision is supported by the documents in the administrative record for the site.*”

The NDEP does not concur with the above statement for the reasons stated in this letter. See comments **1, 3, 5, 6** and **15**.

15. NAS Fallon needs to address all comments in NDEP’s January 20, 1999 letter. Comments which need to be addressed, but have not been fully discussed above include the following:

Item 3 in NDEP’s January 20, 1999 letter

Information or data that are used to support the “No Further Action” recommendation must include supporting documentation. Documentation does not need to be provided with the Decision Document, but needs to be present in NDEP’s files. Supporting documentation for Site 7 that is missing from NDEP’s files are listed below.

- C Air photos used to evaluate the presence of the Napalm burn pit.
- C The September 4, 1991 testimony by the NAS Fallon Fire Chief.
- C Logs for the four abandoned borings.
- C Sampling and Analysis Plan for the RI/FS (Volume III of the RI/FS Work Plan).
- C Laboratory analytical reports.

NAS Fallon needs to either provide the supporting documentation, or state the supporting documentation does not exist and is not included in the Administrative Record.