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NAS SOUTH WEYMOUTH
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MINUTES AND AGENDA FOR RESTORATION ADVISORY BOARD MEETING HELD 8 MAY 2008 NAS SOUTH WEYMOUTH MA

05/08/2008

NAVAL AIR STATION SOUTH WEYMOUTH

Naval Air Station
South Weymouth, MA
Restoration Advisory Board
Summary of RAB Meeting – May 8, 2008

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

1. INTRODUCTIONS/ APPROVAL OF PRIOR MEETING MINUTES

Mary Skelton Roberts opened the meeting at approximately 7:00 PM. She requested that all attendees, including RAB members, regulators, and audience members, introduce themselves. She noted that the meeting agenda, handouts, and the sign-in sheet were available on the back table. The sign-in sheet for the meeting is provided as Attachment A to this meeting summary. M. Skelton Roberts asked if everyone had time to read the minutes from the March 2008 RAB meeting and asked for comments. There were no comments on the minutes.

M. Skelton Roberts then reviewed the ground rules for the meeting and reminded the meeting attendees that the focus of the meeting is cleanup issues; redevelopment issues will be placed on the 'parking lot.' She reviewed the guidelines for the meeting and 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. She also requested that all questions be held until the end of the presentation.

M. Skelton Roberts then reviewed the agenda and presentation scheduled for the meeting. The Agenda for the meeting and the Action Item Tracking List are provided as Attachment B to this meeting summary. In accordance with the agenda, the presentation would be followed by the Updates and Action Items portion of the meeting.

2. PRESENTATIONS

M. Skelton Roberts introduced Phoebe Call, Tetra Tech NUS, to give a presentation on the Long Term Monitoring (LTM) events that were conducted at the Rubble Disposal Area (RDA) in 2007. 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**.

Ms. Call noted that the objectives of tonight's presentation are to update the RAB on what was completed in 2007 during the LTM activities and discuss: the components installed, the analytical results, the facility inspection observations, and the post-remedial wetland monitoring results (Slide 2).

The LTM activities include different components that are performed at different frequencies. For the first 2 years of LTM, groundwater and surface water sampling and analysis, landfill gas monitoring and O&M facility inspection will be conducted on a quarterly basis, and after 2 years they will be conducted semi-annually. Wetland monitoring is conducted on a semi-annual basis. Sediment sampling and analysis and a settlement survey are conducted on an annual basis (Slide 3).

One of the key points of the LTM programming is to ensure the requirements of the ROD are followed. Typically LTM is anticipated to cover a 30-year period. The ROD included specific remedial goals just for groundwater: arsenic (10 µg/L), benzo(a)pyrene (0.2 µg/L), and manganese (313 µg/L). Groundwater results are compared to the remedial goals and also to the Maximum Contaminant Levels (MCL) and Massachusetts MCL (MMCL). The ROD did not specify cleanup goals for surface water and sediment.

In February and March of 2007 seven new monitoring wells were installed, in addition to three wells that were previously installed. Also seven piezometers and co-located staff gauges were installed on or near the RDA. All 10 wells and seven piezometers were developed to clean out the screen and ensure good communication with the aquifer so that a representative groundwater sample could be collected. Groundwater sampling and field measurements were completed in March, June, September, and December.

Two staff gauges and piezometers were installed in Old Swamp River, upstream and downstream of the Site. These two locations were also chosen as surface water locations. Three additional surface water samples were collected in the wetlands along the eastern edge of the landfill. Surface water sampling was completed in June, September, and December. Surface water samples were not collected during the first event in March because locations had not yet been decided upon. Sediment sampling occurs annually; the three sediment samples are co-located with the three surface water samples. Sediment sampling was completed in June 2007 and is planned for the upcoming event in June 2008.

The analytical parameters and field measurements are summarized on Slide 4. The samples collected were analyzed by a subcontracted laboratory for the full suite of TCL/TAL parameters (VOC, SVOCs, pesticides, PCBs, herbicides, VPH/EPH, metals and cyanide, and indicator parameters). Field measurements include water level, turbidity, dissolved oxygen (DO), oxidation reduction potential (ORP), pH, temperature, specific conductance, and ferrous iron. The landfill gas monitoring field measurements include methane, oxygen, carbon dioxide, hydrogen sulfide, lower explosive limit (LEL), and total VOCs.

Slide 5 presents the exceedances of groundwater remediation goals by quarter. The results show variability from quarter to quarter, which is why the data and frequency of detection will be compared over

the long-term. Arsenic, benzo(a)pyrene, manganese, total PCBs, lead, and thallium were all detected at levels exceeding remedial goals or MCLs during 2007. Thallium was found in 8 of 10 locations in Quarter 4, only. Since thallium was not found in samples from prior quarters, it is thought that interferences with other metals using the specified analytical method likely caused false positive results for thallium. Thallium will continue to be monitored.

The surface water results are summarized on Slide 6. In general there were fewer chemicals and lower concentrations found in the Old Swamp River samples compared to the three surface water locations bordering the RDA. There were no detections of benzo(a)pyrene, arsenic was detected in Quarter 2 only, and manganese was found in all samples. During Quarter 2 Aroclor 1260 was detected in surface water at 0.24 µg/L, which is very close to the analytical reporting limit of 0.2 µg/L. No PCBs were found in Quarters 3 and 4. Similar to groundwater, there was variability found in the results from the three quarters the samples were collected.

The sediment results (Slide 7) were similar to the surface water results. The majority of chemicals were found at low concentrations. The highest PAH concentrations were found at SD01 and SD02. Benzo(a)pyrene was found in all three sediment samples, but was not found in the co-located surface water samples. The highest concentrations of metals were typically found at SD01, which is similar to the surface water results.

Slide 8 summarizes the landfill gas measurements. Potential methane enriched areas were found at the north end and apex of the landfill in Quarters 2, 3, and 4; along the western perimeter in Quarters 3 and 4; and in the southwestern perimeter in Quarter 4. These field measurements will be evaluated to see if a trend can be established. There was no hydrogen sulfide detected. The field PID measured VOCs only in Quarter 4. Rodent nests have been observed in 2 gas probes and were removed.

The facility inspection is performed as a check on the engineered cap. There are five major elements that are reviewed by a Massachusetts P.E. The landfill cap is checked for erosion, settling and vegetation coverage. The stormwater drainage system is checked for sediment accumulation, erosion, and obstructions. The gas vents and probes are monitored for damage, settlement, and obstructions. The access road is checked for ruts, erosion, and vegetation; and the fence, gate and signage are checked for damage. The fall 2007 observations (Slide 9) noted minimal erosion on the landfill cap, good vegetative cover, and vehicle ruts on the cap. The stormwater drainage system had nominal erosion, large shrubs established in the north channel, and no debris in the culverts. There was no observable damage to the gas vents and probes. There were vehicle tire ruts noted on the access road. There was slight damage noted to the signage. The recommendations from the facility inspection were to repair the ruts, remove the shrubs, and mow the cap in early summer 2008.

The third element of the LTM is the post-remedial wetland monitoring. The wetland monitoring performance criteria are: by the end of year 5 a minimum of 80% vegetative cover by non-invasive species, over 50% of plants are wetland species, and the tree/shrub coverage is 500 per acre; hydric conditions/saturated soils need to be present; and there must be evidence of successful restoration/creation of 0.61 acres of emergent wetlands. Transects in the restored and created wetlands are flagged and checked during each wetland inspection. The percent cover is determined from species observed along the transects. The results from the fall 2007 inspection are summarized on Slide 10. Evidence exists of successful restoration/creation of emergent wetlands. The wetland monitoring during 2007 showed 75% vegetative cover by non-invasive species in the restored wetland and 80% cover in the created wetland. Over 50% of the plants were wetland species in both the created and restored wetlands. Spot treatment of common reed (an invasive species) is recommended.

On-going activities at the RDA are summarized on Slide 11. The 2007 annual report is underway and will evaluate trends and make recommendations. The first quarter 2008 LTM event has been completed; the second quarter 2008 LTM event is planned for June. The June event will include sediment monitoring (conducted on an annual basis). The recommended repairs (fix ruts, mow, and remove large shrubs) are planned, as well. A settlement survey will also be conducted. Once the monitoring wells, piezometers and stream gauges were installed their elevations were surveyed. A settlement survey will determine how much the materials in the landfill beneath the engineered cap have settled. The spring wetland inspection (semi-annual) is scheduled for early June.

H. Welch asked what if there was, for example, a PCB problem. Who fixes the problem and who is responsible? P. Call responded that the Navy is responsible. The RDA annual report will include recommendations, perhaps for modifications to the LTM program. There is also a five-year review coming up (summer of 2009), which is required by CERCLA for any site where wastes are left in place. There is a standard EPA process for five-year reviews that will review the compiled data, evaluate the success of the remedy, and recommend if any modifications need to be made.

H. Welch asked if there will be an outside contractor that will handle this. P. Call responded that the Navy has scoped Tetra Tech NUS to prepare the 5-year review.

K. Keckler noted that the EPA and MassDEP will be reviewing the reports and making a decision on whether or not the remedy is protective. P. Call clarified that the annual report will be completed first. The report is developed by the Navy and then is submitted to EPA and MassDEP for review. The annual report includes trend analysis and recommendations. Separate from the annual report, but related, is the five-year review report: the first one is required to be completed 5 years after the start of the remedy. The

cap was completed in the summer of 2004, so the first five-year review is due in the summer of 2009. This report is a more extensive review of all of the information that is available. This report will go to EPA and MassDEP for review and approval.

A. Malewicz stated that the ROD guides this site, and the data gathered will determine if the goals for this site are met.

D. Barney noted that there is a process of checks and balances in place. Right now Navy is in the process of collecting data on a quarterly basis, and the data will be compiled and evaluated. The data needs to be looked at quarterly, annually, and overall on a 5-year basis to assess if the remedy is successful and/or to see if any changes need to made. There is a long term process of data collection and review and analysis of this information.

S. Greendlinger stated that there will be a public notification when the 5-year review process starts and when it is concluded. The five-year review process includes a public input component.

M. Parsons asked how long the landfill will be monitored. D. Barney replied that the projection right now is 30 years. It may be more or less depending on the data. M. Parsons asked if the landfill was lined. D. Barney stated that it was not.

M. Bromberg stated that the developer, Tri-Town should be present at the meeting. He asked if there any way to stop the rodents from nesting in the gas vents because this could prevent the ventilation of the landfill. P. Call replied that the rodent nests were actually found between the casing and the housing; the nests are not actually blocking the ventilation. K. Jalkut added that the probes are flush mount casings and the rodents enter through the rocks, and are not in the probes themselves.

M. Bromberg asked if there is a human health risk from groundwater or surface water. D. Barney replied that the exceedances are from groundwater, and there are restrictions on groundwater use. There are no exceedances from surface water. P. Call noted that there are no established goals for surface water and sediment. The intent of the slide was to show concentrations. The concentrations will be reviewed overall.

M. Bromberg asked if there is a human health risk from surface water and/or sediment. B. Olson replied that it is still early in the data collection process and the data need to be evaluated. When enough data are available, the EPA will not wait for the 5-year review to make changes, if changes are necessary. The site is being monitored on a quarterly basis and if changes are deemed necessary, they will be made

in a timely manner. D. Barney stated that the Navy is required to provide timely notification of any exceedances to the agencies after each round of data that is collected.

M. Bromberg asked when the annual report would be available. P. Call stated late spring.

S. Greendlinger noted, based on the question of how long the landfill would be monitored, that 30 years is typical for groundwater LTM. M. Parsons stated that she thought someone had once said that LTM would end after 15 years. B. Olson responded that LTM is performed as long as necessary. If issues exist after 30 years then the area will still be monitored, there is no real end for the time line.

There was a discussion regarding the viability of the RDA as an open space/recreational area given the apparent safety considerations with respect to the northern drainage swale and the existence of the post and rail fence at the bottom of a potential hill for winter sledding. M. Bromberg asked if Tri-Town wanted to fill in the swale, would they be allowed to. B. Olson stated that if the cap would not erode, the EPA may consider the design change.

H. Welch asked if the Navy found a problem, can the EPA/DEP just say fix it to the Navy. B. Olson noted that the Navy can disagree. There is a process that exists if disputes occur. Generally the agencies and the Navy try to reach a consensus and usually a consensus is reached. If no consensus can be reached then EPA would make the determination.

H. Welch asked why there was no remedial goal for surface water. D. Barney replied that in the development of the baseline risk assessment, there was no contamination in surface water found to warrant a clean-up goal. H. Welch noted that there are contaminants in the sediment, so why couldn't contaminants be transferred into the surface water? D. Barney stated that the surface water and sediment are being monitored for this reason, and even though there have been contaminants found in the sediment, there have not been contaminants found in the co-located surface water samples.

D. Chaffin stated that the DEP would review the data that it have been collected, and the data will be assessed to see if a risk exists to human health or the environment from surface water and sediment. Then, if necessary, changes can be made.

D. Galluzzo asked if the landfill was capped because it was determined to be a Superfund site. D. Barney responded that during the risk assessment it was determined to be a landfill that needed a remedy, and that is why the cap is now in place.

D. Galluzzo asked what kind of rubble is in the landfill. D. Barney replied that the rubble included asphalt, brick and concrete. There were also additional constituents placed in the landfill, but the predominant waste is rubble.

D. Galluzzo asked if these materials would be expected to degrade and change the chemical makeup of groundwater. D. Barney commented that this would probably not affect the groundwater in the short-term but could affect the groundwater in the long-term. This is dependent on factors, such as if the rubble is in the water table, properties and conditions of the water going through the landfill, etc.

D. Galluzzo stated that the report suggests that the water flowing into French Stream and Old Swamp River is minimally dirty, yet the two rivers are dirty, so what is the cause. D. Barney responded that he does not agree that Old Swamp River and French Stream are dirty. D. Galluzzo stated that there is an iron problem, black color, and iridescence from some non-natural phenomenon. D. Barney noted that some of the changes are natural and others are exacerbated by chemical contributions.

D. Galluzzo stated that in one year there was “nothing alarming” found, yet there is still heavy oxidation in streams nearby. If this site is not the problem then what is causing the problems in the surface water features elsewhere? D. Barney responded that French Stream has no relationship to the RDA; it is not hydraulically connected to Old Swamp River, and is in a different watershed. The information leads Navy to conclude that there is not a risk associated with the surface water and sediment at Old Swamp River.

D. Galluzzo stated that even though there was nothing alarming found, there is still a problem in Old Swamp River. Why was it deemed necessary that the landfill be capped? Is the Navy looking in the wrong place? B. Olson noted that there is a minor amount of floc in Old Swamp River. Prior to the landfill cap there were no major issues found in the area. The floc in French Stream may be related to other sites, but not to the RDA. The manganese concentrations may be causing the black coloration in French Stream. EPA will monitor the landfill and manganese levels; sometimes the cap can spike manganese levels, because the cap can exacerbate the conditions that cause naturally occurring floc to develop due to removal of oxidizing conditions as a result of installation of the cap. The EPA is mindful of this situation when they study the data, the manganese and arsenic concentrations will be looked at closely. The peat may have been naturally causing the floc problems in French Stream. A large amount of peat has been removed, which may have a positive affect on the floc problem in French Stream.

T. Pries asked if there was a trigger that would cause more frequent monitoring than quarterly events. P. Call replied that we compare the results when the data is received, and if there are exceedances then the Navy is notified and reports it to the agencies. T. Pries asked if the temperature changes do you expect changes in the chemical results. P. Call noted that temporal changes occur and there are a number of

variables that change. Monthly monitoring would not be typically performed. Conditions may not vary often enough to make monthly monitoring necessary. Quarterly monitoring is good, and even though results maybe different per quarter, this is only the first year and there are not enough data yet to establish trends.

T. Pries asked if after 30 years and Tri-Town is in control do they have the ability to stop monitoring, even if it is deemed that further monitoring is necessary. The Navy is ultimately responsible, correct? D. Barney stated that the Navy is ultimately in control and they are independent of the developer. At the end of the day the responsibility still lies with the Navy.

A. Malewicz stated that the ROD supersedes who is doing what. The EPA enforces the ROD and DEP weighs in to make sure the remedy is protective of human health and the environment. T. Pries commented that we just have to trust the EPA then. A. Malewicz stated that the Superfund regulations will protect us. They are very strong regulations. T. Pries asked if the Navy knows everything that is under the cap. It is good that Old Swamp River is clean since it enters the water supply.

A. Hilbert asked with the new enabling legislation and the land to be transferred at a reduced price, will LNR be taking care of the monitoring. D. Barney stated that the RDA is its own entity and has its own requirements. No matter who does the work RDA will continue to be monitored. Even though LNR is not trusted, the public must trust the EPA.

3. UPDATES AND ACTION ITEMS

M. Skelton Roberts reviewed the action items listed on the Action Item Tracking List (see Attachment B) for this RAB meeting:

<u>Check location/depth of peat moved to south end of runway:</u> B. Olson stated that the peat at the north end of the runway was moved to the south end for construction purposes. The question asked was: will this cause a floc problem elsewhere in French Stream. He commented that this may help the north end of the runway because the peat removed was below the water table and it was moved to the south end above the water table. The EPA thinks that this has the potential to help the northern end of the runway and should not cause a problem on the southern end. The site was visited today and the peat stockpiles seem to be diminishing. The peat is not contaminated but can cause floc due to its organic nature.

M. Parsons asked if B. Olson had been off the Base to see French Stream because the floc is really bad now, and looks like it does when it comes off the Base. This is different from how French Stream looked in the past. B. Olson responded that perhaps the floc flushed out to worsen conditions downstream, such as by North Ave. Perhaps it is a localized effect because it is not likely that the contaminants are moving

downstream to cause floc problem. B. Olson stated that on Taxiway Charlie the peat is above the water table.

M. Parsons stated her concern that something is causing the floc to flow further downstream in French Stream. B. Olson noted that this was not related to the movement of the peat. M. Parsons stated her concern was that there is high water table where the peat was moved to and she thinks that the peat may be below the water table. B. Olson disagrees. Construction material was excavated to a depth of 4 to 8 feet and replaced with peat. EPA's observations indicate that the peat is above the water table. M. Bromberg stated he thinks that they excavated about 8-12 feet in depth, but he is not sure of the elevation of the land. He thinks that 4-6 feet of the peat is below water.

H. Welch asked where the peat was buried and D. Barney showed the location on a figure of the Base. M. Bromberg asked who had said 4-8 feet was the depth of the excavation. B. Olson commented that no names were given. It was decided to bring the figures to the next meeting.

M. Parsons wants the issue of heavy flocculation of French Stream downstream of the Base to continue to be looked into.

Determine Navy's role in the Enabling Legislation: Navy was asked to determine if the proposed amendments would alter the status of the LRA and can South Shore Tri-Town receive property from the Navy. D. Barney said they checked and confirmed that Tri-Town would remain able to obtain the property from the Navy.

M. Parsons asked if the new enabling legislation was not in effect would they still be able to get land from the Navy. D. Barney said he was not sure as there were a lot of factors. G. Preston stated that the new enabling legislation was not a pre-requisite for the deal.

M. Parsons asked if the Navy had signed the agreement with Tri-Town. G. Preston stated that there is a term sheet in review with the Deputy Under Secretary of Defense.

M. Skelton Roberts asked each of the Leads to provide updates to the list of Update Items.

RAB Administrative Actions: D. Barney stated that there were no updates.

MassDEP Update: D. Chaffin stated that the Solid Waste Program issued comments on the Small Landfill corrective action design on April 1st.

Coast Guard Update: D. Barney received no update.

IR Program Site Update: D. Barney commented that in the interest of time that everyone could look at the RAB Update since it covers all of the IR program updates. He did go over some highlights. The ROD for the STP has been signed and executed and is in the pipeline for implementation. The Building 81 draft RI is almost ready for release. The draft RI for SRA is expected in early August.

MCP Update: At the remaining site, FFTA, excavation of the impacted soils has been completed, the data have been reviewed and a report and Response Action Outcome are to follow.

EBS Update: D. Barney stated that there have been technical memoranda submitted for the AOC 60 East Mat Ditch and the AOC 61 TACAN Outfall. Comments from the both agencies have been received and a meeting is planned with the agencies to talk about outstanding issues and any additional data needs. Decision documents are underway for RIA 62 - French Stream, RIA 104 - Old Swamp River, RIA 110 - Antenna Field, and RIA 111 - West Mat storm drain area. Field work has been concluded and a draft field report is being prepared for the Main Gate site.

FOST Update: The goal is to get the property in the hands of the developer so they can realize the benefits of integrating the clean up actions with the redevelopment actions. A lease in furtherance of conveyance, or LIFOC, will allow the developer to do demolition, roadway improvements, etc. This is through a lease process, but predicated by finding of suitability to lease (FOSL) first. This document will be submitted for public comment on May 19, 2008.

D. Barney suggested meeting again in June to discuss the FOSL. M. Parsons asked if they could meet the first Thursday in June, to have more time before the comment period ends. D. Barney noted that if necessary the comment period could be extended to June 30.

M. Parsons stated that she doesn't think the Navy will pay any attention to the public comments. D. Barney disagreed. She asked how long the lease period will be. D. Barney replied that it would be a multi-year basis (20-30 years), with the expectation that as the clean up and redevelopment occur and the property is available and ready to transfer, that the lease would end because the property would be transferred.

M. Parsons asked how much property does the lease involve. D. Barney stated that FOST 5 and 6 are under the LIFOC, which is a pretty large area. M. Parsons asked if the developer is taking over the cleanup. D. Barney noted that the developer will do cleanup under the purview of the Navy, EPA, and DEP. M. Parsons stated that she does not trust the developer to do the cleanup, she trusts agencies and

the Navy, but not turning it over to the developer. K. Keckler stated that the EPA will hold the developer to the same standards as they do the Navy. The investigations will look adequately at the nature and extent, assess risk according to EPA guidance and policy, sampling methods are ones that have been approved, and that any remedy that they select is going to be protective of human health and the environment and meet environmental regulations and laws. There should be no significant changes. M. Parsons asked about SRA and Building 81. K. Keckler stated that the draft RI for the SRA Site is due by early August.

D. Chaffin noted that the cleanup process is the same either way, and there is still assurance because the Navy still owns the property and they will not be able to transfer it unless the cleanup is completed to the required standards.

D. Galluzzo stated that he was disappointed that the Navy is still dealing with Tri-Town. He noted that they stated 2 years ago that they were the advocate of the community and now they are stating that they are one with the developer. He feels that the Navy should not have further dealings with them and to accept the amount of money that they are offering for the remaining acreage devalues the surrounding properties.

A. Hilbert stated that a certificate was issued about a month ago. She tried to get a copy from Tri-Town but only received 4 of the 38 pages. The four-page “notice of project change” certificate was received but the comments were not received. M. Parsons received the entire document. A. Hilbert will try again to get the entire document from Tri-town or get a copy from M. Parsons.

H. Welch asked how the developer will protect the wetlands daily when work is ongoing. K. Keckler noted that the EPA will oversee the work, but not daily. H. Welch wants daily oversight. He feels that too much can get destroyed forever if oversight does not occur at a higher level. D. Chaffin commented that adjustments can be made once performance is initiated and, if warranted, more oversight can be conducted. H. Welch stated that if developer is not watched, shortcuts will be taken. D. Chaffin responded that the developer will be monitored to guard against any problems.

A. Malewicz noted that she understands there are a lot of questions. The philosophy of public participation has to change. Understanding of what is going on in the field is needed to address peoples’ concerns. She advocates for a strong communication program between the public, developer, and Navy. She asked the audience for suggestions as to what will provide the public with a degree of comfort and trust. Anyone with any tangible ideas should call Ann or provide them at the next RAB meeting.

B. Olson wanted to make it clear that the Navy will always be in the picture. They are on the hook for the cleanup or oversight of the developer. EPA will also oversee actions with the DEP. The EPA will see if they can ramp up resources to be onsite more often. The developer will hire contractors for cleanup, they will not perform the cleanup themselves. EPA is encouraging the developer to bring cleanup contractors to the meetings to share in a dialogue with the public. He thinks that LFR is the contractor and EPA would like them to be involved in the meetings.

A. Hilbert asked how can you trust the developer when you cannot trust politicians to work for you. A. Malewicz replied that when it comes to cleanup it would help to hear from the technical folks.

T. Pries asked what document trumps what pertaining to the enabling legislation. Does it trump any document by the Navy? A. Malewicz stated that the federal law trumps state law. The EPA governs the cleanup. The enabling legislation cannot trump EPA.

T. Pries would like an understanding as to how the changes to the enabling legislation either align or conflict with the Navy's intent of transferring the land for an economic benefit to the host community. She indicated that there seems to be a misalignment of intent in the new enabling legislation. This issue was put in the parking lot for next month. D. Barney stated that the goal of the Navy is not economic conveyance. The Navy's goal is conveyance and transfer of property in whichever way Tri-Town wants to receive it from the Navy.

M. Bromberg asked if the regulators could think about things that would be helpful from a public perspective. B. Olson noted that they are looking for ideas different from what is in place to keep moving forward and develop trust. The cleanup contractor is going to have to come in and earn trust, but as far as RAB meetings go nothing will change unless the public wants it to. The Navy will still be held responsible for this with the LIFOC.

M. Bromberg asked if he would be correct in saying that the developer's contractors will take samples and then give those results to the Navy, and then the regulators will oversee. This question will be held for discussion at the June RAB meeting.

D. Galluzzo asked will the change in the enabling legislation and the other changes be a part of the RAB agenda or is it just limited to cleanup issues. D. Barney said he is not in a position to discuss the enabling legislation. Navy only needs to know if Tri-Town can receive property from Navy. He noted that there is a democratic process in the towns that needs to be referred to for such issues; it is not a Navy issue.

M. Parsons stated her frustration with the LRA, Tri-Town board; she feels there are different factions but they all seem to be working under the same people, and the public distrusts them. They would like the EPA to keep a close watch on them. Also she asked if the parking lot issues could be distributed to the public shortly after the RAB meeting.

SSTTDC Update: No update.

Topics for future RAB Meetings. The following topic was suggested for the next meeting:

- FOSL

Conclusion/Next Meeting

The next RAB meeting will be on June 12, 2008.

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

May 8, 2008 **Conference Center on Shea Memorial Drive** **7:00 PM**

Agenda Items	*Item Lead*	*Projected Time*
1. Introduction, Review of Meeting Notes	**Facilitator**	**7:00 - 7:15**
2. RDA Long-Term Monitoring-2007	**Navy**	**7:15 - 7:45**
3. Updates and Action Items	**Navy**	**7:45 - 8:15**
4. Questions, Agenda Items, Next Meeting	**Facilitator**	**8:15 - 8:30**

Facilitator: Massachusetts Office of Dispute Resolution: Mary Skelton-Roberts

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; Dan McCormack; Steve White
Navy: Dave Barney (Navy Co-Chair)
EPA: Kymberlee Keckler (Alternate: Bryan Olson)
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
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Brian Helland, Remedial Project Manager, Base Realignment and Closure Office, Program Management Office, Northeast (215) 897-4912
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MA DEP: David Chaffin, Environmental Engineer, Federal Facilities (617) 348-4005
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EPA: Kymberlee Keckler, Remedial Project Manager, Federal Facilities Section
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NAS South Weymouth Website: http://nas-southweymouth.navy-env.com

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

May 8, 2008 – Next RAB Meeting

Action Item	Item Lead	Deadline
ACTION ITEMS		
Check location/depth of peat moved to south end of runway.	B. Olson	Next RAB
Determine Navy's role in the Enabling Legislation.	D. Barney	Next RAB
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 the AOC 55C HHRA to A. Hilbert, J. Rakers, H. Welch (3/08)		
Investigate issues with movement of peat during development (1/08)		
Provide copies of EPA health risk requested by M. Bromberg (1/08)		
Review routing of piping between STP Site and French Stream (11/07)		
Provide location of Basewide Assessment floc samples (10/07)		
Provide copies of parking lot response letter (10/07)		
Provide groundwater data for transferred land (10/07		
MDPH MS Study update (8/07)		
List of AULs; what and where they are (4/07)		
Provide vernal pools map to J. Cunningham (4/07)		
Copies of figures from Old Swamp River Study by Beta Group, Inc (03/07)		
Provide Hydrogeologic Investigation Tech Memo to D. Galluzzo (03/07)		
Distribute monthly Navy program status/administrative items update (03/07)		
Provide blueprint of old STP to H. Welch (01/07)		
Distribute monthly Navy program status/administrative items update (01/07)		
Check status of NAS South Weymouth website (01/07)		
P. Scannell to provide the reference for the 1995 EPA study to D. Barney (11/06)		
Distribute monthly Navy program status/administrative items update (11/06)		
Were runways in the transferred land tested for fuel oil and PCBs? (11/06)		
1997 DEP letter re: non-potable drinking water source areas on the Base (11/06)		
Map showing sampling locations on the Base (11/06)		
Old Swamp River additional sample collection; data available? (11/06)		
Status of release of MDPH ALS/MS study (11/06)		
Contact Dr. Knorr regarding access to NAS South Weymouth EGIS (7/06)		
Distribute monthly Navy program status/administrative items update (7/06)		
Check availability of MDPH to give a presentation on MS/ALS data (5/06)		
Distribute monthly Navy program status/administrative items update (3/06; 4/06)		
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)		

Rubble Disposal Area Long-Term Monitoring - 2007

Restoration Advisory Board Meeting
May 8, 2008

Phoebe Call

Tetra Tech NUS

Tonight's Objectives

- Update RAB on long-term monitoring (LTM) activities completed in 2007.
- Describe LTM components installed in 2007.
- Discuss 2007 LTM analytical results.
- Summarize 2007 facility inspection observations.
- Present 2007 post-remedial wetland monitoring results.

LTM Plan Activities

- Quarterly for 1st 2 years, then semi-annual:
  - Groundwater, surface water sampling and analysis
  - Landfill gas monitoring
  - O&M facility inspection
- Semi-annually:
  - Wetland monitoring
- Annually:
  - Sediment sampling and analysis*
  - Settlement survey

*2007, 2008, before 5-year review in 2009, either 2010 or 2011.

ROD-Specified Cleanup Goals

- Groundwater:
  - Arsenic – 10 µg/L
  - Benzo(a)pyrene – 0.2 µg/L
  - Manganese – 313 µg/L
- Groundwater data also compared to MCLs/MMCLs.
- No cleanup goals specified for surface water and sediment.

LTM Groundwater Components

- 7 wells, 7 piezometers, and 7 staff gauges installed on/near RDA in February-March 2007.
- All 10 wells (7 new, 3 existing) and 7 piezometers developed.
- Groundwater sampling and field measurements completed in March, June, September, December.

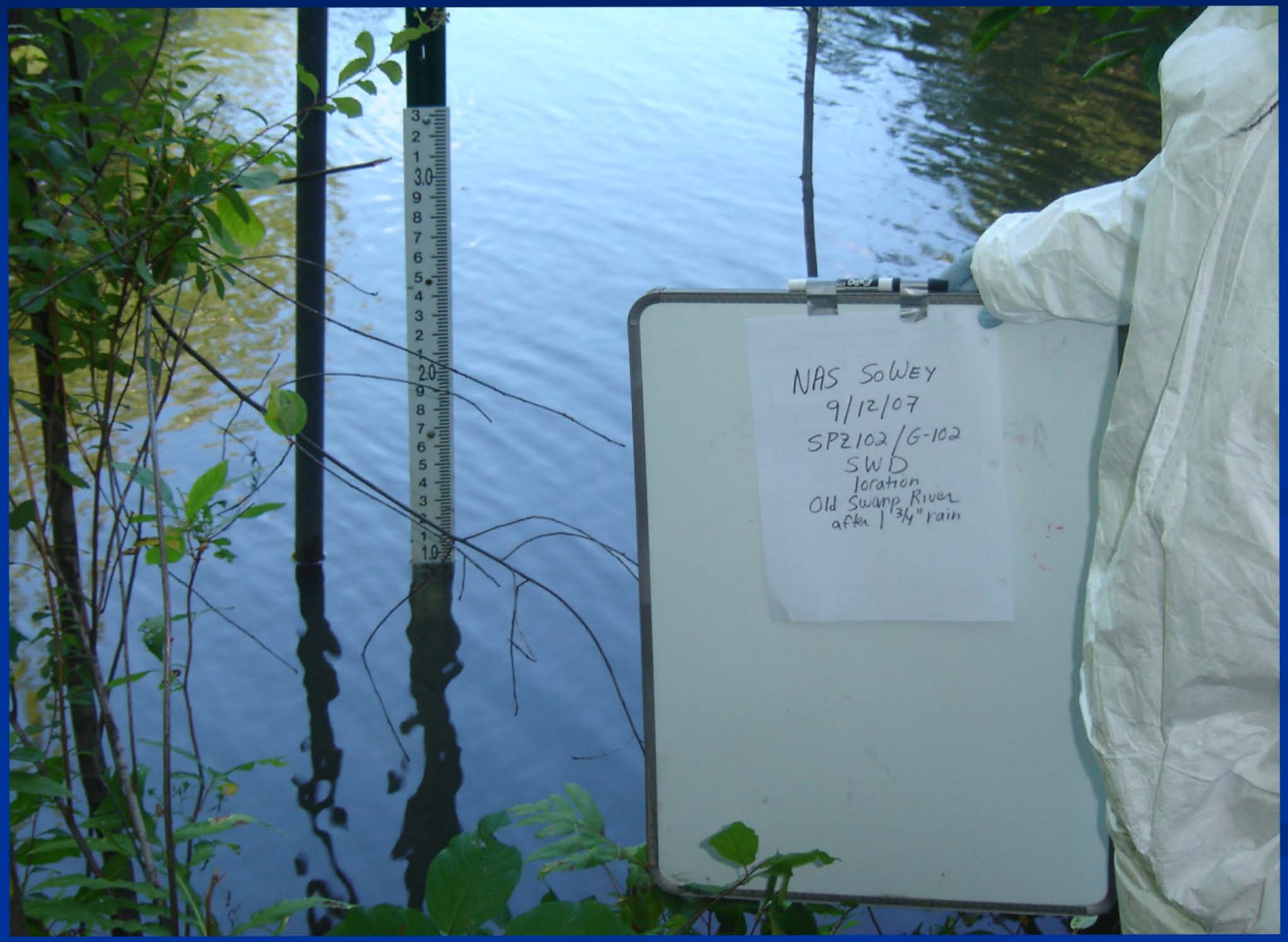
Monitoring Well Installation in Wetland

Monitoring Well Development

LTM Surface Water and Sediment Components

- **2 stream piezometers and staff gauges installed in Old Swamp River, upstream and downstream – May 2007.**
- **Surface water sampling locations:**
  - 3 in wetlands along eastern edge of the landfill.
  - 2 in Old Swamp River (upstream, downstream).
- **Surface water sampling completed in June, September, December.**
- **3 sediment samples in wetlands co-located with the 3 surface water locations.**
- **Sediment sampling (annual) completed in June.**

Old Swamp River SW Location



Surface Water Sampling

Analytical Parameters and Field Measurements

- Laboratory analysis (GW, SW, sediment) for:
  - VOCs, SVOCs, pesticides/PCBs, herbicides, VPH/EPH (petroleum hydrocarbons), metals and cyanide, indicator parameters (GW, SW only).
- Field measurements (GW, SW):
  - Water level, turbidity, DO, ORP, pH, temperature, specific conductance, ferrous iron.
- Field measurements (landfill gas):
  - Methane, oxygen, carbon dioxide, hydrogen sulfide, LEL, total VOCs.

Exceedances of GW Remedial Goals
(# of wells with exceedances in brackets)

Chemical	Q1	Q2	Q3	Q4
Arsenic	Yes [4]		Yes [5]	Yes [1]
Benzo(a)pyrene	Yes [1]			
Manganese	Yes [10]	Yes [9]	Yes [9]	Yes [9]
Total PCBs (MCL)	Yes [1]			
Lead (MCL)		Yes [1]		
Thallium (MCL)				Yes [8]

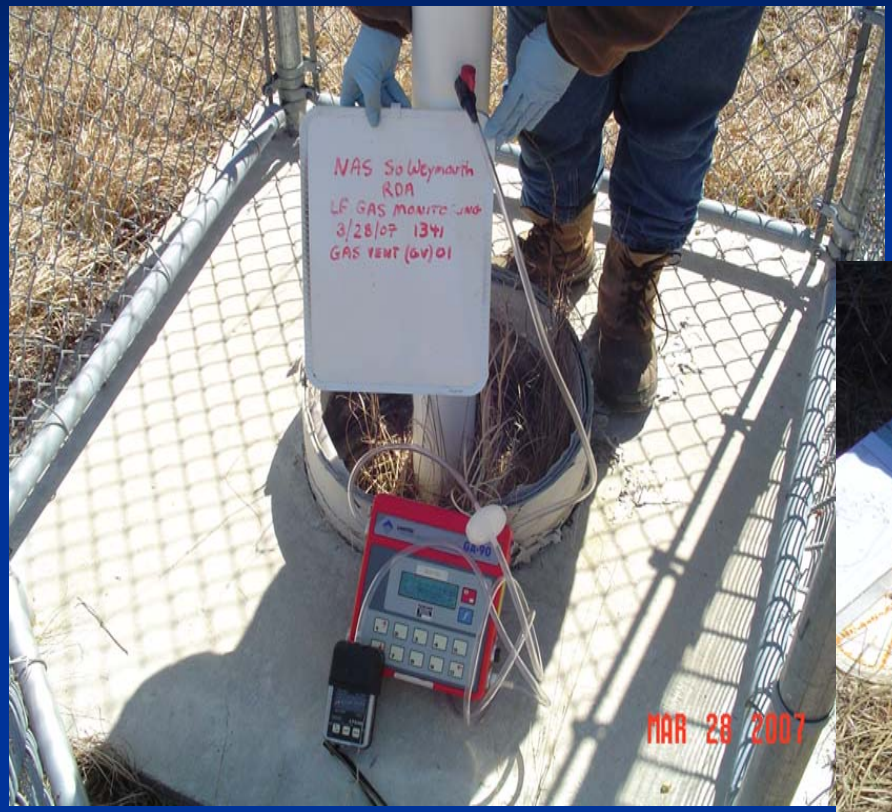
Surface Water Results

- Generally fewer chemicals and lower concentrations found in Old Swamp River samples.
- VOCs, VPH/EPH, SVOCs, PAHs, and pesticides found infrequently, at low concentrations.
- Benzo(a)pyrene not found in any samples.
- Arsenic (total) found in Q2; not detected in Q3 and Q4.
- Manganese found in all samples.
- Highest metals concentrations typically found at SW1.
- Herbicides found in Q3; not detected in Q2 and Q4.
- Aroclor 1260 found in Q2 slightly over the laboratory reporting limit; no detections in Q3 and Q4.

Sediment Results

- SVOCs, VPH/EPH, PCBs, and pesticides found at low concentrations.
- Highest PAH concentrations found at SD01 and SD02.
- Benzo(a)pyrene found in all samples; not found in co-located surface water samples.
- Highest concentrations of metals typically found at SD01.

Landfill Gas Monitoring



Monitoring at gas vent. 8 gas vents installed through the cap.

Monitoring at gas probe. 7 gas probes installed outside the cap limits.

Landfill Gas Measurements

- Potential methane enriched areas:
  - North end and apex of landfill – Q2, Q3, Q4
  - Western perimeter – Q3, Q4
  - Southwestern perimeter – Q4
- No hydrogen sulfide detected
- VOCs measured w/PID only in Q4
- Rodent nests observed in 2 gas probes each quarter; removed.

Facility Inspection – Items Routinely Checked

- Landfill cap – erosion, settling, vegetation coverage
- Stormwater drainage system – sediment accumulation, erosion, obstructions
- Gas vents and probes – damage, settlement, obstructions
- Access road – ruts, erosion, vegetation
- Fence, gate, signage – damage

Landfill Cap Vegetation Cover

Vehicle Ruts (to be repaired)

Facility Inspection – Fall 2007 Observations

- Landfill cap – minimal erosion, good vegetative cover, vehicle ruts
- Stormwater drainage system – nominal erosion, large shrubs in north channel, culverts free of debris
- Gas vents and probes – no damage observed
- Access road – vehicle tire ruts
- Fence, gate, signage – slight sign damage
- Recommendations: repair ruts, remove shrubs, mow cap in early summer 2008

Wetland Monitoring Performance Criteria

- By end of Year 5:
  - Minimum 80% vegetative cover by non-invasive species
  - Over 50% of plants wetland species
  - Tree/shrub coverage, 500/acre
- Presence of hydric conditions, saturated soils
- Evidence of successful restoration/ creation of 0.61 acres of emergent wetlands.

Restored wetland along left and right fringe of emergent area, created wetland in center.

Wetland Monitoring - Fall 2007 Results

- Restored wetland (0.22 acre)
  - 75% vegetative cover by non-invasive species
  - Over 50% of plants wetland species
  - Spot treatment of common reed required.
  - Soils and hydrology should meet standard.
- Created wetland (0.50 acre)
  - Over 80% vegetative cover by non-invasive species
  - Over 50% of plants wetland species

On-going Activities

- 2007 annual report underway – evaluate trends, make recommendations.
- Q1 2008 LTM sampling and facility inspection completed.
- Q2 2008 LTM event planned for June, includes annual sediment monitoring.
- Repairs to cap planned – fix ruts, mow, remove large shrubs.
- Spring wetland inspection in early June.