

**RESTORATION ADVISORY BOARD
MEETING NOTES
FORMER NAVAL AIR STATION, BRUNSWICK, MAINE
THURSDAY, JANUARY 21, 2016
BRUNSWICK TOWN HALL COUNCIL CHAMBERS
BRUNSWICK, MAINE**

MEETING ATTENDEES

Paul Burgio	U.S. Navy, BRAC PMO/RAB Co-Chair
Robert Leclerc	U.S. Navy
Tom Brubaker	Midcoast Regional Redevelopment Authority
Suzanne Johnson	Brunswick Representative to RAB/RAB Co-Chair
Mike Daly	U.S. Environmental Protection Agency
Chris Evans	Maine Department of Environmental Protection
Chris Swain	Maine Department of Environmental Protection
Doug Heely	Environmental Strategies & Mgt.
David Page	Town of Brunswick Rep to RAB/BACSE
David Chipman	Town of Harpswell Representative to RAB
Catherine Ferdinand	Bowdoin College
Anna Breinick	Town of Brunswick
Jeff Orient	Tetra Tech
Carol White	BACSE Technical Advisor
Antoinette Mercadante	BACSE

1. Introductions

Suzanne Johnson, Restoration Advisory Board (RAB) Co-Chair opened the meeting at 4:30 p.m. She reviewed the purpose of the RAB process for the former Brunswick Naval Air Station. She mentioned that technical records for this site are available at the Brunswick library, and introduced Paul Burgio (U.S. Navy Base Realignment and Closure (BRAC) Coordinator for NAS Brunswick) as the other RAB Co-chair. Paul reviewed the agenda for this afternoon's meeting.

Old Business

David Chipman asked about the status of the operations manual for the groundwater extraction and treatment system (GWETS). Paul said they are still evaluating different grades of activated carbon and resins. He thinks the manual will be ready in about 6 months. The system upgrades will be further discussed in this presentation. David mentioned a report from last May that showed unusual concentrations of 1,4 dioxane in the system. The samples were taken when the system was not fully operational, and David recommended that samples not be collected when the HiPox unit is not fully functional. Paul agreed.

Suzanne provided some background on the GWETS and the ongoing study to evaluate better treatment alternatives to some recently discovered emerging contaminants. Paul said that reports are supposed to be submitted by Watermark monthly but there have been issues with timeliness. Paul said that this reporting issue would be dealt with shortly.

New Business

No new business was discussed.

2. 2015 in Review (Paul Burgio)

- 2015 Environmental Investigations

Picnic Pond Stormwater Investigation – the field investigation was conducted last summer and the results were discussed at length during a technical meeting last November. The contamination patterns found in the drainage system were consistent with the conceptual site model. Additional samples were collected in November for analysis, including analysis of perfluorinated compounds (PFCs). Preliminary data has been released and a more comprehensive report will be issued in about 60 days.

David White discussed the elevated levels of polyaromatic compounds (PAHs) and lead in some of the sediment samples and he recommended the upcoming report include a risk assessment. He also said the dam is keeping sediments in place, and that the risk assessment should consider what would happen if the dam were breached and sediment flowed downstream.

Carol White asked for the sampling data electronically to facilitate her review. Paul said that the PCF data was sent electronically. Carol asked that the consultant use a standardized spreadsheet format. Paul said that the Navy is willing to share the data ahead of issuing a report but he cautioned everyone to not draw premature conclusions until all of the information is disclosed.

Mike Daly said that a formal Remedial Investigation (RI) will be coming out of the Picnic Pond study.

Carol White said that BACSE was surprised that Coffin Pond was included in the background study; they thought only Mill and Hancock ponds would be included. Mike Daly thought that the data from Coffin Pond could be useful. No one is sure yet how these data will be used in the evaluation.

Eastern Flightline Investigation (Jeff Orient) - this investigation included installation of new monitoring wells and groundwater sampling to investigate low levels of VOCs (i.e., chlorinated ethenes) in groundwater. Additional wells were installed and samples collected in late 2015. The groundwater sampling late last year included analysis for PFCs and 1,4 dioxane. During this sampling event, samples were also collected from wells around the NEX and at Site 12. A report on this work will be issued this spring.

Suzanne Johnson asked what chlorinated ethenes are. Jeff said they include commonly used industrial solvents and degreasers that typically break down to smaller and less complex compounds in the environment.

Quarry Remedial Investigation – the Quarry area has been the focus of several investigations for munitions, radiological concerns and chemical constituents. The MC RI report is presently with the

Navy for review. The investigations have defined the extent of munitions and explosives of concern (MEC). The Navy still hopes to transfer land outside of the MEC area to Bowdoin this year. The Navy is considering an interim removal action to reduce the footprint of the wastes in the Quarry area.

Basewide PFC Investigation – the second round of sampling across then base was conducted in November. This work included collection of groundwater, surface water, sediment, and drinking water samples (from the water supply well at the golf course). The PFC investigation also encompasses the GWETS pilot study where different types of carbon are being evaluated to determine their effectiveness in removing PFCs from water.

Orion Street Skeet Range – past soil sampling programs were used to conduct a risk assessment that indicated lead, arsenic and PAHs as contaminants of concern. The PAH compounds are apparently from the clay targets used at the range. There is no impact to groundwater, and any surface water concerns are being addressed under the Picnic Pond investigation. A soil removal action was completed in 2013 to address the lead impacts and the risk assessment was subsequently re-evaluated. The revised risk assessment identified smaller areas of arsenic and PAH impact that will be addressed in 2016. Soil removed from this action will be placed under the Sites 1/3 cap extension.

Fitch Avenue Skeet Range – this skeet range was only operated for a few years in the 1940's. Surface soil sampling identified a small hot spot of lead contamination in the southern area. The initial removal action was completed in 2013 and additional surface soil will be removed from two small areas in 2016. This excavated soil will also be placed under the Sites 1/3 cap extension.

Site 12 – this CERCLA site received a Record of Decision (ROD) in 2015. Groundwater sampling was conducted in May and December of 2015 in concert with the Eastern Flightline investigation.

Carol White asked what the samples were analyzed for. Jeff Orient said that samples were analyzed for metals and munitions constituents, and that the results have been shared with the group. PFCs were not included in the December sampling event. Chris Evans thought that samples were also analyzed for extractable petroleum hydrocarbons (EPH). David Chipman asked if any bedrock wells were sampled. Jeff said that only shallow wells were included in these sampling events.

Site 9 – this site has been investigated a number of times, and a large soil and debris removal action was completed in 2008. A risk assessment was recently completed for recreational land use (i.e., surficial uses), and concentrations of PAHs exceeded risk values due to PAHs in two small areas. The Navy plans to address surface risks via an additional removal action, and to restrict subsurface activities through a deed restriction. The additional removal action is scheduled for this spring, and this excavated soil will also be placed under the Sites 1/3 cap extension.

Suzanne Johnson asked for clarification as to where Site 9 is located. Jeff said it is in center of base, east of the flightline and north of the first impoundment pond.

David Chipman asked about Building 211. This building was transferred to the Town of Brunswick two years ago and is currently being used as their recreation center.

Carol White asked if there is a plan to compile all of the PFC data into a comprehensive report. Jeff said yes, all of that data will be summarized into a single report.

Suzanne Johnson asked about the origin of the hot spots in Site 9. The hot spots in Site 9 are likely smaller areas that were not fully excavated in 2008 rather than part of a larger area. The hot spots may include some residual debris remaining from past barracks demolition in the northern part of Site 9. The map included in the presentation shows a red line that denotes the extent of visible ash, and a green shaded area that signifies the excavation area.

Suzanne also asked about land use controls (LUC) for this site, and what exactly would be restricted. The restrictions have not yet been developed but will allow for recreational surface uses. Future buildings are possible but precautions would be needed during construction.

Paul Burgio clarified that the intent of the Site 9 removal action is to shrink the footprint of the restricted area. There will be restrictions on the use of groundwater and subsurface soil. The actual restrictions probably won't be developed until they are ready to transfer the land. The Navy does not intend on prohibiting new construction, but precautions will be needed during construction to protect workers.

2015 Radiological Work – Paul Burgio gave the following brief update on the Navy's radiological work:

- At Site 2 the assessment was completed, and a scoping survey report will be issued in 2016. Three or four small radiological items were removed.
- Site 6 is an old rubble site that was formerly closed. Geophysical and radiological assessments were completed and nothing was found. A scoping survey report will be issued in 2016.
- A scoping survey report is also being prepared for the Quarry.

Carol White asked about the PFC sampling program for residential wells, and whether a matrix had been developed to determine which homes will be sampled. Paul said that the PFC sampling program will include an RI-type report, which will include these details.

- 2015 CERCLA Decision/Post Decision Documentation

Land Use Control Explanation of Significant Differences – the LUC ESD is needed for the on-going CERCLA sites to reflect changes in the land use controls since closure of the base. It also includes specific language to enforce restrictions after properties are transferred. The remedies are still in place and considered protective, and the RODs are otherwise unchanged.

Land Use Control Implementation Plan – this plan included LUC implementation details and is scheduled for completion in early 2016.

Site 12 – the ROD completed in September 2015 detailed the selected remedial alternative. The alternative includes land use controls to prevent intrusive (i.e., subsurface) activities along with public education, warning signs and annual inspections. Site 12 will be the first CERCLA site to be

transferred. A state covenant (Uniform Environmental Covenants Act or “UECA”) will be included in the deed when transferred.

CERCLA Five Year Review – this review was required for CERCLA sites that do not have “no action” remedies. It includes Sites 1, 2 and 3 landfills, Site 7, Site 9 and the Eastern Plume. Site 12 will be included in the next review. The Navy considers that all of the remedies currently in place are protective.

- 2015 Remedial Activities

Sites 1/3 Cap Extension – this project was moving forward until sediment with elevated radiological readings found at some of the cap underdrain outfall pipes. The Navy is working with the stakeholders to develop a path forward specific to this issue.

Site 2 – the cover over the northern area is almost complete.

Former DRMO Yard/Building 584 - radiological screening was completed in the yard and nothing was found. Inside Building 584, one small area on the floor was discovered to be radiologically impacted and was remediated. This work will be documented in a report next month report. The entire area has been repaved.

Site 7 Old Acid/Caustic Pit – The Navy started a removal action to address cadmium but encountered some munitions items (inert training rounds) which temporarily halted the soil removal work. The area has to be cleared before the soil excavation work can continue.

Building 9 – a dime-sized area of radium was found on the floor and was cleaned up last summer. The final status survey report is under review.

Eastern Plume – the Navy is continuing operation of the GWETS and is evaluating various grades of carbon to treat emerging contaminants. The computer system that controls the treatment system was also upgraded.

Carol White asked if a work plan was prepared to describe the GWETS pilot study. Paul said that a specific work plan was not prepared because the intent was to evaluate several alternatives to see what would work best. The work was a research project more than a pilot study with a specific path forward.

Suzanne Johnson asked if Site 7 is fenced off and what risks may be present. Paul said that there are no risks because the items found were non explosive and located at least 2 feet below ground surface. There is also construction fencing surrounding the area.

Carol White said that BACSE is concerned that the work area at Site 7 was backfilled before samples were collected. Paul said that a revised work plan will be prepared now that the (inert) munitions have been removed.

3. Planned 2016 Activities (Paul Burgio)

- Environmental Investigations

Paul briefly reviewed the investigative work planned for 2016, which includes completion of a report for the Eastern Flightline area groundwater study, completion of a report on the Picnic Pond surface water and sediment sampling program, additional groundwater and private well sampling for PFCs and VOCs, and completion of radiological studies at Sites 8, 9, and 18.

Suzanne Johnson asked if the private well sampling program would include analysis for 1,4 dioxane as well as PFCs. Paul said that the analyses would include 1,4 dioxane.

Carol White recommended that the private well sampling program be comprehensive to include anyone who is anxious about their water quality.

Paul also mentioned that a drilling program will be conducted at Site 4/Building 584 to investigate the old acid/caustic pit beneath the building. He also said that a second round of soil gas sampling will be completed at Sites 1/3 this year.

- CERCLA Decision/Post Decision Documentation

The planned and ongoing documentation activities for 2016 will include the Land Use Control Implementation Plan, and a proposed cleanup plan and Record of Decision for the Orion Street Skeet Range.

Suzanne Johnson asked how the LUCIP could be completed given that the PFC investigation will be ongoing. Paul said that the LUCIP will be a fluid document that may be subject to change over time, particularly if other emerging contaminants are identified. The Navy will consider stakeholder comments to the LUCIP when it is issued.

- Remedial Activities

At Sites 1/3, the cap extension will be designed and installed, and the radiological material found at the under drain outfalls will be investigated. There are several soil removal projects planned for this year around the base, and soil generated from these projects will be placed under the cap extension. This is appropriate because Sites 1/3 is a properly designed hazardous waste landfill.

At Site 2, the cover will be extended and fencing will be installed around the recently covered areas.

Operation and maintenance of the GWETS will continue, including evaluation of the carbon adsorption system.

4. Questions

Chris Evans mentioned that the radiological material found at Sites 1/3 is from fill material placed on top of cap, and not from the material placed under the cap.

Suzanne Johnson asked whether any of the CERCLA sites would be transferred to other entities. Paul said that Site 12 will likely be the first of the CERCLA sites to be transferred since there are no

ongoing environmental concerns at this site. The intent is to convey the majority of the land to the Town of Brunswick. The Navy is not transferring cleanup responsibilities for any of the other CERCLA sites.

Carol White asked about the DigSafe process and whether the Town (and subsequently the Navy) is being notified when DigSafe is called. At issue is whether land use restrictions are adequately being communicated to contractors or other parties wishing to conduct intrusive activities. Anna Breinick said that the Town is still working through this process, but that they (the Town) are receiving notifications from DigSafe. They are continuing to refine the process so that when notification is received, they can identify the restrictions that are applicable and can also notify the Navy. The process also needs to include details of the proposed activities so that the Navy can evaluate what the concerns may be.

Carol White said that BACSE will have comments on the LUCIP, specifically how the state covenant program (UECA) will be utilized. Paul said that the Navy will likely allow the covenant language in their deeds but this is still under review and not expected to be a pressing issue for at least a year. The language cannot be added until transfer because the state cannot impose a covenant on federally-owned land. In addition, the Navy does not currently have deeds for their land, so there are no instruments to attach the covenants to. Once a deed is written, the UECA language can be included.

BACSE continues to express concern with parcel by parcel land use restrictions and wants base-wide restrictions for groundwater use. They believe it is possible to impose UECA restrictions on parcels that have already been transferred. Groundwater restrictions for many properties were formerly covered under the Base Instruction; however that document no longer applies. Their position on this matter is contained in their comments on the LUCIP.

The group also discussed the issue of whether impacts to sediment downstream of the Picnic Pond dam have been adequately delineated. BACSE would like to see additional sediment sampling, particularly in and around Harpswell Cove where impacts to shellfish are a concern.

Paul cautioned the group on reaching premature conclusions from preliminary data. The Navy has not reached any conclusions yet on the extent of PFCs in the Picnic Pond drainage system. They are committed to understanding PFC impact basewide, within the area of private wells, and in the GWETS treatment system. This includes finding the extent of impacted sediment downstream of the dam.

The next RAB meeting will likely be in May, although no date has been set.

Meeting adjourned at 6:00 p.m.