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MINUTES OF SEPTEMBER 19, 1991 TRC MEETING

DRAFT

TO: NSB-NLON TRC Members

FROM: Paul Burgess, Project Manager
Atlantic Environmental Services, Inc.

DATE: October 3, 1991

RE: Technical Review Committee Meeting - September 19, 1991
Installation Restoration Study
Naval Submarine Base - New London
Groton, Connecticut
N62472-88-C1294
Atlantic Project No.: 1256-10-90

ATTENDEES:

The following people attended the meeting.

Charles Menzie	Menzie-Cura Associates/ Atlantic Environmental Services, Inc.
Paul Burgess	Atlantic Environmental Services, Inc.
Gene Cioffi	Crystal Springs Laboratories
Mark Leipert	NORTHDIV
Harold A. Bobowicz	CTDEP
Thomas V. Wagner	Town of Waterford
Deborah Jones	Town of Groton
LCDR G.C. Paad	COMSUBGRU TWO
LCDR Courtney McCracken	NORTHNAVFACENGCOM
Lt. Eric Odderstol	COMSUBGRU TWO REC (017)
William Hasse	Town of Ledyard
Barry Giroux	Atlantic Environmental Services, Inc.
Adrienne Townsel	NORTHNAVFACENGCOM
Jim Sebastian	EPA Community Relations
Ruth Noonan	COMSUBGRU TWO
Paul Marchessault	EPA - Boston
Robert Fromer	LEAF
Ron Ochsner	28 Partridge Hollow Road Gales Ferry
Dale Weiss	Alliance Technologies
Patti Tyler	Environmental Services, Division/ EPA Region I
Linda Mortensen	ESAT/EPA Region I

Paul Jameson	CTDEP
Matthew Hoagland	USEPA
William Mansfield	NSB-NLON

William Mansfield opened the meeting and welcomed all attendees.

Paul Burgess, Atlantic Project Manager, provided an overview of the project status, and a detailed presentation of the results and recommendations from the IR study. Individual presentations regarding each of the seven Step I sites and four Step II sites were made. Also, as part of this presentation, Charles Menzie, Ph.D, Atlantic's Risk Assessment consultant, provided an overview of health and environmental risk assessment. Dr. Menzie's presentation ~~also~~ included an explanation of the exposure scenarios considered at each of the four Step II sites. The last part of Atlantic's presentation was made by Barry Giroux, Atlantic Project Engineer, regarding three issues that will impact remedial action objectives to be developed during the feasibility study. A fact sheet regarding these issues was distributed (attached). Written comments regarding these issues should be submitted along with comments on the remedial investigation report.

During and following Atlantic's presentation, the following comments were made by TRC members. Responses when provided are included with each comment.

Comment: When will the follow-up studies recommended in the IR report be conducted?

> Adrienne Townsel indicated that it would be desirable to start these studies next season.

Comment: A few people questioned Atlantic's conclusion regarding ground water flow in bedrock at and near Area A. William Haas questioned whether the fracture network and effect of pumping wells were fully considered? Dale Weiss suggested that water supply wells should be continuously monitored to obtain more data to verify conclusions made. Another comment was made by William Haas to continue sampling offsite wells.

> Paul Burgess explained the approach used to develop the conclusions regarding ground water flow direction, which included evaluation of water level measurements at many residential wells. However, specific written comments will be considered and evaluated.

Comment: How will the proposed risk assessment regarding the Thames River be made, and will ground water flow to the Thames River be quantified?

> Paul Burgess stated that the methodology has not been developed, however, use of several techniques such as surface water sampling, mussel cages, and pore water sampling will be considered. The ground water dilution into the Thames River will be better characterized as part of this evaluation.

Comment: The Towns of Ledyard and Waterford have designated shellfish leases in the Thames River near NSB-NLON. A map of these locations will be sent to Bill Mansfield and provided to Atlantic.

Comment: How do antimony concentrations found at the Torpedo Shops compare to background values?

> Paul Burgess stated that these antimony values were higher than those measured at other locations at the Subase, and above upper limits of published data regarding background antimony concentrations in soil.

Comment: Dale Weiss indicated that there were high VOCs concentrations measured in soil gas at a few sample locations in the former gasoline station. With these findings, how did Atlantic conclude that no contamination is evident at this site?

> Paul Burgess explained that the soil gas results are qualitative. Areas with high soil gas measurements were selected for soil borings and sampling. The quantitative soil samples analysis results did not indicate the presence of significant levels of contaminants.

Comment: Were there many trends regarding deep versus shallow ground water contamination in Area A?

> Paul Burgess indicated he was not certain, however, the deeper bedrock may be more contaminated. After looking at the data, there is a general trend showing shallow ground water in the wetland area and deeper ground water in the downstream area to have higher levels of contaminants.

Comment: Robert Fromer stated that air monitoring for VOCs in ambient air should be conducted. Charles Menzie indicated that conservative models were used to predict VOCs in indoor confined areas such as basements. In most cases, little or low risk was predicted. Ambient air levels are expected to be much lower and not of any significance regarding risk.

Comment: Tom Wagner questioned whether or not an evaluation of historical low level radioactive waste management had been conducted as part of the IR studies.

> William Mansfield indicated it was outside the scope of the IR project.

Comment: Robert Fromer asked if radiological surveys have been conducted?

> Paul Burgess indicated that as part of this study such a survey was performed by Atlantic's subcontractor Radiation Safety Associates, Inc. Furthermore, every soil sample was field screened for radiological contamination. No such contamination was detected. In addition, ground water in the landfill areas was tested for radiological parameters.

Comment: Gene Cioffi suggested that the Connecticut Department of Health Services has information regarding background levels of radiological parameters in drinking water that should be evaluated by Atlantic.

Paul Burgess indicated that Atlantic will pursue this information.

Comment: Dale Weiss suggested that site specific background concentrations should be developed rather than relying on published information.

Comment: Paul Marchessault suggested that the overflow from North Lake to the drainage along the south side of the lake should be eliminated to prevent contamination of North Lake from the possible overflow from this drainage into North Lake. Bill Mansfield said this was a good idea and it will be considered.

Comment: Matthew Hoagland, USEPA, stated that a more global look should be made of ground water flow rather than evaluating each site individually, and expressed concern that no ground water monitoring wells were installed at the Step I sites where no further action is being recommended.

Comment: Robert Fromer indicated that dilution should not be relied on as a remedial solution. Contaminated sources should be remediated.

Comment: Paul Jameson of the CTDEP indicated that the state soil TBC level for lead is 20 ppb not 50 ppb as indicated in the report and that the TCLP is the test used by the CTDEP. He also stated that the state probably will want all remedial action objectives to meet state soil disposal guidelines and to provide for restoration of all ground water to drinking water quality.

Comment: On page 4-13, the PCE value of 5 ppb is an ARAR, not a TBC.

Comment: Paul Marchessault indicated that the EPA's selection of remedy can only consider promulgated state standards as ARARs.

William Mansfield said that he has received many diverse comments regarding the TRC committee charter. As a result, the charter will be tabled.

Bill Mansfield reminded everyone that written comments on the remedial investigation report are due by October 15, 1991.

→ STATE asked for extension on submission of comments & will send letter to Navy to that effect.

IR Program
Naval Submarine - New London, Groton, Connecticut

ISSUE	POSITION
Are drinking water standards ARARs for the DRMO and Lower Subase?	Ground water in these areas is not now and will not be used as a source of drinking water due to high salt content. Ground water flow direction is well defined and into the Thames River which is not an existing or potential future source of drinking water. For these reasons, drinking water standards are not ARARs at these two sites.
Are AWQC ARARs for Area A surface waters?	It is not the State's goal to have this stream be a source of drinking water and there are no AWQC for the metals present regarding fish consumption, therefore, there are no relevant and appropriate AWQC for human exposure. AWQC for aquatic life are also not relevant and appropriate as it is unlikely that sensitive species reside in these waters. The exceedance of AWQC were slight and copper concentrations although above AWQC were the same as in upstream samples collected from the Thames River. For these reasons, AWQC are not relevant and appropriate for Area A surface waters.
Should state soil clean-up guidelines be used as remedial action objectives?	These standards were developed to protect water quality and are based on conservative assumptions that relate soil concentrations to ground water concentrations. Metals standards in these guidelines are based on EP-Toxicity results not TCLP test results. TCLP is the test used at the NSB-NLON and is a more aggressive test than the EP-Toxicity, resulting in higher extract concentrations. There is good data regarding ground water quality at this site, therefore, in areas with ground water that is already of acceptable quality, there is no need for soil clean-up where no other risks exist. In areas with unacceptable ground water quality or risks, source removal/remediation is desirable, however, clean-up standards will be based on assumptions that relate soil concentrations to potential ground water concentrations more accurately than those used in the State Soil Clean-up Guidelines.

MINUTES OF SEPTEMBER 19, 1991 PUBLIC MEETING

TO: Commander Nelson Goddard
Adrienne Townsel
William Mansfield

FROM: Paul Burgess, Project Manager
Atlantic Environmental Services, Inc.

DRAFT

DATE: October 3, 1991

RE: Public Meeting - September 19, 1991
Installation Restoration Study
Naval Submarine Base - New London
Groton, Connecticut
N62472-88-C1294
Atlantic Project No.: 1256-10-90

ATTENDEES:

The following people attended the meeting.

Steve M. Buchanan	Groton Church of Christ
Terry L. Buchanan	Gales Ferry Division of Baroco
Paul Jameson	CTDEP
Jim Sebastian	EPA - Community Relations
Remedios B. Nikonowich	1053 Long Cove Road Gales Ferry
Lt. Eric Odderstol	SUBGROUP TWO REC
Norman Richards	29 Attawan Avenue Niantic
Winifrid A. Pearson	1292 Route 12 Groton
Bart Pearson	1292 Route 12 Groton
Mr. Vivirito	1458 Route 12 Gales Ferry
Sue Pezzullo	7 Pinelock Drive Gales Ferry
John Mudjett	1444 Route 12 Gales Ferry
Robert R. Smith	1037 Long Cove Road Gales Ferry

Gertrude R. Smith	1037 Long Cove Road Gales Ferry
Mark Leipert	NORTHDIV
Paul Burgess	Atlantic Environmental Services, Inc.
Barry Giroux	Atlantic Environmental Services, Inc.
William Mansfield	NSB-NLON
Adrienne Townsel	NORTHNAVFACENGCOM
LCDR Ruth Noonan	COMSUBGRU TWO
Commander Goddard	NSB-NLON
LCDR Courtney McCracken	NORTHNAVFACENGCOM

Commander Goddard opened the meeting and welcomed all attendees.

Paul Burgess, Atlantic Project Manager, provided an overview of the project status, and a detailed presentation of the results and recommendations from the IR study. Individual presentations regarding each of the seven Step I sites and four Step II sites were made. Also, as part of this presentation, Charles Menzie, Ph.D, Atlantic Risk Assessment consultant, provided an overview of the health and environmental risk assessment.

Following the presentation, Commander Goddard opened up the meeting to written and oral questions for the technical panel. The technical panel consisted of William Mansfield, Charles Menzie, Paul Burgess, and Adrienne Townsel.

The following questions were received. The first set of questions were written. Responses when given are also provided.

Question 1: What is the time-frame for completion of the feasibility studies at Area A, DRMO, and the Lower Subase and for the follow-up studies at the Step I sites?

> Paul Burgess indicated that the feasibility study is scheduled to be completed in August of 1992. Adrienne Townsel said that possibly the follow-up work at the Step I sites would be conducted next season.

Alt not eval + selected for any sites. RA start difficult to quantitate

Question 2: Mr. Vivirito questioned the relationship between ground water levels and the one occurrence of cadmium in his and an adjacent well. Perhaps at certain times of the year, there is some ground water flow from the Navy Subase towards his property. What was the ground water elevation in his well and Area A at the time of sampling when cadmium was detected?

> Paul Burgess indicated that his comments would be taken into consideration, and that we would assess existing ground water level measurements at Area A to determine any trends.

Question 3: Why is North Lake so clean when it is located downstream of Area A?

> Commander Goddard explained that the pond is filled with water from the City of Groton and that the streams which discharge from Area A flow around rather than through North Lake.

Lieutenant Commander Ruth Noonan explained the Navy would be conducting interviews to aid in the preparation of a Community Relations Plan. She asked any persons interested in being interviewed to contact her.

Commander Goddard thanked everyone for their interest and closed the meeting.