

03.01-05/20/96-01676

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

May 20, 1996

Commander, Atlantic Division
Naval Facilities Command
Code 1823

Attention: MCB Camp Lejeune, RPM
Ms. Katherine Landman
Norfolk, Virginia 23511-6287

Commanding General

Attention: AC/S, EMD/IRD
PSC Box 20004
Marine Corps Base
Camp Lejeune, NC 28542-0004

RE: Baseline Risk Assessment for Sites 44, 54, and 86 from
the Draft Remedial Investigation Report for Operable Unit
6, MCB Camp Lejeune, Jacksonville, NC

Dear Ms. Landman:

The NC Superfund Section has completed its review of the remaining baseline risk assessments (i.e. sites 44, 54, and 86) from the Draft RI report for Operable Unit 6. Comments are attached as memos from Mr. David Lilley, our Industrial Hygienist to myself. Please call me at (919) 733-2801 x282 if you have any questions about this.

Sincerely,

Patrick Watters

Patrick Watters
Environmental Engineer
NC Superfund Section

Attachment

cc: Neal Paul, MCB Camp Lejeune
Gena Townsend, US EPA Region IV
Grover Nicholson, NC Superfund

May 1, 1996

TO: Patrick Watters
FROM: David Lilley 
RE: Comments prepared on the Baseline Human Health Risk Assessment, ^{SITE} DU 44,
Camp Lejeune, NC

After reviewing the above mentioned document, I offer the following comments:

1. Page 6-8, Section 6.2.4.1, second paragraph and Page 6-9, top paragraph: It is claimed benzo(g,h,i)perylene's maximum concentration was below the Region III RBC value, and therefore eliminated as a COPC. Region III does not list a value for benzo(g,h,i)perylene. Please explain.
2. Page 6-10: The CSF (inhalation) for benzo(a)pyrene listed in this table was not found in IRIS as claimed.
3. Page 6-11, Section 6.3.1.1: The Site Conceptual Model is in Appendix R, not Appendix S as claimed.
4. Page 6-20, Trespassers and Future On-site Residents: It is not understood by the reader why residents would have exposed skin surface areas of 5,800 cm² for adults and 2,300 cm² for children, when trespassers have an exposed skin surface areas of 5,000 cm² and 2,000 cm² for children. According to the explanation, the numbers were derived the same way. Please revise the document to reflect consistent exposed skin surface areas.
5. Page 6-21, Trespassers and Future On-Site Residents: The inhalation rate for a child is listed as 10 m³/day. EPA Region IV's *Supplemental Guidance to RAGS, Human Health Risk Assessment Bulletin No. 3*, November, 1995, page 3-4 lists the inhalation rate for a child as 15 m³/day. Please adjust this document accordingly.

May 10, 1996

TO: Patrick Watters
FROM: David Lilley *DBL*
RE: Comments prepared on the Baseline Human Health Risk Assessment, **SITE** ~~OU~~ 54,
Camp Lejeune, NC

After reviewing the above mentioned document, I offer the following comments:

1. Page 6-18, Trespassers and Future On-site Residents: It is not understood by the reader why residents would have exposed skin surface areas of 5,800 cm² for adults and 2,300 cm² for children, when trespassers have an exposed skin surface areas of 5,000 cm² and 2,000 cm² for children. According to the explanation, the numbers were derived the same way. Please revise the document to reflect consistent exposed skin surface areas.
2. Page 6-19, Trespassers and Future On-Site Residents: The inhalation rate for a child is listed as 10 m³/day. EPA Region IV's *Supplemental Guidance to RAGS, Human Health Risk Assessment Bulletin No. 3*, November, 1995, page 3-4 lists the inhalation rate for a child as 15 m³/day. Please adjust this document accordingly.
3. Appendix T, Surface Soil Ingestion, Dermal Contact, and Particulate Inhalation Exposure Assessment for Current Military Personnel: The total carcinogenic risk listed for each of these tables is different than the risk posed by the only carcinogen found. Is something wrong with the computer program?
4. Table 6-4 and Appendix T, Surface Soil Ingestion Exposure Assessment for Child Trespasser: Page 6-16 lists the ingestion rate for a child trespasser as 200 mg/day. However, Table 6-4 and the above mentioned spreadsheet in Appendix T lists the ingestion rate as 100 mg/day. The ingestion rate of 200 mg/day should be used. Please adjust the document accordingly.

May 17, 1996

TO: Patrick Watters

FROM: David Lilley

DBL

RE: Comments prepared on the Baseline Human Health Risk Assessment, ~~OU~~ 86, ^{Site DBL}
Camp Lejeune, NC

After reviewing the above mentioned document, I offer the following comments:

1. Page 6-11, Section 6.3.1.2: It is unclear to the reader how future residents could be exposed to subsurface soil but not surface soil. Please explain.
2. Page 6-18, Trespassers and Future On-site Residents: It is not understood by the reader why residents would have exposed skin surface areas of 5,800 cm² for adults and 2,300 cm² for children, when trespassers have an exposed skin surface areas of 5,000 cm² and 2,000 cm² for children. According to the explanation, the numbers were derived the same way. Please revise the document to reflect consistent exposed skin surface areas.
3. Page 6-19, Trespassers and Future On-Site Residents: The inhalation rate for a child is listed as 10 m³/day. EPA Region IV's *Supplemental Guidance to RAGS, Human Health Risk Assessment Bulletin No. 3*, November, 1995, page 3-4 lists the inhalation rate for a child as 15 m³/day. Please adjust this document accordingly.
4. Table 6-4 and Appendix S, Surface Soil Ingestion Exposure Assessment for Child Trespasser: Page 6-16 lists the ingestion rate for a child trespasser as 200 mg/day. However, Table 6-4 and the above mentioned spreadsheet in Appendix S lists the ingestion rate as 100 mg/day. The ingestion rate of 200 mg/day should be used. Please adjust the document accordingly.