



**Naval Air Station
South Weymouth, MA
Restoration Advisory Board
Summary of RAB Meeting – April 14, 2005**



1. INTRODUCTIONS/ APPROVAL OF PRIOR MEETING MINUTES

Ms. Susan Jeghelian, MA Office of Dispute Resolution, and RAB meeting facilitator, opened the meeting at approximately 7:00 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 and asked for comments on them. M. Bromberg corrected an error stated on page 13 that his question was related to the Old Swamp River, rather than an old swampy area. The change was noted. There were no additional comments on the March 2005 RAB meeting notes; the notes will stand as issued. In addition, S. Jeghelian encouraged those with ideas for future RAB meeting topics to bring them to the attention of the RAB co-chairs.

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 then noted that in accordance with the agenda, the two presentations (the Update on the Rubble Disposal Area and the Turtle Assessment Program) would be followed by the Updates and Action Items portion of the meeting.

In addition, as mentioned during the March 2005 RAB meeting, Mr. Terry Fancher, the new Director of the South Shore Tri-Town Development Corporation (SSTTDC) introduced himself and encouraged anyone with questions to contact him. He offered to make a presentation at a future RAB meeting. T. Fancher left business cards for those interested.

2. PRESENTATIONS

S. Jeghelian asked D. Barney, Navy, to present an update on the Rubble Disposal Area (RDA), which included slides and photographs depicting the stages of construction of the landfill cap. The following paragraphs summarize his presentation and include references to selected presentation slides in Attachment C.

Landfill Cap Construction at the Rubble Disposal Area (RDA)

D. Barney presented a brief history of activities that have taken place at the RDA, including the signing of the record of decision (ROD), installation of the soil cap over the 3.5 to 4.0-acre landfill, hydroseeding activities that were completed last fall, installation of post and rail fencing along the perimeter of the cap to restrict vehicular access and further protect the cap, and construction of a swale to collect surface runoff from the cap. (Attachment C, Slides 1 – 3). To date the cover is approximately 95 percent complete. Construction activities at the PCB “hot spot” area are incomplete; the area remains isolated, enclosed within a chain-link fenced area (Attachment C, Slide 4). In order to complete the work at the PCB area, the requirements of the ROD must be complied with, including achieving the numerical value for residual PCBs left in place. There are a variety of ways to achieve this residual PCB limit: by extending the cap over the area, soil excavation, additional sampling, etc. Once construction activities are completed at the PCB-contaminated area, the next step will be to complete post-closure documents, including a Long-Term Monitoring Plan (LTMP), Operations and Maintenance (O&M) Plan, and a Land Use Control Plan (Attachment C, Slide 5).

The LTMP is under development and defines the media that need to be monitored, the parameters to be monitored, the frequency and duration of the monitoring, and the requirement for a mandatory CERCLA five year review, which assesses the effectiveness of the remedy (Attachment C, Slide 6). The O&M Plan sets forth activities to be undertaken during site inspections (adequacy of the fence, vegetation management) to maintain the integrity of the cap (Attachment C, Slide 7). The Land Use Control Plan sets forth the institutional controls and identifies prohibited activities and uses that could impact the effectiveness of the selected remedy for the site (Attachment C, Slide 8).

Attachment C, Slide 9 shows the RDA prior to construction (top photo) and after the cap, fence, and swale were installed (lower photo).

Questions and Answers on the RDA Presentation

M. Bromberg asked about the cost of the cap construction. D. Barney said that he will double check the cost and confirm at the next RAB meeting, but estimated the cost at approximately \$ 4 million.

M. Parsons asked what the cap is constructed of. P. Anderson, Navy, said it is a semi-permeable cap layered with a 6 in. layer of gravel, covered by geo-textile (a heavy felt approximately 1/4 inch thick), covered by 18 in. of select fill, covered by 6 in. of topsoil and then seeded. M. Parsons asked about the life expectancy of the cap. P. Anderson said that it is expected to last a very long time. M. Parsons followed up by asking about the construction of the gabion baskets. D. Barney and K. Hayes responded

that the baskets are constructed of a galvanized material and are frequently used for erosion control. Over time vegetation will become established within the barrier and will help maintain the erosion barrier as the wire degrades.

K. Hayes asked a question about the rip rap and if the turtles were able to migrate across the swale. D. Barney replied that the size of the rip rap is not conducive to turtle travel across the area which is why turtle bridges were constructed at points in the swale.

D. Wilnot wanted to know if there was any on-going chemical testing indicating that the contaminants are being contained. D. Barney responded that the testing will not begin until the LTMP is finalized, approximately two to three weeks away.

M. Bromberg wanted to know if any safety railings would be constructed around the Old Swamp River culvert headwalls, or the swale. D. Barney said that with regard to the Old Swamp River he believed that it will remain "as is" and with regard to the swale its appearance and utility are design features of the cap. He asked M. Bromberg if he had any suggestions. M. Bromberg expressed a concern about children getting hurt on the rip rap and suggested putting a layer of fine stone several feet high to gradually make it level and act as a safety barrier. Ultimately, M. Bromberg said that he wanted to have safety measures considered for the swale.

M. Byram asked about the post and rail fence. D. Barney said that it was continuous except for a break for an access gate and at the waters edge of Old Swamp River for the culverts. M. Byram continued by asking if it is constructed to allow wildlife passage. D. Barney said yes. M. Byram asked if there were areas of concern identified. D. Barney replied that petroleum constituents identified within the landfill were not entirely attributable to degrading asphalt within the landfill. M. Byram asked if there was any testing conducted in the wetlands, where drums were buried. D. Barney replied that during the remedial investigation sediment samples were collected and analyzed for PCBs; no risk was identified. M. Parsons asked if the PCB area was close to Old Swamp River. D. Barney said that it is separated by the wetland material, approximately 30 yards. M. Parsons asked whether the petroleum products were removed from the landfill. D. Barney said they were consolidated within the landfill and are still present. M. Parsons asked how long before they degrade. D. Barney replied that they are currently degrading and will continue to interact with the organic material present which will accelerate degradation. M. Leipert added that the LTMP will include monitoring for petroleum constituents.

M. Parsons asked how long monitoring would continue. B. Olson, EPA, said that monitoring would continue as long as there is waste in place that could migrate away from the landfill, at a minimum 10 years but it could be much longer. B. Olson continued that a significant amount of monitoring will occur

downgradient of the landfill. D. Barney said that the type, frequency and duration of monitoring are under discussion relative to the LTMP.

M. Bromberg said that outside the RDA perimeter there are small areas of orange flocculent on the south side and he wanted to know if it would be tested or whether the perimeter should have been extended out further to deal with it. D. Barney said that it will be tested and said that as it is prevalent across the base that it will be addressed in the basewide program.

K. Hayes asked about the design life of the cap. It is likely more than 30 years; D. Barney will check on the expected life of the cap and also noted that O&M inspections will continue as long as wastes remain in the landfill.

K. Hayes asked how much soil is estimated to be excavated from the wetland area. D. Barney said that it is premature to say and that additional information may be required to make this determination; however excavation is not likely to occur towards the cap.

M. Bromberg asked ENSR what effect the swale around the RDA has on the box turtles. ENSR said in order to address the concerns for turtle safety, ENSR consulted with the Massachusetts Natural Heritage and Endangered Species Program (MNHESP) which suggested the construction of eight turtle bridges around the perimeter. Each bridge has geotextile fabric above the gravel with 6 in. of soil and vegetation. In addition, each bridge is approximately 12 - 15 feet wide. S. Egan, ENSR, added that the rocks around the swale are rather large and therefore act as a guide to funnel the turtles to the turtle bridges. M. Bromberg asked if there are a sufficient number of bridges. J. Bleiler, ENSR, replied that this can only be determined by monitoring turtle activity over the next several years.

S. Jeghelian asked for further questions before moving on to the next presentation. There were none; therefore S. Jeghelian asked L. Yeutter, Navy, to introduce J. Bleiler and S. Egan, ENSR, to present the turtle program update. The following paragraphs summarize their presentation and include references to selected presentation slides in Attachment D. S. Jeghelian asked for questions to be held until the end of the presentation, given the framework of the presentation.

Turtle Investigation Presentation

L. Yeutter, a human health risk assessor for the Navy, presented some initial information before turning the presentation over to ENSR (Attachment D, Slide 1). L. Yeutter, stated that the initial sighting of a spotted turtle, a state listed species of concern, occurred in the spring of 1999. It was reported to the Massachusetts Natural Heritage and Endangered Species Program (MNHESP) and the Navy put together a plan to identify the extent of the turtle population. At that time, the Eastern box turtle, another state listed

species of concern, was identified. Slide 2 shows both turtles. Each year since 1999, investigations have been conducted, focusing on these two turtle species. The objectives of the Navy's program are summarized on Slide 3, Attachment D. In addition, the Navy has identified the turtle habitats on the base, which often are near sites where remedial actions are required. Not only have the investigations allowed the Navy the opportunity to determine turtle populations in areas where remedial actions are likely, but these investigations have also provided an opportunity to collect a large amount of ecological data. These data have been shared with MNHESP which has enabled them to expand their public database. L. Yeutter, introduced J. Bleiler and S. Egan, ENSR, who presented the turtle program and specific findings.

J. Bleiler, ENSR, said that to his knowledge, this turtle investigation is the largest program on-going in Massachusetts, and one of the largest in New England. The program includes collecting data such as turtle age, gender, weight, health, condition, length, and co-located animals.

Spotted turtles are a state listed species of concern (Attachment D, Slide 4). Their populations are declining in part because they are sensitive to development pressures and habitat alteration. There is not much data about spotted turtle nesting or breeding activities. They prefer unpolluted bodies of water, vernal pools. They are a cold water species and tend to nest in open sunny meadows and in the wetlands. They are not a tortoise, and are a maximum 4-5 inches in size.

Eastern box turtles are a state listed species of concern (Attachment D, Slide 5). They are terrestrial tortoises found primarily in uplands, fields, wetlands, typically hibernating in upland areas, sometimes in groups (which has not been commonly noted in other investigations). They are long lived but don't migrate more than about one-half mile. While they are fairly distinguishable – the females have brown eyes and a flat plastron while the males have crimson eyes and a curved plastron, they are difficult to trap.

Various survey methods used in the program are summarized on Slide 6, Attachment D, and briefly discussed below.

Nesting surveys are conducted during the summer, primarily in the month of July. One tracking technique uses a small thread bobbin attached on the back of the turtle; the thread trail then helps track the location of the nest where the female lays her eggs. The hatchlings, in particular, are very vulnerable to predation. As such, it is not common to find juvenile turtles. The age can be determined much like that of a tree, counting rings.

Marking and tracking surveys are also conducted whereby small notches are made into the bottom of the shell to help identify different turtles that have previously been marked. Over 1,000 turtles have been marked, which helps in monitoring movements spatially, over time, etc.

Some of the work involves radio telemetry (2 to 4 gram radio with a battery that is attached to top of shell with epoxy), an established technique. The radio is often marked up to blend into the pattern and color to help avoid predation. Both species have a variety of coloring (orange and/or yellow spots) and patterning on the top and the bottom of the body.

General Observations and Conclusions

General observations of the turtle investigation are stated below and summarized on Slide 7, Attachment D. The base consists of approximately 1,400 acres with approximately 400 - 500 acres of wetlands, where turtles are primarily found. Spring is prime time to locate spotted turtles, while the Eastern box turtle can be found from the spring through the fall. Both species aestivate (sleep/hibernate-like activity) for 6 to 8 weeks during the hot summer months (more-so for the spotted turtles). There has been a lot of turtle activity noted in the vicinity of the CERCLA sites. As long as there are sites that could require remedial actions it is anticipated that yearly turtle investigations will continue. The program is currently scoped through 2005. Turtles observed on the base move a little more than the literature may suggest; on the base they move roughly a couple hundred meters. Turtles have been found at more than 20 sites across the base, generally in the northern and southern portions of the base. There is some movement between the two populations therefore some turtles are moving across CERCLA sites.

A total of 155 individual spotted turtles have been located, captured and marked at the base: in 1999 (17 individuals); in 2000 (33 individuals); 2001 (42 individuals); 2002 (30 individuals); 2003 (25 individuals) and 2004 (8 individuals) (Slide 8, Attachment D). Of those, 28 are juveniles and 2 are sub-adults; 51 are males and 74 are females.

A total of 38 Eastern box turtles have been identified, captured and marked at the base: in 1999 (3 individuals); in 2000 (33 individuals); 2001 (5 individuals); 2002 (0 individuals); 2003 (8 individuals), 2004 (8 individuals and 1 empty shell); and 2005 (1 individual) (Slide 9, Attachment D). Of those, none have been juveniles; 20 are females and 18 are males.

A few examples of coordination of the turtle program with environmental programs at the base were discussed.

Trapping was conducted for six months prior to excavation at an MCP site where sediment was removed from a ditch. Radio transmitters were placed on turtles within a couple hundred meters of the ditch to track movement, real-time field oversight was conducted, and silt fence exclusion devices were installed.

The turtle program activities performed in conjunction with construction at a CERCLA site are summarized on Slide 10, Attachment D. Approximately one year prior to implementation of the work, turtles within a

hundred yards of the site were identified, marked, and fitted with a radio transmitter. Extensive walkovers, mark and recapture surveys, radio telemetry monitoring, and nesting surveys were conducted to ensure that turtles were excluded from the construction area. In fact, contractors were trapping turtles in kiddie pools to keep turtles safe and therefore there were no real project delays in conducting the remedial action.

The 6 years of turtle study data are summarized on Slide 11, Attachment D. Conclusions based on the program to date are presented on Slide 12, Attachment D.

Question and Answer Period for Turtle Investigation Presentation

M. Parsons asked if there is a possibility that the turtles could cross the RDA swale. J. Bleiler said that given the turtle bridges it is likely that the turtles will be directed towards them to get through the swale. If the field investigations conducted in August and September indicate that the bridges are not working as well as hoped, some modifications may be needed. J. Bleiler added that he is confident, though, that the turtles will use them. M. Parsons said that in late September she noticed turtles on the perimeter of the base leaving the base and that she is concerned with the juveniles getting stuck. M. Parsons followed up by asking if ENSR had done radio-telemetry on the juveniles. J. Bleiler said that the technology is not advanced enough to perform this kind of monitoring. Currently small 1-gram radios are available however they only have a small battery with a lifespan of a couple days.

K. Hayes wanted to know why blood work had not been conducted on these turtles to include with the ecological work. J. Bleiler said that he agreed that it would be useful to have this kind of information given the longevity of the species however it would be more appropriate to pick a surrogate species rather than a species of concern. The surrogate species at the site that have been sampled are amphibian fish and mice tissue; there is a good tissue database for the base.

S. Spears, Watershed Action Alliance, said that Mass Audubon has raised questions about turtle migration, particularly with regard to the box turtles. Specifically she wanted to know whether turtles on taxiway Charlie could likely move to the Old Swamp River area. J. Bleiler said that while there are some individuals that have moved back and forth between these areas, they are two relatively distinct groups of turtles: one group near taxiway Charlie and the other near the Old Swamp River. S. Spears wanted to know if the migration was noticed in one or both of the species. S. Egan replied that one spotted turtle was observed, but no Eastern box turtles were. S. Spears followed up by asking how close the nesting sites come to the hazardous waste sites. J. Bleiler said they had never encountered disruption of construction activities as a result of moving the nesting sites; however some nesting sites have been found at the hazardous waste sites. S. Spears wanted to know if turtles are likely to nest in the middle of the RDA cap. S. Egan said that they are likely to nest in patchy areas with exposed sandy soils in

between. The RDA had thick grass which is not conducive to nesting. J. Bleiler said that the turtles are more likely to use the RDA as a corridor for passage across it. L. Yeutter added that even if the turtles used the RDA for nesting they wouldn't come in contact with the waste.

D. Wilmot wanted to know whether or not this type of program is typical at other bases or is unique at Weymouth because of public concern for the turtles. J. Bleiler said that in Massachusetts there have been similar investigations conducted at the Massachusetts Military Reservation (MMR), Sullivan's Ledge Superfund Site, and Ft. Devens, which were driven by MNHESP requirements. L. Yeutter added that there are probably five other investigations, not related to turtles specifically, at bases across the country that are comparable to the level of this investigation. B. Olson added that he believes such investigations are driven by the Endangered Species Act and Massachusetts is particularly strong in that area. D. Kay, Vanasse, Hangen, Brustlin, added that Massachusetts has an endangered species law similar to federal law, which is not true of many of the states. She noted that when faced with a situation where this kind of investigation is required, the rule is that all measures have to be taken to ensure that the species population is protected and will continue to survive.

M. Byram wanted to know if the turtles nest and hibernate in the same spot. J. Bleiler responded that they nest and aestivate in relatively in the same area, but this is true mostly because of the kind of vegetation present at the site. As stated previously they are likely to nest in patchy areas with exposed sandy soils in between so wherever this is found, turtles are likely to be there. He continued by adding that sometimes the same turtles have been identified in the same general location for three years and by the fourth year they have completely moved elsewhere, so they are not truly predictable. M. Byram followed up by asking if it is common not to find box turtle juveniles. J. Bleiler said yes, it is extremely difficult to find them. He noted that he has only seen two juveniles in his experience to date.

M. Parsons asked if turtles will continue to be studied around the RDA. L. Yeutter, Navy, said there will be a component of the LTMP for post-construction monitoring. The length of time for monitoring will be determined based on the results that they find. S. Egan said that there are not a lot of turtles being identified on the RDA (mostly passive migration) and the habitat is not going to vary much (it will remain thick grass). M. Parsons added that since the majority of the investigation is being conducted near sites where remedial actions are likely, rather than further away where the residents live, the corridors of wetlands being traveled by the turtles in these areas are not being investigated. She in fact saw turtle # 82 in her pool.

J. Cunningham wanted to know what would happen to development activities if turtles were encountered. J. Bleiler responded that development is regulated by the Massachusetts Endangered Species Act. The state has habitat maps that developers consult prior to development that show where rare species are found. If development is anticipated in those areas they need to coordinate with MNHESP. J.

Cunningham followed up by asking if they needed to leave the turtle habitats alone. J. Bleiler responded that it depended on what the state required. D. Kay stated that it is highly variable, for example depending on the species in question. There are state standards regarding impacts on species, alternatives, and mitigation measures that must be followed for development in sensitive habitats. She indicated that the state may allow development, however the methods used in planning the development must be approved by the MNHESP.

M. Bromberg wanted to know how sensitive spotted turtles are to development (for example if a vernal pools dries up). J. Bleiler said that the spotted turtles are early season turtles and typically aestivate in the wetlands, however some have been found aestivating on the taxiway. M. Bromberg followed up by noting that ENSR said that box turtles generally move upland to aestivate, and the proposed re-zoning map shows a lot of the upland area on the east end on the base as being proposed for development. He wondered what effect the re-zoning will that have on the box turtles. J. Bleiler replied that they are focused on the environmental sites. M. Bromberg then asked how much land box turtles need. J. Bleiler said that he wasn't sure if this information existed, but the investigations they had conducted addressed the home range for individual box turtles over a relatively long period of time (6 years). Information has also been gathered with respect to the population's home range. L. Yeutter asked if they had estimated an average home range. J. Bleiler said that it was two and a half acres for spotted turtle and box turtle's range was a little larger.

S. Spears asked what the greatest threat is to the turtles overall. Is it really loss of habitat? J. Bleiler said that habitat loss and fragmentation are the greatest threats.

S. Jeghelian asked if there were other questions. There were none. The meeting then moved on to the Updates and Action Items portion of the agenda.

3. UPDATES AND ACTION ITEMS

S. Jeghelian stated that there were no Action Items to address. S. Jeghelian then asked each of the Leads to provide updates to the list of eight Update Items.

1. Administrative Actions – D. Barney proposed holding RAB meetings every other month on a trial basis since there is so much activity with the redevelopment and zoning proposals and few substantial items on the horizon to present to the RAB. D. Barney added that he would volunteer to compile a written update of administrative items, status of the Navy programs, and distribute it to the RAB members in lieu of the meeting. In addition, the web page will be re-instated to relay information to the public. M. Leipert said that the website had been used as a good means for relaying information to the public, however it has been down since December due to the transition

of contractors. The site is currently being updated; once it is up and running the RAB meeting minutes will be posted there, as well as the recently signed ROD for the Pistol Range, different documents for review, and the updates suggested by D. Barney can be published there as well.

K. Hayes said that with respect to postponing the next RAB meeting, an additional round of testing is forthcoming for AOC 8 and he would like to see the results. D. Wilmot added that he would like to see the results of samples collected from French's Stream. D. Barney said that in the next month or so sampling results collected from AOC 8 will be available. He was not sure if by the next RAB meeting further excavation work will be implemented. He noted that additional sampling will be performed at the Tile Leach Field, however the data probably won't be available in May, but possibly by June it can be discussed.

K. Hayes asked who is doing the testing at French's Stream. B. Olson said that over the past week a limited number of sediment samples have been collected and more work is expected. Data is not likely to come back until May and at that point the results will become available for discussion.

D. Wilmot added that he thought there was a timing issue; the SSTITDC is going to be voting on the Lennar plan shortly. He thought that any sampling results should be made available to the public before the town meetings, e.g. before they are voting on the future land use. B. Olson said that he wasn't sure how that information would affect the reuse, plus the sampling results are limited. D. Wilmot added that he simply thought there were things that should be completed before a vote is taken for future land use, for example the watershed assessment and testing off-base. B. Olson said that he agrees that those things need to be completed before development, however from EPA's perspective they would rather know what the plan is before cleanup is undertaken, because the cleanup standards vary depending on the type of future land use. J. Cunningham summarized D. Wilmot's concerns and EPA's efforts reported by B. Olson and concluded that since the sampling data likely won't be available for the May meeting, but rather for the June RAB, if no new information is available it might be best to wait until June for the next meeting.

K. Hayes said that it would be helpful to include, on the proposed update, a summary of the testing being conducted and when documents will be available. D. Barney said that he would be willing to summarize the information and/or direct the public to where that information would be available for review. M. Bromberg suggested that the RAB meeting frequency issue be dealt with on a month to month basis if there is nothing pressing scheduled. J. Cunningham agreed with this approach. D. Barney said that he recognizes that there are important issues for discussion at upcoming RAB meetings but that time is needed to prepare a thorough presentation; for example

the flocculent issue would a good topic possibly for the June meeting. S. Jeghelian confirmed the group's decision that there would not be a May RAB and that the June meeting would likely include presentations on testing at French's Stream and the flocculent occurrence.

D. Wilmot said that he had found something on the internet regarding Department of Defense (DOD) policy. A new directive signed by out-going Deputy Defense Secretary, Paul Wolfowitz, on March 19th confines Pentagon anti-pollution work only to activities that directly sustain the national defense mission. This cancels the Clinton directive on environmental security, eliminates provisions for reducing risk to human health and the environment by identifying, evaluating, and where necessary, remediating contamination resulting from past DoD activities. D. Barney was not aware of this directive and stated that he will look for it and make it available to the community. K. Hayes, asked D. Barney if under the earlier BRAC 5 the Navy will complete the commitments made at that time; D. Barney confirmed the Navy's commitment. D. Barney said that within DoD there is a broad range of environmental programs and pollution prevention initiatives. B. Olson said that from EPA's perspective they have not heard anything about this. The Superfund statute requires these activities to be conducted. DoD cannot make directives to supersede what EPA is required to do under CERCLA; that is something Congress would have to do. B. Olson also stated that he had not seen any changes to EPA's support for federal facilities in the New England region.

D. Wilmot asked about a timeframe for responses to their questions on FOST 4. M. Bromberg wanted to discuss the FOST 4 at a RAB meeting rather than simply ask questions through the comment process. He commented that a discussion at a RAB meeting would allow their questions to be answered by the regulators/Navy and also allows for discussion if there are follow-up concerns. He suggested FOST 4 and the Buoy Depot as future RAB topics.

2. MADEP Update – D. Chaffin, MADEP, said that there has been some progress at the Small Landfill site since the work closing out the site under solid waste regulations was deferred. The MADEP had sent a letter to the Navy requesting the Navy resume work. The Navy responded that they would submit a schedule to resume work to close it out later the month of April. M. Parsons and S. Ivas asked for copy of the letter. D. Chaffin said that he would send it directly to them.
3. Coast Guard Buoy Facility Update – D. Barney stated there was no update from the Coast Guard but said that he was told that a public hearing would not be scheduled any time soon.
4. IR Program Sites Update – D. Barney said that a groundwater sampling event would take place at the Tile Leach Field next week and the results will be available by the June meeting. Last Friday

D. Barney said that he walked the FFTA with Larry Kahrs, the MADEP LSP, and it is anticipated that a RAM Plan will be available by mid-May. In addition, they will be enlisting the Rockland Conservation Commission for guidance since they have jurisdiction over the wetlands.

5. MCP Release Areas Update – M. Leipert said that the Phase IV Completion Statement Remedy Operations Status Report was submitted to MADEP in early March for the Jet Fuel Pipeline. All wells and injectors will be surveyed, a water level measurement round will be conducted, and sampling of some of the wells will occur prior to the next injection, which is anticipated over the next two months. M. Leipert added that with respect to RIA 21 (Building 15), after the soil removal was conducted a round of groundwater sampling came back with non-detected (ND) results. A second round of groundwater sampling was just completed. As long as the results also come back ND an RAO will be filed with the MADEP, however the results are not in yet.

K. Hayes if there were any updates on the Solvents Release Area. M. Leipert responded that there were none yet; the Navy is still in the process of developing a conceptual site model and coming up with a plan to locate the source area. The work is ongoing and the Navy hopes to have a draft work plan sometime in May.

6. EBS Review Item Areas/Various Removal Action Update – M. Leipert said that at area of concern (AOC) 53 (the transmitter building on the northwest section of base near main gate) several removal actions have been completed in the past: removal of PAHs in the stream and removal of heavy metals and petroleum from the foundation of the former Building 33. All the subsequent sampling results were below cleanup levels/background concentrations. Therefore the Navy is in the process of amending the Closeout Report Action Memo (CRAM) and moving towards completion of a ROD. However, before this will happen the Navy will gather a few more AOCs together and do a combined Proposed Plan and ROD on several AOCs.

Sometime this summer there will be a public hearing for AOC 3/13/15/100 (3 - TACAN debris pile), (13 - near railroad track near warehouse with high levels of PAHs, removal was completed), (15 - water tower, two lead removal actions), and (100 - debris area on the far southern area of base, the removal action was completed 2 years ago). AOCs 3/13/100 were initially grouped together but then work at AOC 13 held things up. Now all four AOCs are grouped together for preparation of a single Proposed Plan and ROD.

AOC 8 has been under snow, so additional characterization is now needed. More sampling is planned and a soil/sediment removal for PCBs is expected. More information is expected by the June meeting.

7. FOST/FOSL/CDR Update – D. Barney said there was no update and the comments on FOST 4 were outstanding.

8. SSTTDC Update – S. Ivas said that the SSTTDC was waiting for the Board of Directors to vote on the proposed redevelopment plan and re-zoning. The SSTTDC vote must happen prior to the town meetings being scheduled.

Additional Discussions – Possible Issues to Discuss at the Next RAB Meeting

D. Barney said that he would locate the DoD directive and make it available to the RAB, possibly post it to the web page.

M. Bromberg said that he got a call from Lorraine Larraby, Whitman's Pond Association, asking him to mention that she had a consultant examine the USGS testing data collected from the Old Swamp River and they thought there were some gray areas with the results. She indicated that she may come to a future RAB meeting to ask for more testing.

Conclusion/Next Meeting

The meeting concluded at approximately 9:30 pm. The next monthly RAB meeting was set for Thursday, June 9, 2005.

ATTACHMENT A

SIGN-IN SHEET

SIGN IN SHEET
RESTORATION ADVISORY BOARD
PUBLIC MEETING

4/14/2005

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Patty Maragh-Whittemore	EPA	617/918-1382

SIGN IN SHEET
RESTORATION ADVISORY BOARD
PUBLIC MEETING

4/14/2005

NAME	ADDRESS	TELEPHONE
A. Chaffin	MADRP	617 348-4005
Frank Feely	SSTTDC	781-682-2187
DELIA KAYE	VHB	617-607-2945
Susan Jephelian	MODR	617-287-4047
Dan McCormack	Wey RAB	781-340-5008
David Ursow	CH2M Hill	781-331-5468
Donald F. McLeod	Weymouth	781-331-0208
Mary Parsons	Rockland	781-871-3350
Mary Byram	Ringland	781-337-7319
Beth Sortin	Abington - RAB	
Marcie Feely	Wey - WPA	781-331-2620
Bryan Olson	US EPA	617-918-1365
Jim Levin	Abington - SSTTDC	617-471-548
Michael SMART	Wey. Town Council	

ATTACHMENT B

AGENDA & ACTION ITEM TRACKING LIST



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



14 April 2005

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. Turtle Assessment Program Update/ RDA & AOC 8 Update	Navy	7:15 - 8:00
3. Updates and Action Items	Facilitator	8:00 - 8:30
4. 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); (Alternate: Mark Leipert)

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 (BEC)/EFA Northeast Remedial Project Manager (617) 753-4656
Email: barneyda@efane.navfac.navy.mil

Mark Leipert, EFA Northeast EBS Project Manager (610) 595-0557, ext. 146
Email: mark.leipert@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**



14 April 2005 – Next RAB Meeting

<i>Action Item</i>	<i>Item Lead</i>	<i>Deadline</i>
ACTION ITEMS		
None		
UPDATES		
RAB Administrative Actions	D. Barney	Each RAB
MA DEP Update	D. Chaffin	Each RAB
Coast Guard Buoy Facility Update	R. Marino/J. Connet	Each RAB
IR Program Sites Update	D. Barney	Each RAB
MCP Release Areas Update	M. Leipert	Each RAB
EBS Review Item Areas/ Various Removal Action Update	M. Leipert	Each RAB
FOST/FOSL/CDR Update	D. Barney	Each RAB
SSTTDC Update	J. Lavin/ S. Ivas	Each RAB
COMPLETED ITEMS		
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		
Provide copy of Navy's June 24 Letter to SSTTDC to M. Parsons		
Provide data on RIA 4B surface water and sediment		
Provide analytical results for several metals to Dave Wilmot		
Check on whether any more barrels have been found at RDA		
Check on preliminary data from the Jet Fuel Pipeline Site		
Provide USGS with leads on sources of data for the Old Swamp River Study		
Compile and review available French Stream data – to be done as part of Basewide watershed study		
Provide mailing address for J. Sorenson, USGS		
Update community of off-Base well issues		
Contact Mission Statement subcommittee (S. White and B. Loring) and request update on progress for next meeting		
Compile and review available French Stream data		
Contact Susan Speers about potential changes in local public access TV		

ATTACHMENT C

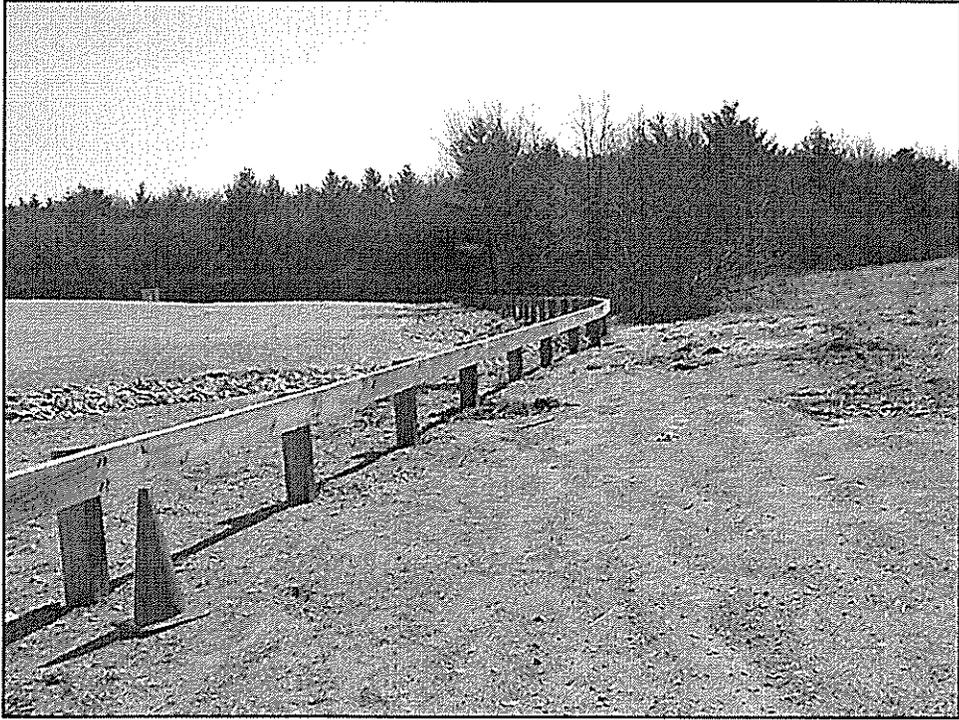
SLIDES FROM RDA UPDATE PRESENTATION

Site History

- Record Of Decision (Dec. 2003)
- Construction Start (April 2004)
 - Hay Bales/Silt Fence
 - Clearing and Grubbing
 - PCB Area Excavation
 - Grading and Filling (Contour Site)
 - Install Soil Cover (Layers)

Site Status

- Soil Cover more than 95 % Complete
 - PCB Area Excavation Incomplete
- Surface Hydro Seeded (Fall 2004)
- Perimeter Post and Rail Fence Installed
- Post Winter Inspection/Maintenance



Next Steps

- Complete PCB Area Work
- Complete Soil Cover
- Finalize Post-Closure Plans
 - Long Term Monitoring Plan
 - Operations & Maintenance Plan
 - Land Use Control Plan

Long Term Monitoring Plan

- Define Media to Monitor
 - Ground water, surface water, sediments
- Define Parameters to Monitor
 - Metals, PAH's, PCB's, other....
- Define Frequency/Duration to Monitor
 - Daily, Monthly, Quarterly, Annual
- CERCLA Five-Year Review

Operation & Maintenance Plan

- Periodic Inspection of Soil Cover
 - Erosion
 - Settling
 - Fencing
- Vegetation Management
 - Grass Cutting

Land Use Control Plan

- Institutional Controls
- Prohibit activities or uses that impact the integrity of the soil cover
- Navy responsible to implement & monitor



ATTACHMENT D

SLIDES FROM TURTLE INVESTIGATION PRESENTATION

Focus on two species since 1999

- Spotted Turtle (*Clemmys guttata*)
- Eastern Box Turtle (*Terrapene carolina*)

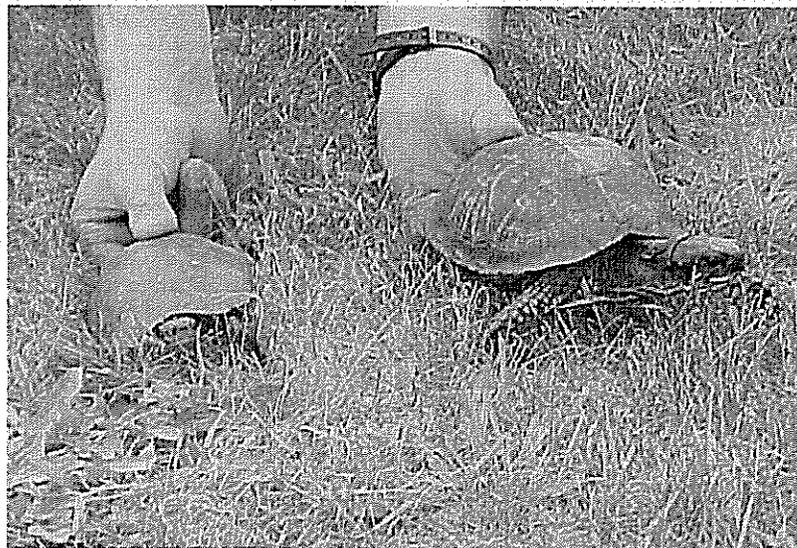
Two components

- Environmental Sites
 - ❖ MCP
 - ❖ CERCLA
 - ❖ EBS
- Basewide
 - ❖ Habitat-based



Spotted Turtle

Eastern Box Turtle



Objectives

- Develop an understanding of turtle ecological requirements in order to minimize impacts to these animals from remedial activities
 - Determine the extent of spotted turtle and box turtle habitat and populations at NAS South Weymouth
- Collateral Benefits:
 - Collect ecological data on individuals and populations
 - Expand MANHESP database
 - Provide ecological data for re-development and other programs



Spotted Turtle

- State-listed Species of Special Concern
- Small aquatic and wetland species
- Prefers unpolluted, shallow bodies of water with emergent and/or scrub-shrub vegetation
- Found during cooler months -- difficult to find during summer months
- Uses temporary ponds (vernal pools) for feeding
- Nests in open sunny areas such as meadows or fields



Eastern Box Turtle

- State-listed Species of Special Concern
- Small, terrestrial turtle with dome-shaped shell
- Primarily found in forested uplands, along stream corridors and early succession habitats
- Long-lived (100-plus years)
- May live in same area for many years
- Nests in open areas with sparse vegetation and, sandy soils



Survey Methodology

- Radiotelemetry
- Meander Surveys
- Trapping
- Focused Nesting Surveys
- Mark/Recapture Surveys



General Observations

- Both species occur in wetland habitats, adjacent upland habitats, and terrestrial corridors connecting adjacent wetland habitats
- Both species observed on taxiways and access roads
- Turtle activity highest in spring and fall months
- Both species aestivate during the dry, hot summer months
- A large portion of all turtle observations occur within 500 meters of two CERCLA sites



Spotted Turtles at NAS South Weymouth

- 155 spotted turtles captured and marked to date
 - » 1999 - 17 individuals
 - » 2000 - 33 individuals
 - » 2001 - 42 individuals
 - » 2002 - 30 individuals
 - » 2003 - 25 individuals
 - » 2004 - 8 individuals
- 28 of the spotted turtles are juveniles (+2 sub-adults)
- Of the 125 adults, 51 are male & 74 are female
- Temporary wetlands provide key habitat
- Home-ranges from 0.10 to 15.38 ha with an average of 2.91 ha. (1 hectare = 2.47 acres)



Box Turtles at NAS South Weymouth

- 38 box turtles captured and marked to date (+1 shell)
 - » 1999 - 3 individuals
 - » 2000 - 13 individuals
 - » 2001 - 5 individuals
 - » 2002 - none
 - » 2003 - 8 individuals
 - » 2004 - 8 individuals (+1 empty shell)
 - » 2005 - 1 individual
- No juvenile box turtles have been located to date
- Of the 38 adults, 20 are female (approx. 53%)
- Stream bank community and upland forested areas are important habitats
- Home-ranges from 1.4 to 244.5 ha with an average of 29.6 ha. (1 hectare - 2.47 acres)



CERCLA Site Construction Oversight

- Area cleared of turtles prior to excavation
 - ❖ Detailed SOPs prepared for all elements of oversight
 - ❖ Telemetry and walkovers for 1-year in advance
- Turtle exclusion fencing installed prior to construction
 - ❖ Real-time radiotelemetry monitoring
 - ❖ Periodic perimeter monitoring
 - ❖ Turtle re-location as needed
- Contractor Education
 - ❖ Briefings to enhance awareness
 - ❖ Coordination of efforts
 - ❖ Quick-turnaround response to re-locate animals
- No substantive project delays as a result of careful coordination of efforts



Summary of Program

- 6 years worth of survey data
- Spotted turtles
 - ❖ n = 155
 - ❖ Population distribution appears healthy
 - » Adults and juveniles present
- Box turtles
 - ❖ n = 38 (+1 shell)
 - ❖ Population distribution appears weighted towards mature adults
 - » May be sampling artifact



Conclusions

- Facility provides viable habitat for two state-listed species of special concern:
 - ❖ Eastern Box Turtle
 - ❖ Spotted Turtle
- Survey to continue through fall 2005
 - ❖ trapping and marking individuals
 - ❖ mapping habitat
- Remedial operations have been modified to ensure turtle habitat protected
- Recognition of substantial Navy effort by MANHESP and Mass Audubon
- Study has contributed substantially to scientific knowledge of both species

