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NSB NEW LONDON
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C-49-12-7-164

MINUTES OF RESTORATION ADVISORY BOARD (RAB) MEETING

To: NSB-NLON RAB Meeting Attendees and RAB Members (See attached distribution list)

From: Corey Rich of Brown & Root Environmental

Date: December 19, 1997

Subject: RAB Meeting Minutes - November 5, 1997
Installation Restoration Program
Naval Subase - New London (NSB-NLON)
Groton, Connecticut

Attendees of the meeting

Andy Stackpole	NSB-NLON
Mark Evans	Navy
Greta Deirocini	Navy
Kymberlee Keckler	USEPA Boston
Jim Murphy	USEPA Boston
Dave Peterson	USEPA Boston
Mark Lewis	CTDEP
Corey Rich	Brown & Root
Pat Hooper	Brown & Root
Mark Jonnet	Brown & Root
Susan Orrill	RAB Co-Chair Member
Harry Gibson	RAB Member
Bart Pearson	Community
Bob Jones	Regional Environmental Coordinator

The attendance sheet is included as Attachment 1.

Welcome and Introduction

Andy Stackpole opened the meeting at 7:37 p.m. He welcomed Harry Gibson as another member of the RAB. Harry Gibson stated he is a retired coast guard and just moved back this summer.

Andy Stackpole went over prior meeting minutes. No comments.

A Halliburton Company

Mark Evans gave an update on the Goss Cove Landfill – Site 8 (See Attachment 2).

Mark Evans stated the construction budget for the site is in FY99. The Navy would like to complete the FS, Proposed Plan, and ROD before that.

Bart Pearson asked of the two caps what would you consider the most permanent, and would both require monitoring.

Mark Evans stated that they both would be considered permanent. The second engineered cap is more conservative. It includes a plastic liner and would minimize any rainfall infiltration into the landfill material.

Kymberlee Keckler stated the revised draft may have different alternatives in it

Mark Evans concurred. It may include the sediment alternatives to remediate the sediments in the Cove.

Lower Base RI (Sampling Program)

Corey Rich stated that at a prior meeting he gave a summary of the RI Work Plan. Currently Brown & Root is collecting groundwater samples and should be complete in the next week or so. Some of the preliminary analytical data is back from the soil samples. They've been evaluated and a preliminary package has been submitted to the regulators. Once all the data collection activities are completed, the draft report will be submitted by the beginning of March

GIS (Geographic Information System)

Corey Rich gave a presentation on the GIS for Subase New London (See Attachment 3).

The Navy has developed a GIS for Subase New London. Brown and Root was tasked by NORTHDIV to develop this system, and the objectives were to develop a GIS that would assist the Navy in evaluating large amounts of environmental data that is collected at the sites. Because of the volumes of reports, it is difficult to find data at certain times and use it for other purposes. What the system does is gather the data from many different reports and join it into a user friendly system that the Navy, the regulators, and the public will have access to. This information will be accessed by the computer instead of volumes of reports that are generated. It will make it an easier process for the public to read through.

It also helps when you collect the data for discrete portions of the site. Also, it enables you to see the big picture of what's going on at the facility. It gives the Navy the ability to see the big picture as opposed to these discrete locations. All the existing environmental data available for the sites was assimilated from previous to current investigations.

Gathered data and relevant criteria and developed a comprehensive data base with that information. Existing mapping for the sites was acquired from different sources. Downloaded from the Internet from available mapping that was obtained from the SUBASE and took that data and linked it all together. Arc View software was used.

Some of the more specific information that was included was analytical, physical, and positional data from the different IR sites and UST sites that have been investigated. Kymberlee Keckler asked if it gives you results of the risk ranking information.

Corey Rich stated it tells you the result whether it's high, medium, or low.

Brown and Root has submitted the system to the Navy for their review. It's going to be updated continuously throughout the remaining years of investigation at the sites. This is the initial version of the GIS.

Dave Peterson asked if there are other GIS systems for the base?

Corey Rich stated there was a meeting with Public Works, and they are developing their own GIS system. At some point we will integrate the two systems. The Navy is going to include funding on each of the CTOs so that every time new data is collected, it will get put into the GIS system, and it will be updated continually and will be a good tool or warehouse of all our information. Soon both regulators, Navy and the public will have access to the GIS system. Members of the RAB could actually go down to their local library and access it on the computer via Internet. The Navy hopes to set up a web page so that everybody can access it. That could be implemented as early as next year.

Mark Jonnet from Brown & Root gave a 15 minute presentation on the capabilities of the GIS.

Bart Pearson asked what are the quality control checks and if the information is being scanned.

Mark Jonnet stated that when the information is sent to the laboratory, the information comes back electronically so that we can take this information and put it in the data base. In the past you would get paper and have someone type it in. If you have 66,000 rows of information there is potential for error. The lab analyzes it and they record it electronically. Nobody is retyping the information.

Dave Peterson asked if all the data was included or just the most recent?

Pat Hooper stated the information from the laboratory is from 1993.

Corey Rich stated that they did have to take old reports and type in the information by hand.

Dave Peterson asked if that is true on proofing the locations? Is it GPS type information or survey information?

Mark Jonnet stated the information can be inputted several ways. You could have GPS information. Depending on the quality of that, you could be within a foot or two.

Pat Hooper stated there is a field of information in the data base that describes the accuracy of that coordinate. It tells you whether or not that data was surveyed or if it was digitized from an existing map, and in some cases who did the survey and when it was performed.

Sue Orrill asked how the system handles multiple samples if you're doing a monitoring well and doing the exact test over and over again, like monitoring every three months.

Mark Jonnet stated that the way we control it is by going into the analytical data table's date field. This date field in conjunction with the first field, which is called sample, separates the two and allows you to start asking questions. You can select a well and ask your questions. Any of the fields or columns you can ask questions on.

Sue Orrill asked if the well site numbers and the soil sample numbers are the same as described in all the reports before?

Pat Hooper stated yes. The site number and the site name are in the system. The information is consistent to what is in the reports.

Dave Peterson asked if you have a data layer for bedrock and groundwater aquifers?

Pat Hooper stated if you're talking about soil cross section type information, that information is not in the system at this point. There has been talk about incorporating the drawings that we've shown cross sections. If you click on the cross section, it will show the drawing of the cross section. Time wasn't spent entering the data from boring logs. Did not go into that level of detail.

Dave Peterson asked if USGS maps were used.

Pat Hooper stated they have the main surface soil type there.

Sue Orrill asked if the off-site samples that were done just north and east of the base are included in the system

Mark Jonnet stated the information from the Thames River is captured

Corey Rich stated no. The residential area for eco-risk isn't in there either.

Sue Orrill stated she thinks it's important as far as the public is concerned to have that information included. A lot of money was spent getting those samples done and they were monitored for at least a year, in some cases longer. It would be worthwhile to have that put in there.

Corey Rich stated they have those available and location-wise can pull that up. The data is not as easily accessible at this point in time. It's in hard copy versus electronic copy.

Mark Evans agreed. It would be important from a "PR" (public relations) point of view to have the information in the system.

Sue Orrill stated she has had a few calls from people wanting her to remember that information. It would be valuable from that standpoint to be able to show and compare the data on those wells because there's a reasonable amount of data, and if you were to do that it would be very useful.

Corey Rich stated some of the samples that were collected in the Thames River, the information part of the RI, and part of the Sea Wolf dredging project are in the system.

Sue Orrill asked what other samples of soils, groundwater or surface water are not in the system.

Corey Rich stated they have tried to pull in everything that was available electronically along with the data that was available from the Phase II RI that covered 13 sites. Generally, all the different investigations that Brown and Root has done at the sites are in the system. For the most part all the IR sites are included.

Pat Hooper stated they have the majority of all the data collected in the last seven years in the system and some other contractors in the '80s which that data may not be valid at this point.

Sue Orrill stated that off-site collection was done since 1990.

Mark Evans stated for this first draft, our baseline is the Phase II RI. The data that we have since Brown and Root has been our consultant will be available to be put on very easily.

Corey Rich stated 85 to 90 percent of the data is in the system.

Sue Orrill stated she would like to know what information from about 1990 that has been collected and is not in the system, and then to decide at some point what would be reasonable to add to it.

Corey Rich stated it depends on how much you want to spend to get this minute amount of information in the system.

Sue Orrill asked if the system includes the two wells that were just put in the street.

Corey Rich stated no. It will be included in the final version.

Sue Orrill stated they are significant.

Dave Peterson asked if you are doing groundwater for the whole base, can you pull up the wells?

Pat Hooper stated it is known at which depth the water is taken. They have all the analytical data behind those samples, but it is not known in this system what soil type that aquifer is in terms of its characteristics. There's a field that talks about if it's an overburdened bedrock well. That will give you some idea of how fast the groundwater is going through the aquifer. That's the extent of what they have at this point.

Corey Rich stated they haven't gotten to the point of putting in the geologic information yet. That's something we can work towards.

Mark Jonnet stated other uses for the system are to provide data to the modelers, if there's going to be anymore groundwater modeling.

Mark Evans stated the system will be helpful when developing the work plan for the basewide groundwater operable unit. Will have all existing groundwater data and wells, and this will help better identify where there could be some data gaps.

Bart Pearson asked when do you estimate everything will be finished.

Andy Stackpole stated that most of the sites on base are identified.

Bart Pearson asked when the job will be completed.

Kymberlee Keckler stated some of the most contaminated sites should be done in the next couple years.

Mark Evans stated 2005 for most of the sites.

Sue Orrill stated she is interested in knowing what isn't in the system so there can be some evaluation of whether it really needs to be included or not.

Mark Evans stated by the next RAB meeting we can put together a list.

Pat Hooper stated they made a simplistic effort to do that. If you go into the table attributes, there's a field called source and it provides a description of what it means. A cross reference can be provided of what investigations have been included in the system, and can get into more detail later.

Dave Peterson asked with the Arc View are there limitations of how many layers you can deal with? What's the difference between that and the higher end stuff?

Mark Jonnet stated you're giving up some of the functionality. With the bigger GISs you can start to have the groundwater modeling software tied into it You wouldn't actually leave the software. You can grab the data. What they have been doing for most facilities is organizing the data up front. As time goes on the lower end software keeps picking up the functions of the higher end.

Pat Hooper stated that Arc View is more of an analytical tool. It takes the data and can do analogies.

Mark Jonnet stated this is the third version of Arc View. The first version was view only. It has grown. The key is after about a day or two of training, anybody can sit down and use this.

Jim Murphy asked when the program is available on Internet, will people be able to manipulate it.

Mark Jonnet stated they are in the process of creating a web page. A fancy computer isn't needed to execute the program.

Pat Hooper stated it will always be updated. The way they are conducting business is by distributing CDs As more data is received, it can be updated. When everything is on the web, everyone can be assured they have the latest information.

Future Meeting Date/Time

Next meeting will be February 11, 1998.

Meeting Adjourned

Meeting adjourned at 8:53 p.m..

ATTACHMENT 1

Naval Submarine Base New London

Restoration Advisory Board

Sign-In Sheet

Nov 5, 1997

Name	Organization	Address/Phone
Tymberlee Keckler	USEPA - Boston	
Sue Orrill	RAB Co Chair	
Larry Gibson	Resident	
ROBERT JONES	Navy NE Region / Groton Resident	
Jim Murphy	USEPA - Boston	
BART PEARSON	~~129~~ PUBLIC	
Mark Jonnet	BRL	
David Peterson	EPA	
Mark Evan	NORTHDIV	
COREY RICH	B&RE	
Patrick Hooper	B&RE	

ATTACHMENT 2

FEASIBILITY STUDY

SITE 8 - GOSS COVE LANDFILL

DRAFT SEPTEMBER 1997

NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CT

DETAILED DESCRIPTION ANALYSIS OF ALTERNATIVES

- NO ACTION
- CAPPING WITH INSTITUTIONAL CONTROLS AND MONITORING

ALTERNATIVE 1 - NO ACTION

- Retained as a baseline for comparison with other alternatives.

ALTERNATIVE 2 - CAPPING WITH INSTITUTIONAL CONTROLS AND MONITORING

- Alternative 2A - Solid Waste Cap
- Alternative 2B - Engineered Control Cap

ALTERNATIVE 2A - SOLID WASTE CAP

- CAP WOULD MEET THE CTDEP SOLID WASTE LANDFILL CLOSURE REQUIREMENTS
- RESTRICT USE OF SITE
- MONITORING

ALTERNATIVE 2B - ENGINEERED CONTROL CAP

- CAP WOULD PREVENT CONTACT WITH CONTAMINANTS
- (MORE CONSERVATIVE CAP)
- RESTRICT USE OF SITE
- MONITORING

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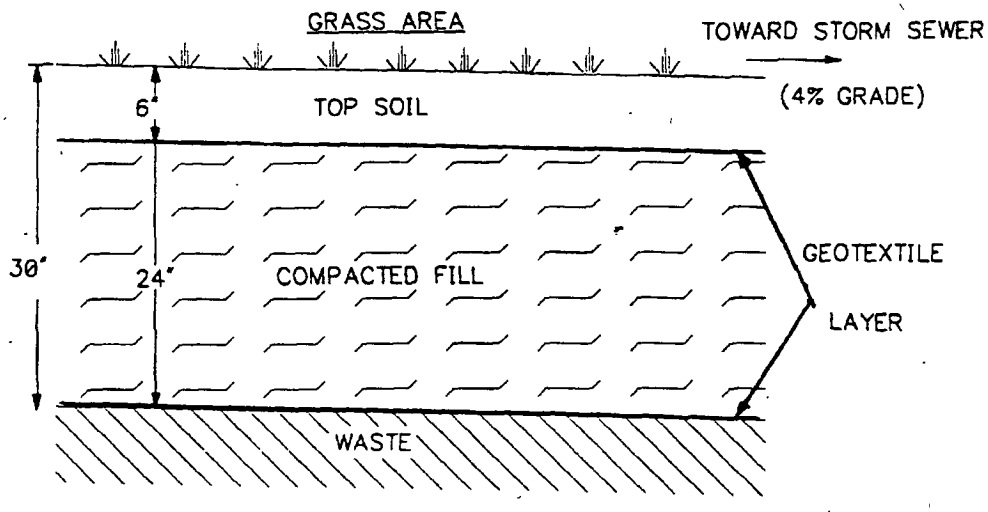

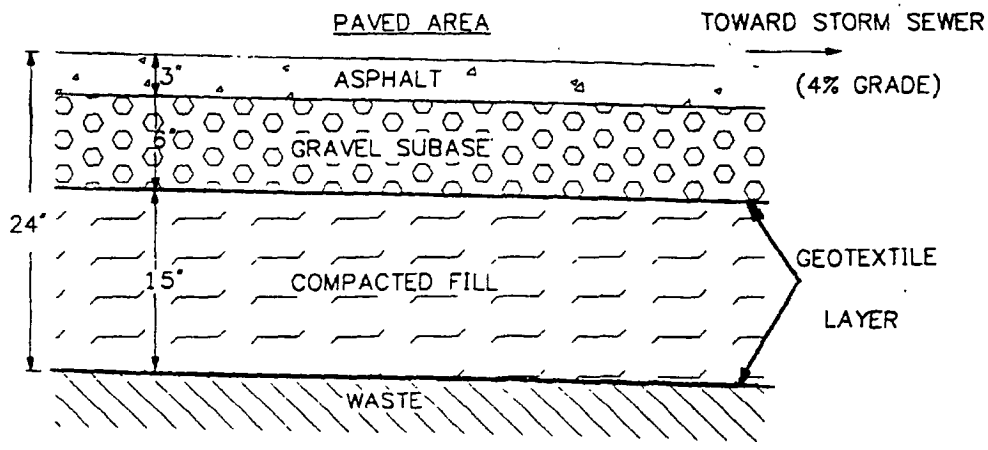

DRAWN BY JDC DATE 7/23/97	Brown & Root Environmental	CONTRACT NO. 7428	OWNER NO.
CHECKED BY GAD DATE 9/25/97	CROSS SECTIONAL SCHEMATIC OF CTDEP SOLID WASTE CAP ALTERNATIVE 2A, GOSS COVE LANDFILL NSB-NLON, GROTON, CT	APPROVED BY DATE 9/29/97	
COST/SCHED-AREA		APPROVED BY	DATE
SCALE NOT TO SCALE		DRAWING NO. FIGURE 4-1	REV. 0

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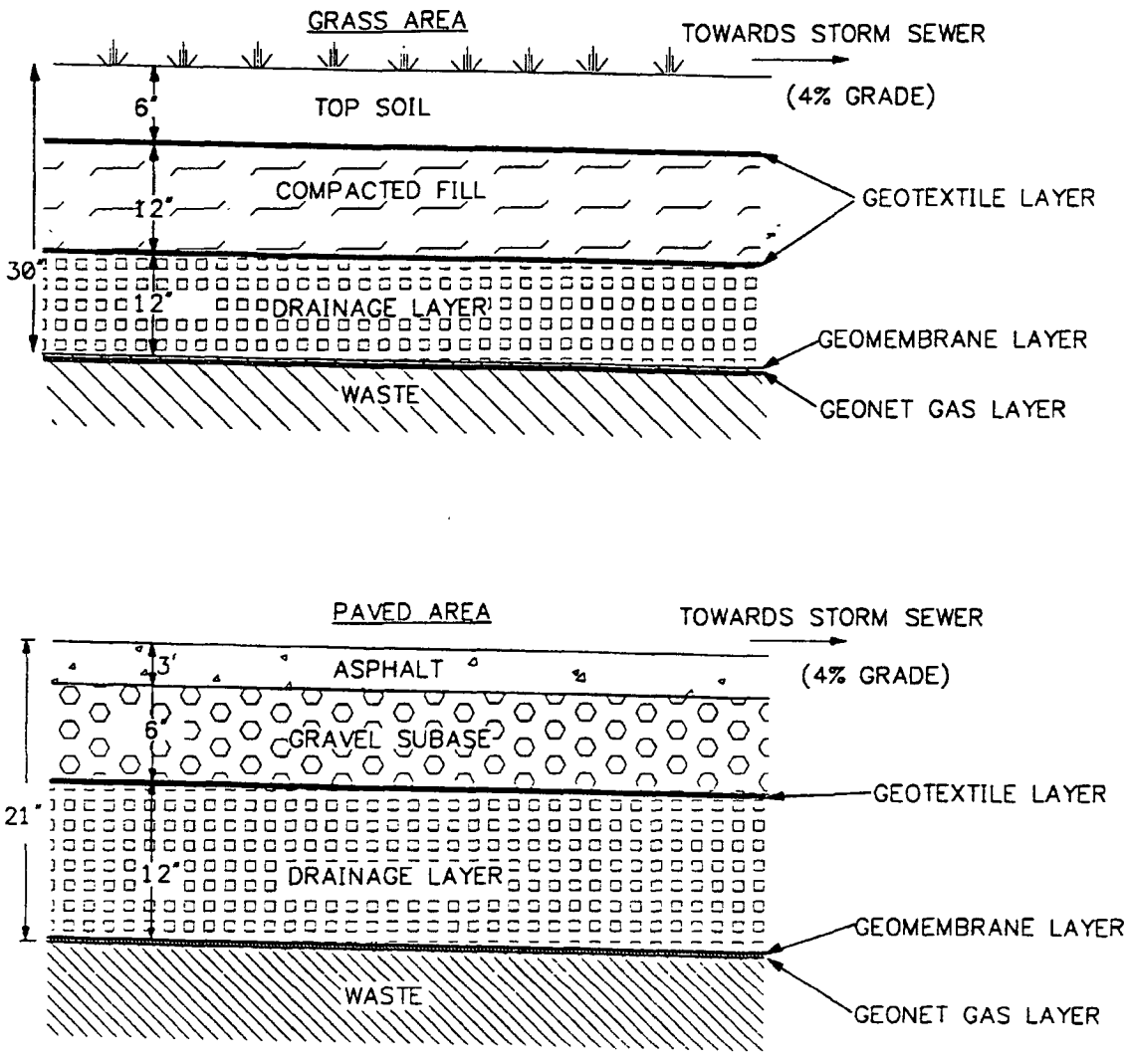

DRAWN BY HJP DATE 7/23/97	Brown & Root Environmental	CONTRACT NO. 7428	OWNER NO.
CHECKED BY CNJ DATE 9/25/97	CROSS SECTIONAL SCHEMATIC OF CTDEP ENGINEERED CONTROL ALTERNATIVE 2B, GOSS COVE LANDFILL NSB-NLON, GROTON, CT	APPROVED BY	DATE 9/25/97
COST/SCHED-AREA		APPROVED BY	DATE
SCALE NOT TO SCALE		DRAWING NO. FIGURE 4-2	REV. 0

ATTACHMENT 3

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

RESTORATION ADVISORY BOARD (RAB) MEETING
NOVEMBER 5, 1997
BROWN & ROOT ENVIRONMENTAL

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

OBJECTIVE

- Develop a GIS that will assist the Navy in managing and evaluating the large amount of environmental data that has been collected at NSB-NLON.

- The GIS should allow the Navy to see the "Big Picture" as opposed to discrete reports.

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

PROCEDURE

- Assimilate existing environmental data and relevant criteria into a comprehensive database.
- Acquire appropriate mapping of the site.
- Link data and mapping using ArcView.

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

DATA AND MAPPING

- Analytical, physical and positional data from investigation and remediation of IRP sites and select UST sites.
- Risking Ranking and Chronology of Investigations.
- Federal and State media-specific criteria.
- Existing CADD mapping.
- USGS Quadrangle maps.
- USGS Digital Orthophoto Quadrangle.
- ARCInfo mapping available over the Internet.

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

STATUS OF DEVELOPMENT

- Draft EGIS submitted to Navy for review in October 1997.
- Final EGIS will be submitted to Navy in November 1997.

GEOGRAPHIC INFORMATION SYSTEM (GIS)
NAVAL SUBMARINE BASE - NEW LONDON
GROTON, CONNECTICUT

FUTURE PLANS

- The EGIS will be updated for each new CTO and investigation.
- Both the Navy and Regulators will have access to the latest information.

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