

Camp Lejeune Data Mining Technical Workgroup 21-22 July 2010 Workgroup Meeting Summary

Day 1: 21 July 2010, began at 0800

Opening Statements

MajGen Jensen, US Marine Corps (USMC), gave opening remarks and indicated that while there are limits to the data available for this complex modeling, the USMC will go out of their way to provide all information needed. RADM Rodenbeck, US Public Health Service/Agency for Toxic Substances and Disease Registry (ATSDR), stated that there is a need for a joint effort to find additional information and data so ATSDR can complete the Camp Lejeune health activities. A lot of information has been given; however, the perception is that it has not. The Camp Lejeune Data Mining Technical Workgroup needs to document all procedures and protocols. He stressed that if the Department of the Navy (DON) does not understand what ATSDR is asking for, clarification must be made.

All in attendance briefly introduced themselves (list attached).

Overview of ATSDR Camp Lejeune Current Health Activities

ATSDR provided a summary of the various health activities. Data collection for the 1998 Adverse Birth Outcomes study and the case control study are complete, and the data analyses are waiting for the water modeling results. The mortality study (1975-1987) began data collection in April 2010, and the health survey study (mandated by Congress) should be starting in September 2010. ATSDR indicated that the mortality study and the health survey study will use Camp Pendleton as the control population. ATSDR is currently waiting on Office of Management and Budget (OMB) clearance to proceed with the health survey: a standard requirement for any federally conducted health survey. In support of these health studies, ATSDR is modeling the groundwater, as well as the drinking water distribution system. ATSDR hopes to develop monthly contaminant concentrations estimates for the Hadnot Point drinking water system; similar to what was done for the Tarawa Terrace drinking water system. ATSDR indicated that the time frame for the epidemiology studies is from 1967 (to characterize first trimester exposures for those born in 1968) to 1987; however, the modeling efforts may require expansion of time frame.

ATSDR Information and Data Needs

ATSDR provided a draft listing and description of its information and data needs; which the Workgroup members discussed in detail. DON noted that a cutoff date for information would help with the data mining effort, as the base is generating data related to various environmental and utility programs on a daily basis. ATSDR noted that the health activities are focusing on drinking water and PCE, TCE, and BTEX

contamination. ATSDR will redraft the information and data needs list based upon DON suggestions and to assure DON has a clear understanding of ATSDR's needs.

All agreed that it is likely some piece of paper will be found in the future after all of the studies are completed. As such, the Workgroup needs to be clear that every scrap of paper is not needed. The Workgroup will focus on what is relevant and does it really change anything if additional information is found later.

Review of US Marine Corps Base Camp Lejeune Environmental Programs and Information and Data Sources

DON staff provided an overview of all environmental compliance and other program activities. In addition, a three-ring binder containing briefs on the Base's various programs was provided, and included: Marine Corps Organizational Overview, information available aboard the Base, including an *I&E Documents Studies, and Databases Spreadsheet* (also referred to as the "Broad Information List"), Installation Restoration Program, Solid Waste Management Unit (SWMU) Program, other Environmental Restoration-related initiatives, UST Program, Drinking Water Program, Onslow Water Resources Group, DCERP Programs, Environmental Management System, Air Quality, Asbestos Program, Environmental Compliance Evaluation Program, Hazardous Waste/Hazardous Material Program, Landfill Groundwater monitoring Program, NEPA, Wastewater, Storm Water Management, Public Works Division Records, Preventive Medicine/ Environmental Health Program, and Industrial Hygiene Program. A review of available document repositories was provided, and the history of the Administrative Record was provided. Based upon Workgroup discussions and ATSDR's information and data needs, the Workgroup will focus its efforts on the following general Camp Lejeune environmental program areas (not in any priority order):

- Drinking water,
- Hazardous waste spills,
- Industrial hygiene,
- Installation Restoration,
- Landfill groundwater monitoring,
- Military munitions response (specifically groundwater elevation monitoring and geophysical information),
- Public works, and
- Underground storage tank.

The Workgroup determined that the Camp Lejeune Ambient Air Quality, Asbestos, Hazardous Waste/Hazardous Material (as it relates to transport and storage), National Environmental Policy Act, Wastewater, Storm Water, and Preventive medicine activities were unlikely to have any relevant information or data related to ATSDR's Camp Lejeune health activities.

DON provided information on DON's official document retention policies and procedures and where currently various repositories of information and data are located at

the base, on the DON electronic network, and how those have changed over time (e.g., changes of physical locations at the base, consolidation of DON web sites). The “Baker” web site (https://www.bakerenv.com/camplejeune_irp/default_frameset.htm) should not be considered a definitive source of information and data because it is no longer being maintained. The Naval Installation Restoration Information Solution (NIRIS) web portal contains the most up-to-date information. Although ATSDR has access to the public NIRIS web portal, the Workgroup determined it is important that ATSDR has access to the NIRIS private side so it can perform more detailed searches on available reports and have access to final reports not required to be maintained in the official Administrative Record.

The Base Underground Storage Tank (UST) program was discussed and an in-depth discussion concerning the estimated total petroleum mass that may have leaked from the Hadnot Point Fuel Farm occurred. Workgroup members discussed that it was important to cross reference with the State of North Carolina files because they may contain some information that is currently not on the DON UST remediation program files.

The US Marine Corps Base Camp Lejeune Defense Coastal Estuarine Research Program (DCERP) was discussed. ATSDR noted that moisture sensors in soil and associated rainfall data from DCERP would be useful, if available.

The Onslow Water Resources Group was discussed and how it would be beneficial for ATSDR to have information and data generated by the Onslow Water Resources Group and that ATSDR needs to be aware of the Onslow Water Resources Group’s activities.

The Workgroup discussed whether regularly-scheduled technical meetings should be held, similar to the “Partnering Meetings” with the CERCLA process. The first item suggested to be discussed is the modeling approach for Hadnot Point. All agreed that regularly scheduled, formalized meetings should be held, whether in person or by phone, to discuss various technical issues. This would be a separate activity from the Workgroup.

DON recommended that ATSDR have someone on-base full-time to assist in the data mining effort particularly in determining what information and data may be relevant to ATSDR’s Camp Lejeune health activities.

The Workgroup also discussed the need for a small group to review the Naval Facilities Engineering Command (NAVFAC) repositories (e.g., Norfolk). In particular, ATSDR would be interested in obtaining a list of NAVFAC-sponsored environmental research projects.

The meeting adjourned for the day at 1744.

Day 2: 22 July 2010, began at 0805

The group reviewed action items from previous day.

Review of US Marine Corps Base Camp Lejeune Environmental Programs and Information and Data Sources (continued)

The US Marine Corps Base Camp Lejeune Drinking Water Program was discussed. ATSDR stated that they have some sample data but do not have all original lab reports. For example, there are some hand-written lab results from around November 1985, ATSDR would like to know if they can rely on this data or not. A joint action item was created to contact previous employees to seek clarification regarding these hand-written lab results and potentially pose other questions. In addition, the Workgroup will determine what labs were used from 1985 to 1995, the date range agreed upon by the group, and then contact the labs to determine if they have maintained original lab results. The Workgroup also needs to review the state of North Carolina drinking water files and request all data.

ATSDR Modeling Efforts

ATSDR gave a presentation to demonstrate how they are pulling the various types and sources of data together. The presentation included a draft map of the model boundaries, a chart regarding well supply operational chronology, and individual excel files detailing well capacities (e.g., when well went online and offline, and references for the data). It was decided that the more in-depth detailed discussion on the model will be tabled to one of the quarterly technical meetings that will be arranged separate from the Workgroup activities

Review of Document Repositories

The Workgroup visited the key document repositories located at Camp Lejeune:

- EMD Library (CERCLA and RCRA SWMU Files etc.),
- Consolidated Document Repository,
- UST Remediation Files, and
- The Vault (Technical Drawings etc., sub-group visit).

Workgroup Draft Plan of Operation

The workgroup discussed the draft Plan of Operation. Workgroup members are to provide comments on the draft Plan of Operation to RADM Rodenbeck by 3 August 2010.

Review of ATSDR Information and Data Needs

Based upon the discussions and information presented at this meeting, the workgroup discussed ATSDR's Draft Information Data Needs Table and how it can be improved:

- Potential report document sources based upon Camp Lejeune environmental program areas,
- Add date ranges for information ATSDR already has and needs, and
- Geographic area of interest, if possible.

Subsequent to ATSDR providing updated tables, DON will review and confirm data sources.

Assigned Tasks and Next Meeting

The Workgroup reviewed the Action Items list (attached to these minutes).

The next Workgroup meeting was tentatively scheduled for the second or third week of August, and will likely be a one-day meeting at ATSDR, Atlanta, Georgia

1650-Meeting adjourned

Workgroup Members in Attendance

Frank Bove	ATSDR
Thomas Burton	MCBCL - PWD
Bob Faye	ERG - ATSDR
Michael Helbling	NAVFAC
Morris Maslia	ATSDR
Susan Moore	ATSDR
Sven Rodenbeck (RADM)	ATSDR
Scott Williams	HQMC

Others in Attendance

Brynn Ashton	MCBCL - EMD
Erin Atkins	MCBCL - EMD
Carl Baker	MCBCL - PWD
Bonnie Capito	NAVFAC Atlantic
David Cleland	NAVFAC MIDLANT
Fred Cone	MCI EAST/MCBCL I&E
Robin Ferguson	MCBCL - EMD
Alicia Filzen	MCBCL - EMD
Chris Gamache	HQMC
Lisa Gideon	MCBCL - EMD
Brian Hass	MCBCL - EMD
Joel Hartsoe	MCBCL - PWD
Robert A. Lowder	MCBCL - EMD
James Marshall-Zank	MCBCL - EMD
Micah M. Miller (Capt.)	MCBCL - EACO
Kim Pritchard	Booz Allen Hamilton - MCBCL
Pat Raper	MCBCL - EMD
Anthony Recob	MCBCL - EMD
Charity Rychak	MCBCL - EMD
Nick Schultz	MCBCL - EMD
M.A. Simmons	NMCPHC
Glene L. Smith	Naval Hospital, CLNC, DPH
Kirk Stevens	NAVFAC MIDLANT
John Townson	MCBCL - EMD
Dan W. Waddill	NAVFAC Atlantic
Steven Whited	MCBCL - EMD

**Action Items from Camp Lejeune Data Mining Technical Workgroup 21-22 July
2010 Meeting**

1. DON to provide copy of the DON “Broad Information List” Table discussed at the meeting
2. DON to provide a PDF copy of the entire meeting binder to ATSDR after it is finalized
3. DON to provide additional information on landfill groundwater data (water quality and VOC chemical data)
4. DON to provide an index of the IH document inventory (file codes index provided but need copy of index of reports)
5. DON to provide a copy of the baseline IH reports
6. ATSDR to provide DON with document reference regarding “baseline IH report” to facilitate item number 5
7. DON to provide a copy of Navy Retention Policy (NRP), including the “cheat sheet”
8. DON to provide additional information on IR Site 88, specifically any updates/changes to conceptual model and ATSDR will provide a listing of which reports it already has regarding IR Site 88
9. DON to plan first of proposed regularly scheduled technical discussions, similar to the Partnering Meetings in the IR and UST programs, between MCB Camp Lejeune and ATSDR
10. DON to provide all information on Site 96, to include a copy of all applicable reports, and/or a listing of reports available on the NIRIS
11. DON to provide listing of MMRP Sites, map showing locations, and listing of available reports. Reports should be available on NIRIS AR; those that are not should be provided separately
12. DON to review unfinalized MMRP data/reports for physical characteristic data that may be of use to ATSDR (this item will be addressed after 10 and 11 are completed)
13. DON to provide ATSDR access to NIRIS-private side
14. DON to provide information on how to acquire copy of and license for “Terrabase” software (<http://www.terrabase.com>. - Contacts: phone-225-448-3296, fax-225-218-6807, email-mcrouch@terrabase.com)
15. DON to look for historical maintenance records for HPFF tanks and review DESC records for a historical fuel usage inventory for HPFF, specifically fuel inventory losses
16. a) ATSDR will inform USMC if they would like USMC to have contractor re-calculate mass of petroleum product remaining in subsurface at HPFF
16. b) DON to find out from Contractors how they calculate mass of petroleum recovered (methodology) for HPFF and their confidence level for methodology and results
17. a) DON to provide map of SERDP precipitation and surface water gauging stations monitoring locations. b) In addition, DON to determine where data for figure on page ES-14 (Tab 8) came from, and where TP stations are located

18. DON will request that ATSDR (i.e., Morris Maslia) be copied on distribution of Onslow Water Resources Group bi-monthly meetings agenda
19. DON will try to locate WTP incomplete flow data, as detailed on 3-page of the document entitled "Camp Lejeune Water Treatment Plant Missing Data, July 2010"
20. DON to provide information on temporary and permanent water feed from Holcomb Blvd to Tarawa Terrace WTP (~1985-1987 time period)
21. ATSDR and DON to determine feasibility of placing an ATSDR liaison stationed at Camp Lejeune
22. DON to prepare an SOP for all key staff that denotes all studies/reports/etc should be reviewed for value to ATSDR. When in doubt, will provide copy of report to ATSDR, or discuss with ATSDR
23. DON to provide list NAVFAC-sponsored/funded research projects/reports, specifically for projects related for aquifer studies and chemical degradation
24. DON and ATSDR to determine what drinking water system information can be release to the public (i.e. supply well location maps, lat/longs, etc)
25. a) ATSDR to prepare a list of questions/ clarifications on historical data, including the hand-written lab results from around November/December 1985
25. b) DON and ATSDR will jointly contact former DON employee via joint conference call regarding above-referenced questions.
26. a) DON and ATSDR to determine what laboratories were used from 1985 to 1995 using the Drinking Water Watch website (ATSDR) and historical records (DON)
26. b) DON and ATSDR to conduct a joint communication to the lab(s) requesting lab reports from said time period, specifically for VOCs, including BTEX.
26. c) DON and ATSDR send a joint communication to NCDENR requesting lab reports from said time period, specifically for VOCs, including BTEX
27. a) ATSDR to provide additional information regarding inaccurate elevation data in Terrabase
27. b) DON to review information provided by ATSDR to determine sources of inaccuracies and whether they can be rectified
28. DON to determine whether it is possible for booster pump and Marston Pavilion to be opened at the same time, as queried by ATSDR upon review of log books
29. Technical Work Group members to review Draft Plan of Operation and provide comments to RADM Rodenbeck by 3 August 2010
30. ATSDR to revise Data Needs Table to include at a minimum the following additional information: a) Potential document sources per "EMD's broad listing table," included in Tab 3 of handout, b) Date range for information already have (i.e., copy of AR from 2006) and information needed (i.e., chemical analyses for WTP system pre-1996), c) Revised table will be provided to DON by 30 July 2010, and d) DON will review and provide feedback no later than 6 August 2010