



Naval Air Station
South Weymouth, MA
Restoration Advisory Board
Summary of RAB Meeting – May 11, 2006



NAS South Weymouth Website: <http://nas-southweymouth.navy-env.com>

I. INTRODUCTIONS/ APPROVAL OF PRIOR MEETING MINUTES

Ms. Susan Jeghelian, MA Office of Dispute Resolution, and RAB meeting facilitator, opened the meeting at approximately 7:05 PM. She requested that all attendees, including RAB members, regulators, and audience members, introduce themselves. The sign-in sheet for the meeting is provided as Attachment A to this meeting summary. S. Jeghelian asked if everyone had time to read the meeting notes from the prior RAB meeting (February 2006) and asked for comments on them. There were no comments.

S. Jeghelian reviewed the guidelines for the meeting. She reminded the participants when asking questions to wait to speak until they are acknowledged, to state their names and affiliations, and to speak into the microphone when they have questions.

The Agenda for the meeting and the Action Item Tracking List are provided as Attachment B to this meeting summary. S. Jeghelian stated that the presentation order was going to be reversed. Dr. Knorr would present the MS and ALS study update first and then the results of the aquifer pump test would be presented by Jack Henderson, a consultant to South Shore Tri Town Development Corporation (SSTTDC). S. Jeghelian then noted that in accordance with the agenda, the presentation would be followed by the Updates and Action Items portion of the meeting.

2. PRESENTATIONS

S. Jeghelian introduced Dave Barney, Navy, who introduced Dr. Knorr of the Massachusetts Department of Public Health (MDPH). The following paragraphs summarize the presentation and include references to selected presentation slides in Attachment C. The complete presentation is available on the NAS South Weymouth web site: <http://nas-southweymouth.navy-env.com>.

MDPH Presentation

Dr. Knorr noted that the last MDPH presentation to the RAB was when they were just starting the 3-year project study. The project was extended 1 year due to delays dealing with privacy of medical records in the other states participating in the study.

Agency for Toxic Substances and Disease Registry (ATSDR) undertook and funded the study since they were interested in doing some follow up work on amyotrophic lateral sclerosis (ALS) and also to expand into multiple sclerosis (MS), both types of neurological diseases. Community health concerns in the local area helped MDPH to initiate, and partially fund, the study in Massachusetts. Four other state universities or health departments also received funding from ATSDR for the 3-year project: Missouri, Oregon, Illinois and Texas. There was no data or registry of disease prevalence at the universities and health departments in these five states, so the data needed to be collected. The MDPH study area included Plymouth County, Weymouth and Raynham.

The study objectives were to estimate the prevalence of MS and ALS in southeastern Massachusetts and evaluate the prevalence in relation to exposure to hazardous wastes. For a case to be included in the study, the individual had to reside in the study area and have had at least one doctor visit between 1998 and 2003, though diagnoses could have occurred at any time (Slide C.2). Cases were restricted to definite or probable ALS. The defined study area was southeastern Massachusetts, but neurologists were contacted in a wider area, including Boston (Slide C.3). The primary sources used to gather information were individual neurologists and their hospital records. Secondary sources included community activist groups, ALS and MS societies, death certificates, and hospital discharge information.

Incidence of both MS and ALS has been associated with exposure to heavy metals, particularly lead and mercury. Dr. Knorr noted that these two diseases do not have well established risk factors, though a number of studies have shown associations with heavy metals, as well as PCBs. The purpose of the MDPH study was to assess prevalence and then look for clusters around certain sites. The study focused on two groups of sites: the Base and DEP 21E sites in Middleboro. Statistical tests were used to determine if cases occur more often near environmental sites and if clustering of cases occurs. Limitations of the study are summarized on Slide C.4. The rate of prevalence will be calculated by town and will be compared to the background rate for these diseases. This study was not an analytic epidemiological study; it was limited to collection of existing data on rates of disease and possible relationships to environmental sites (e.g., no interviews). In a descriptive epidemiological study such as this one, the rates of exposure are determined and a relationship may be drawn to the environmental conditions, but the study can't show a direct cause and effect.

Dr. Knorr summarized the strengths of the study (Slides C.5 and C.6). The MDPH helped drive the study methodology so the results of could be used to determine if a future study is warranted. The study design was consistent with the other states with ATSDR funding. All the data collected is confidential and the information is protected by state law. The data collection was completed in late summer of 2005. Dr. Knorr noted that while information was obtained from a Veteran's Administration facility in Massachusetts, information could not be obtained from the Newport, RI Veteran's Administration Naval hospital, which is

where staff stationed at South Weymouth were treated. Dr. Knorr mentioned that he contacted that facility numerous times and spoke with the Admiral who had been in charge of the facility. Although the Admiral promised to provide information for the MDPH study, no information was ever received. Dr. Knorr commented that this may have been due higher priorities, such as the Iraq war. There was a long discussion over this lack of information, with concerns expressed that if a South Weymouth staff member developed ASL or MS there may be a strong cause and effect relationship with the Base.

D. Wilmont mentioned that the Ashland DPH study presented chemical mixtures that were similar to those in South Weymouth, and had been linked to the development of soft tissue cancer. How does the MDPH look at mixtures? Dr. Knorr stated that they have only looked at the chemicals on the Base one at a time. He also stated that the health department was starting to look at mixtures but they don't have much knowledge about them from an epidemiological perspective. Massachusetts is working on a nationwide CDC project to set up a standardized web-based network to look at combinations/mixtures for any patterns. So the tools are being developed to assess combinations and commonalities.

D. Wilmont stated he was disappointed that a representative from ATSDR was not present. He also suggested that the collected data and available technology could be used to find out what can be done at a local level before it is taken nationwide.

The MDPH report is due to ATSDR in June 2006, and then the review process will begin (Slide C.7). The report will go through an independent peer review process, where the methods and results would be reviewed. After any responses to comments have been made, the report will be made public, released through the ALS/MS Advisory Committee or will be located on their website, www.mass.gov/dph/.

P. Scannell stated that he feels the study is unbelievably lacking. A discussion followed as to whether more could have been done. Dr. Knorr responded that the study represented what could be done following scientific standards and procedures.

A question was raised about looking at asthma and other diseases that could be related to the contamination on the Base. The MDPH is at the beginning stages of looking at many other diseases in relation to contamination.

D. Galluzzo commented that he felt the federal government was not cleaning up Superfund sites and not looking at public health effects. Without knowing the full effects and having the results of the ASL and MS study, he does not believe that the zoning and reuse plan should be discussed further. Dr. Knorr stated that even if the results of the study show a cluster of MS surrounding the Base, this does not necessarily mean that the contamination from the Base is the cause.

M. Parsons stated that she knows of many people living under the flight path [when the base was active] who have MS or other diseases. Dr. Knorr restated that this was a preliminary study and that the results would hopefully bring in more funding for further investigations.

D. Panchard noted that French Stream flows through his land and he has noticed that in a severe rainfall French Stream overflows onto his property, therefore contaminating all the properties along the stream. It was suggested that under the Rivers and Streams Reclamation Act a grant should be sought for building a containment pond to keep most of the water on the Base, if it is contaminated.

It was stated that if anyone has information about the number of people with MS in the area, they should direct their concerns/knowledge to Gary Perlman at ATSDR (617-918-1492).

D. Wilmont suggested that all the information be consolidated, the GIS and database information with disease information, and for it to become an Action Item. D. Barney stated that DEP and EPA have the Navy's EGIS and Navy would also provide it to the MDPH.

M. Parsons suggested another meeting to discuss the study when it was released.

B. Olson stated that under CERCLA, EPA would not be looking at the flight path as an exposure source since it is a historic risk. They are working to cleanup the Base so that future use is acceptable and citizens do not have to worry about future development and health risks. B. Olson assured the public that even if the land is transferred, no one will be allowed to live on the property until the EPA is satisfied that it is clean and risk free.

Extended Pump Test Presentation

D. Barney introduced Jack Henderson, who has been involved in looking at water supply issues for the redevelopment of the Base, for SSTTDC and LNR. He would be presenting a status report on the extended duration pump test at the Base. The following paragraphs summarize the presentation and include references to selected presentation slides in Attachment D. The complete presentation is available on the NAS South Weymouth web site: <http://nas-southweymouth.navy-env.com>.

J. Henderson presented an outline of his presentation and noted that the objective of the pump test was to assess the quantity, quality, availability of water, and assess the safe yield of the well, as well as the impact of continuous pumping on wetland streams and contaminated sites. To join the Massachusetts Water Resources Authority (MWRA), which is LNR's the proposed plan for potable water supply, the

developer has to demonstrate that there are no local potable water supplies. Also, if it is determined that the water supply cannot be used as a potable source, the information can be used to see if it can be used for irrigation purposes.

He described the pump test monitoring locations (Slide D.2). The pump test area was off the west end of the east-west runway. An 8-inch test well was installed to a depth of 45 feet. Thirty-nine observation points and sixteen different drive points (screens driven into the ground) were spaced around the test well for measurement of water levels during the pump test, as well as for collection of water quality data. Three weirs were also placed in French Stream to measure the flow and to see if there was any impact from the pumping. "Trigger" wells were used to check for any contaminant transport during pumping. The trigger wells were located halfway between the test well and known contaminated sites. He explained that if the water table remains stable at these trigger well locations, this indicates that there is no movement of potential contamination. Ambient wells were monitored for background measurements.

He then summarized the pump test operations (Slide D.3). Prior to the beginning of the pump test, water levels were monitored for 3 weeks. The water was pumped for 6 days (which is a day longer than normal pump tests) at a rate of 195 gallons per minute, which is roughly 280,000 gallons per day. After 6 days the water table had not reached stabilization (e.g., the same amount of water is coming into the well as is being pumped out). With DEP's permission, it was agreed to stop the test and only use the well information to support a permit for use as an irrigation well, not as a potable drinking water supply well. To validate the well as a potable drinking source, the pump test would need to be restarted at a lower pumping rate. The drawdown area (Slide D.4) and water level measurements indicate that water levels in ambient and trigger wells were not impacted by the pumping.

The results of the water quality analyses indicated no detections of volatile organic compounds, synthetic organic contaminants, or petroleum hydrocarbons; iron and manganese, metals requiring treatment for potable water supplies, were detected. J. Henderson noted that the metals levels were high but they are found at similar levels in groundwater throughout New England (Slide D.5). For this water to be used as a potable water supply, treatment using oxidation and filtration would be required. The cost of treating the water would make it uneconomical to use the aquifer as a potable water supply. Modeling, which is yet to be completed, will assess any impact of long term pumping on the movement of water from contaminated sites as well as verify that the well would not yield enough water for a potable drinking source. Conclusions to date and the remaining work are summarized on Slide D.6.

S. Jekhlian asked if there were any questions on the presentation.

D. Galluzzo commented that years ago the aquifer was tested, when the Mills Corp. plan was being discussed and they were looking for water, and PCB contamination was found. D. Barney asked about the source of that information. In response, P. Scannell stated that he thought the source of the PCB information was a 1995 U.S.EPA study. He mentioned that it could be found by searching on the web and said that he has the study and it showed unacceptable levels of PCBs. He agreed to bring the study information to D. Barney's attention. P. Scannell stated that he could not believe that the groundwater was not tested for everything that has been detected on the Base.

A question was asked about the impact on French Stream while using the aquifer for irrigation. J. Henderson responded that the computer model will give them the ability to monitor long term impacts of pumping the well on those resources. The initial testing did not indicate a strong connectivity between the wetlands and the underlying aquifer, so a large impact on the wetlands or French Stream is not expected. There is a low permeability soil material, peat and silt, creating a semi-pervious barrier to the downward movement of water: thus a direct connection is not likely. DEP will approve a pumping rate for irrigation use that will not impact French Stream and wetlands.

A question was asked about the long term impact on a semi-pervious barrier: Will the barrier eventually let contaminated water through as the water is continuously drawn down for irrigation use? J. Henderson responded that modeling will show the rate that will not "mine" the aquifer or impact it and DEP will consider rates and frequency of pumping. He stated that the proposed withdrawal rate of 300,000 gallons per day is the maximum projected irrigation usage and will not be needed consistently throughout the irrigation season.

There was continued discussion over the impact of long term use of the water supply from the aquifer and its effects on the community. It was noted that the DEP has the final say in whether the water supply is sufficient to use for the purposes presented.

3. UPDATES AND ACTION ITEMS

S. Jeghelian then reviewed the two action items listed on the Action Item Tracking List (see Attachment B) for this RAB meeting:

1. The MDPH presentation was included in this RAB meeting.
2. Distribute monthly Navy program status/administrative items update - D. Barney stated that there were copies of the April and March updates available at the back of the room. [Note: these updates will be posted on the Weymouth website.]

S. Jeghelian then asked each of the Leads to provide updates to the list of Update Items.

1. Administrative Actions – D. Barney reintroduced Brian Helland, the new Navy RPM, stating that he has been involved with the Base since the mid-eighties. He managed the underground storage tanks removal program.
2. MADEP Update – D. Chaffin said that due to time constraints he would let D. Barney cover Small Landfill and Fire Fighting Training Area in his update.
3. EPA - B. Olson had a brief presentation that addressed the orange floc at the Base. The following paragraphs summarize the presentation and include references to selected presentation slides in Attachment E. The complete presentation is available on the NAS South Weymouth web site: <http://nas-southweymouth.navy-env.com>. He started by showing photographs taken by a citizen and provided to EPA (Slides E.1 and E.2). The concern that had been expressed was that the pictures were taken on land that was considered clean and was about to be transferred. In response to the photographs, EPA sampled the floc in March 2006. B. Olson noted that this type of floc is seen widely and often where there is a large source of iron. The cause is not yet known and it has not yet been determined whether it is a CERCLA issue or not. The samples were analyzed for a whole suite of contaminants. The only detections were seven metals; the most prevalent metal was iron (Slide E.3). The next step is to look at all the data and try to identify the cause and determine if it is related to any base contamination (Slide E.4). B. Olson suggested that a collaborative effort be undertaken with everyone that has a stake (agencies, Fish and Wildlife, LNR, SSTT, etc.) and try and take a look at this issue.

P. Scannell stated a concern: when development starts who was going to oversee the developer's work, e.g. digging, and the possibility of discovering evidence of contamination and how it would be handled. He also stated that he does not think the Base can be cleaned up enough for development. B. Olson stated that possible oversight during development should be considered and discussed in the future. A. Malewicz stated that DEP typically requests a site management plan from developers.

4. Coast Guard Buoy Facility Update – D. Barney stated that there was no update from the Coast Guard.
5. IR/MCP/EBS Program Sites Update: D. Barney stated that the most recent updates were included in the April handout and thus did not repeat the information.

6. FOST/FOSL/CDR Update – No update.

7. SSTTDC Update – S. Ivas stated that at the SSTTDC board meeting tonight there was a presentation on proposed regulations on affordable housing, administrative rules, design specifics, and protection of wetlands. There will be a future public presentation with the Weymouth town council. Also the board was intending to sign a contract with the Metropolitan Area Planning Commission (MAPC) to have them assist SSTTDC in filling out an application for the 40R program, an affordable housing program. Last Thursday, May 4, 2006, a board of directors' member, the executive director, and S. Ivas met with the Rockland open space committee; it was decided that a trails inventory should be the first action to be addressed regarding open space on the Base.

Possible Topics for future RAB Meetings

S. Jeghelian asked if there were any suggestions for topics to discuss for the next RAB meeting. She also reminded the RAB attendees about the CAC process for information on development at the Base. The next CAC meeting is May 24, 2006.

D. Barney proposed July 13, 2006 for the next RAB meeting. This is consistent with previous discussions to reduce the frequency of meetings; he also has a conflict in June with a RAB meeting for another site. After a brief discussion, the RAB agreed to skip a meeting in June and hold the next meeting in July.

D. Barney suggested getting EPA and Navy basewide data together to present at a July meeting. The July meeting could focus on French Stream but also provide an overview of the basewide assessment. A suggestion was made to also discuss Old Swamp River. M. Bromberg also offered to provide input to Navy for issues to discuss at the July RAB. D. Barney will continue to provide monthly updates when there is no RAB meeting scheduled.

The following meeting topic was set:

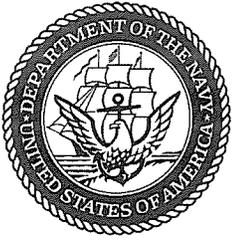
- Basewide update, including EPA and Navy data, French Stream hydrogeologic results

Conclusion/Next Meeting

The meeting concluded at approximately 10:00 pm. The next monthly RAB meeting was set for Thursday, July 13, 2006.

ATTACHMENT A

SIGN-IN SHEET



SIGN IN SHEET

NAVAL AIR STATION SOUTH WEYMOUTH RESTORATION ADVISORY BOARD

May 11, 2006

NAME	ADDRESS	TELEPHONE NUMBER
Dan Winkler	10 Park Plaza	617 973-7477
Daniel M. Funchard	110 Yevens Cir	518 8095
Anne Kabaniz	DEP	292-5659
J. Gulligan	ABampton	982-0967
Paul Anderson	M24	
W. J. Jernell	79 Weymouth	781 340 7446
W. P. Jernell	48 Market St	781 340 8175
Ron Harkin - Barrett	EPA	617 918 1318
Steve Ivas	SSTDC/IC	781.659.1690
Don Galluzzo	86 Canada St Wey	781-337-8908
Bryan Olson	EPA	617-918-1365
MARY D. PARSONS	754 UNION ST.	781-871-3350
Steve White	166 Lake Shore Dr.	781-331-5523
D Chaffin	DEP	617 348-4005
DAVE BARNEY	NAVY	617 753-4656
Susan Jeshelian	MODR	617-287-4047
Wm Brandon	EPA	617 918 1391
Dan McCormack	Wey Rab	781-340-5008
Patty M-Walton	EPA	617/918-1382
JAMES CUNNINGHAM	WEY-RAB	781-331-0545
Mike Branberg	"	"
Dave Wilmut	"	"
Michael Smart	Wey	781 331 8844
Robert Kwon	MDPH	617-624-5757
Maey Bagan	Hinglow	781 337 7319



**Naval Air Station South Weymouth
Weymouth, MA
Restoration Advisory Board
RAB Meeting Agenda**



11 May 2006

Conference Center on Shea Memorial Drive

7:00 PM

<i>Agenda Items</i>	<i>Item Lead</i>	<i>Projected Time</i>
1. Introduction, Review of Meeting Notes	Facilitator	7:00 - 7:15
2. Aquifer Pumping Test Results (tentative)	SSTTDC	7:15 - 7:45
3. MS/ALS Study Update	MADPH	7:45 - 8:15
4. Updates and Action Items	Facilitator	8:15 - 8:30
5. Questions, Agenda Items, Next Meeting	Facilitator	8:30 - 8:45

Facilitator: Massachusetts Office of Dispute Resolution: Susan Jeghelian

Restoration Advisory Board (RAB) Members:

Abington: James Lavin, (Alternate: Steve Ivas); Phil Sortin (Alternate: Beth Sortin)

Hingham: no current representation

Rockland: no current representation

Weymouth: James Cunningham (Community Co-Chair); Ken Hayes; Verna Hayes
Dan McCormack; Steve White

Navy: Dave Barney (Navy Co-Chair)

EPA: Patty Marajh-Whittemore (Alternate: Pamela Harting-Barrat)

MA DEP: David Chaffin (Alternate: Ann Malewicz)

BRAC Cleanup Team (BCT) Points of Contact:

Navy: Dave Barney, BRAC Environmental Coordinator, Base Realignment and Closure Office, Program Management Office, Northeast (617) 753-4656
Email: barneyda@efane.navfac.navy.mil

Brian Helland, Remedial Project Manager, Base Realignment and Closure Office, Program Management Office, Northeast (215) 897-4912
Email: brian.helland@navy.mil

MA DEP: David Chaffin, Environmental Engineer, Federal Facilities (617) 348-4005
Email: david.chaffin@state.ma.us

EPA: Patty Marajh-Whittemore, Remedial Project Manager, Federal Facilities Section (617) 918-1382 Email: whittemore.patty@epamail.epa.gov



Naval Air Station South Weymouth Restoration Advisory Board Action Item Tracking List



11 May 2006 – Next RAB Meeting

<i>Action Item</i>	<i>Item Lead</i>	<i>Deadline</i>
ACTION ITEMS		
Check availability of MDPH to give a presentation on MS/ALS data	B. Olson	Next RAB
Distribute monthly Navy program status/administrative items update (2)	D. Barney	March, April
UPDATES		
RAB Administrative Actions	D. Barney	Each RAB
MA DEP Update	D. Chaffin	Each RAB
Coast Guard Buoy Facility Update	R. Marino	Each RAB
IR Program Sites Update	D. Barney	Each RAB
MCP Release Areas Update	D. Barney	Each RAB
EBS Review Item Areas/ Various Removal Action Update	D. Barney	Each RAB
FOST/FOSL/CDR Update	D. Barney	Each RAB
SSTTDC Update	J. Lavin/ S. Ivas	Each RAB
COMPLETED ITEMS		
Provide copies of SSTTDC and Mayor Madden letters re: Small Landfill CAAA to M. Parsons (2/06)		
Provide information on vernal pools to M. Byram (2/06)		
Distribute monthly Navy program status/administrative items update (2/06)		
Small Landfill CAAA Update (12/05)		
Distribute monthly Navy program status/administrative items update (12/05)		
Provide details of RDA contractor's upcoming work (10/05)		
Provide details about SSTTDC's unescorted access policy (10/05)		
Provide turtle activity update (8/05)		
Check where upcoming RAB meeting times are posted (8/05)		
Distribute monthly Navy program status/administrative items update (8/05)		
Provide RDA construction cost, cap design life, address safety issues (6/05)		
Provide copies of DoD directive regarding environmental issues (6/05)		
Provide DEP Small Landfill letter to M. Parsons and S. Ivas (6/05)		
Distribute monthly Navy program status/administrative items update (5/05)		
Provide Vortech system O&M handout to Navy (3/05)		
Provide a paper copy of SMP schedule to J. Cunningham (3/05)		
Provide completion date of draft base-wide assessment report (3/05)		
Post summarized version of DDA on SSTTDC Website (12/04)		
Check on seating capacity for Conference Center (12/04)		
Update RAB on BRAC conference (12/04)		
Check on analytical data from RIA 112 storm drain maintenance actions (12/04)		
Provide list of sites for L. Larrabee (12/04)		
Navy and consultant evaluate alternatives for reporting data on several metals for D. Wilmot (12/04)		
Provide sample ESCA from another Navy site to Mary Parsons/B. Sortin (12/04)		
Provide copy of EPA's June 14 Letter to Navy to M. Parsons		