



**DEPARTMENT OF ENERGY
Schenectady Naval Reactors Office
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**SNR/WFO O#98-007
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File

**MEETING BETWEEN NAVAL REACTORS, US ARMY CORPS OF ENGINEERS, AND
STATE OF CONNECTICUT REPRESENTATIVES TO DISCUSS CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION CONCERNS RELATED TO
RESIDUAL RADIOACTIVITY IN GOODWIN POND DRAINAGE BROOK**

Date: February 19, 1998

Location: Connecticut Department of Environmental Protection
Hartford, Connecticut

Participants:

Naval Reactors

T. H. Beckett, Associate Director for Regulatory Affairs
J. J. Mangeno, Director, Nuclear Technology Division
C. G. Overton, Chief, Windsor Field Office
S. J. Wenderoth, Counsel, Naval Sea Systems Command

US Army Corps of Engineers

C. B. Orgel, Program Manager, FUSRAP, North Atlantic Division
T. Smolen, Counsel, New England District
D. J. Waskiewicz, Project Manager, FUSRAP, New England District

Connecticut Department of Environmental Protection

D. Galloway, Supervising Radiation Control Physicist, Air Monitoring and Radiation Division

State of Connecticut, Office of the Attorney General

K. Massicotte, Assistant Attorney General
D. H. Wrinn, Assistant Attorney General

Purpose: This meeting was requested by Galloway of the Connecticut Department of Environmental Protection (CTDEP) to resolve the State's concern that the S1C Environmental Impact Statement did not adequately address residual radioactivity in the Goodwin Pond drainage brook resulting from S1C Site operations.

Summary: The US Army Corps of Engineers (USACE) presented its plans for remediation of the Combustion Engineering (CE) Windsor Site under the Formerly Utilized Sites Remedial Action Program (FUSRAP). The USACE plans to initiate field work to characterize the CE Windsor Site starting in March or April 1998 with remedial actions being completed in 2004. The State expressed some concern that the USACE

plans indicated slippage from the schedule presented by the Department of Energy in May 1997. The USACE reassured the State that plans are essentially on schedule.

A draft letter from Admiral Bowman to the CTDEP Commissioner addressing the State's concerns was marked up based on comments from the CTDEP and the Connecticut Attorney General's (CTAG's) Office. CTDEP (Galloway) and CTAG (Wrinne) stated that the draft letter appeared to address the State's need for additional assurance from Naval Reactors on its participation in FUSRAP remedial activities for the Goodwin Pond drainage brook. Galloway said he needed to review the letter internal to the CTDEP and with the Commissioner before he could state that it resolved the State's concerns.

Background: Naval Reactors and State of Connecticut representatives last met on May 8, 1997, to discuss how concerns outlined by the Connecticut Department of Environmental Protection (CTDEP) in its letter to the Director, Naval Nuclear Propulsion Program dated February 18, 1997, could be resolved. The CTDEP's concerns centered on three issues the CTDEP considered to be inadequately addressed by Naval Reactors' Environmental Impact Statement for the disposal of the S1C prototype reactor plant:

- 1) Naval Reactors' commitment to cleaning up the S1C Site to the unrestricted release criteria of 15 mrem/year from all man-made sources of radioactivity, with no more than 4 mrem/year coming from the ingestion of water.

- 2) Characterization of the S1C Site to determine the extent of radiological contamination.

- 3) The need to address residual radioactivity in the Goodwin Pond drainage brook associated with S1C Site operations.

The May 8, 1997 meeting concluded with all parties agreeing that continued dismantlement of the S1C Site was of mutual interest and that an exchange of clarifications on the issues would resolve CTDEP's concerns. CTDEP (Rocque) agreed to take the lead for determining whether jointly signed minutes of this meeting would meet CTDEP's needs or whether an exchange of correspondence was preferred. CTDEP (McCarthy) also agreed to take the lead for drafting the language that would be used in either format. After that meeting, CTDEP (Galloway) requested WFO (Overton) to draft an Admiral-signed letter as the proposed format to resolve these issues.

On May 21, 1997, Naval Reactors provided the CTDEP with a draft letter from Admiral Bowman to respond to Rocque's February 18, 1997 letter. On July 29, 1997, the CTDEP provided Windsor Field Office (WFO) with its version of a letter. On August 8, 1997, WFO hand delivered Naval Reactors' proposed changes to CTDEP's July 29, 1997, draft letter. On December 2, 1997, the CTDEP (McCarthy) informed WFO (Overton) that the Connecticut Attorney General's Office (CTAG) considered that Naval

Reactors' August 8, 1997, proposed changes inadequately addressed the brook. The other two issues (release criteria and S1C Site characterization) appeared to be resolved to the CTDEP's satisfaction.

When Galloway called Overton on January 22, 1998, to arrange a meeting between Naval Reactors, the State, and the US Army Corps of Engineers [The USACE had assumed responsibility for the Formerly Utilized Sites Remedial Action Program (FUSRAP) from the Department of Energy (DOE) in October 1997], he characterized the August 8, 1997, Naval Reactors-proposed draft as still lacking the teeth that the State would like it to have. Galloway said that the State continued to be concerned that Naval Reactors will finish S1C Site dismantlement and walk away from the Site well in advance of FUSRAP remediating the brook. The State wants a commitment that ensures that Naval Reactors will stay involved after the Site is dismantled and the property is transferred. Galloway said the State would also like the letter to have a time frame during which FUSRAP will remediate the CE Windsor Site (including the brook).

FUSRAP Activities at the CE Windsor Site: Naval Reactors (Mangeno) began the subject meeting by suggesting that the USACE discuss the plans for FUSRAP actions at the CE Windsor Site. Orgel said that on October 14, 1997, Congress chartered the USACE to take over FUSRAP from the DOE with the dual mandate to clean up the FUSRAP sites efficiently and promptly. As an indication of the USACE's priority for meeting the dual mandate, Orgel noted that the USACE is tracking status of FUSRAP actions weekly. Orgel added that the USACE had begun meeting with Congressional staffers to inform them of FUSRAP status. She stated that a 90-Day Report to Congress providing the USACE's assessment of FUSRAP and the feasibility of cleaning up all FUSRAP sites by the end of 2002 was at the Office of Management and Budget and would be released shortly.

Orgel explained that FUSRAP is being executed through the USACE's Geographic Districts. She introduced Waskiewicz as the USACE New England District Project Manager for the CE-Windsor Site. She noted that Waskiewicz has radiological cleanup experience from the USACE's decommissioning of the Watertown Arsenal Reactor and its associated research and development support buildings. Waskiewicz began by stating that characterization of the CE Windsor Site would begin in 1998. Remediation was planned to occur between 2001 and 2004. Waskiewicz said that the USACE planned to reinstate finalization of the FUSRAP Sampling and Analysis Plan for the CE Windsor Site and would rebrief interested parties in March 1998. Galloway expressed concern that FUSRAP was backing off of FUSRAP plans for the CE Windsor Site previously provided by DOE in May 1997. Waskiewicz responded by stating that initial walkover surveys will be started in March or April and that SAIC (Science Applications International Corporation) will continue to be the FUSRAP characterization and analysis contractor for CE Windsor Site. Waskiewicz said that the timing of these actions was consistent with the DOE schedule. Waskiewicz also noted that another contractor (Oak Ridge Associated Universities (ORISE)) had recently conducted surveys of the Rappaport Building in Windsor Town Center to determine if that building

should be designated into FUSRAP. Galloway asked if the timeline Waskiewicz described would be provided in writing. Orgel explained that it was included in the USACE 90-Day Report to Congress. Orgel committed to provide Galloway with a copy of the report as soon as the report was released. She added that budget plans were recently provided to Congressional staffers as well.

[Attachment 1 is a copy of the DOE FUSRAP proposed schedule for the CE site presented during the May 1997 meeting at the CE Windsor Site. Note that the schedule shows field characterization beginning in June 1998; however, the DOE had indicated intentions of accelerating that schedule slightly. This appears to be the source of Galloway's conclusion that the USACE was backing off of the DOE's schedule.]

Waskiewicz explained that the USACE will be following the CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) model for FUSRAP remediation. Waskiewicz stated that the USACE will be involving all interested parties in the process. He said schedules were still tentative because the USACE was waiting for the 90-Day Report to be finalized. Orgel also noted that the full amount of Congressional funding was not firmed up at this point. Galloway suggested that the USACE discuss the following during the March 1998 rebrief of the CE Windsor Site Sampling and Analysis Plan: 1) Characterization that has been done to date; and 2) where the USACE thinks it needs to perform additional characterization.

Waskiewicz then described the areas on the CE Windsor Site which have already been designated into FUSRAP. Discussion on the designation criteria (e.g., >20% enrichment for uranium) and the origin of uranium contamination ensued. Mangeno pointed out that uranium contamination resulted from both CE's Atomic Energy Commission and commercial activities. Galloway gave additional background on the origin of radioactivity at the CE Windsor Site for the CTAG representatives' benefit. Wenderoth pointed out that the commingled nature of the CE radioactivity will most likely result in all parties sitting down and negotiating a share of the cost for the cleanup similar to Principal Responsible Parties negotiations for CERCLA actions. USACE would have the lead regarding Government contamination. Wrinn asked if the split had been determined. Mangeno said that the split was still not defined but will depend on the results of the USACE's detailed characterization. Overton noted that less than 20% of the brook samples taken by KAPL in 1991 had enrichment values of greater than 20% (subsequent to the meeting, a check of the 1991 sampling data shows only five of 123 samples taken contained enrichment values above 20%).

Galloway expressed concern that negotiations over the cleanup would continue to drag out. He said that FUSRAP may go into the CE Windsor Site and clean up contamination with greater than 20% enrichment and that CE would leave the remaining uranium contamination for a future undetermined cleanup. Wrinn then asked how Naval Reactors fits in. Wenderoth said the USACE would have the lead for the Federal Government, and that Naval Reactors will provide support as requested by the

USACE. Mangeno noted that Naval Reactors has a long-term commitment to the State of Connecticut that will remain beyond the time the S1C Site is released for unrestricted use. Mangeno added that Naval Reactors wants to maintain a good relationship with the State based on continuing Naval Reactors activities at Submarine Base New London and Electric Boat's shipyard in Groton.

CTAG (Massicotte) asked if CE had given any indication on their commitment to cleaning up areas of uranium contamination at the CE Windsor Site that fall outside of the FUSRAP designation criteria. Overton responded that CE had verbally committed during the May 1997 presentation of the CE Windsor Site Sampling and Analysis Plan by DOE to achieve a single cleanup action for those areas containing mixed Government and CE waste. CE wants FUSRAP to take the lead in site characterization and remediation while negotiating with CE to determine the cost share. Massicotte asked if there was any legally-binding agreement. USACE (Smolen) said that there was no current agreement but that a legally binding settlement agreement in the form of a contract would be established between the USACE and CE before cleanup began. The CTAG representatives expressed concern that the State would not have legal leverage over a contract if cleanup lags behind. Wenderoth suggested that if the State was unhappy with the progress being made at the CE Windsor Site, it would still have its state authority. Beckett asked if the cleanup contract would be a Government contract or a CE contract. Orgel answered that it would be a Government contract with reimbursement by CE. Beckett followed up by pointing out that the fact that the cleanup would be under a Government contract should help alleviate some of the State's concerns that negotiations over "who cleans up" what would delay the start of any clean up at the CE Windsor Site; USACE indicated a definitive cost sharing arrangement was not required to initiate remedial action. Massicotte stated it was the State's desire to have the cleanup done effectively and promptly. There was general agreement by all parties that there should be only one cleanup.

Letter from Admiral Bowman to CTDEP Commissioner: The meeting discussion shifted to a revised draft letter from Naval Reactors. Wrinn and Galloway reviewed the draft letter and a copy of the letter was marked up to incorporate clarifications and editorial changes. Galloway stated that the CTDEP would need to review the letter internally and with the CTDEP Commissioner. Galloway added that the letter appeared to address the State's concerns.

Wrinn noted that Naval Reactors planned to have the S1C Site ready for unrestricted release in 2000. Wrinn questioned whether there were any concerns that remedial actions on the CE Windsor Site subsequent to 2000 could impact the unrestricted release status of the former S1C Site. Orgel answered stating that plans for any remedial actions at the CE Windsor Site would include mitigative actions necessary to prevent impacts on clean property. Under the USACE proposed CERCLA model for FUSRAP cleanups, these plans would be presented to the public, regulators, and other interested parties before any remediation began so the State would have an opportunity to provide input at that time. Mangeno added that the State would

ultimately have the final say over this concern for the S1C Site because the CTDEP's approval was required for transfer of the S1C Site land. Beckett noted that Naval Reactors will continue to support USACE as requested during the CE Windsor Site remedial design phase.

Conclusion: Galloway restated his plans to review the draft letter from Admiral Bowman to the CTDEP Commissioner internal to the CTDEP and with the Commissioner. Mangeno committed to promptly providing a cleaned up draft letter for Galloway's use (a cleaned up copy was provided to Galloway by Overton on February 20, 1998).

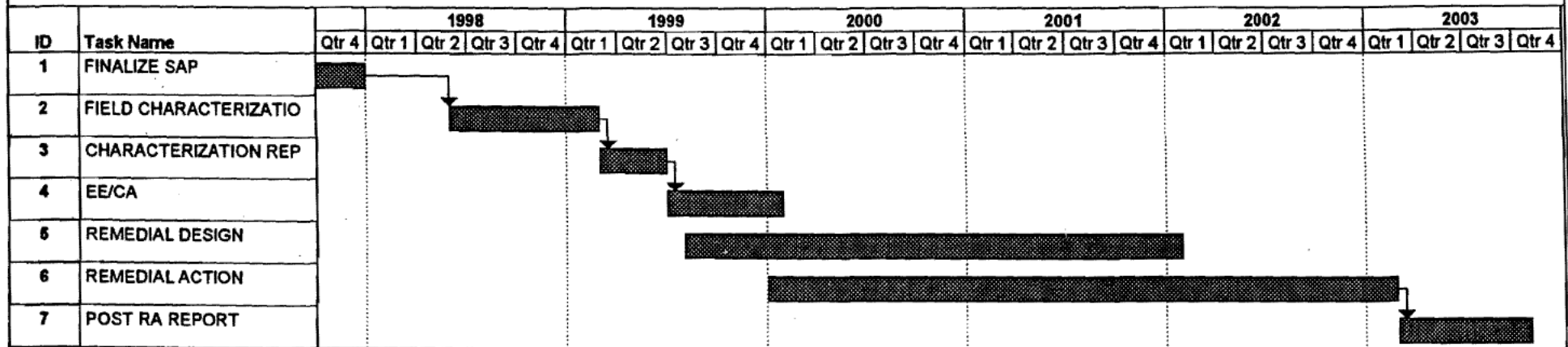
Wrinn said that the slippage of FUSRAP plans for the CE Windsor Site concerned him. Orgel responded by stating that field work would be starting about the same time as the DOE schedule, with the remediation process concluding about one year later than when the DOE had planned. Wenderoth interjected that the USACE has substantial incentive, based on Congressional mandates, to remediate the CE Windsor Site quickly. Beckett noted that USACE has demonstrated the capability to succeed in a cleanup of this scope. Wrinn acknowledged these facts, but commented that the USACE was hedging their plans by stating that the schedule was subject to Congressional funding. In contrast, Wrinn stated that Naval Reactors moves much more quickly and had never qualified its plans for S1C Site dismantlement with a statement of "subject to funding from Congress." [Subsequent to the meeting, Beckett noted the Record of Decision for the S1C Environmental Impact Statement stated that Naval Reactors work would be performed subject to availability of funding.] USACE closed this discussion by indicating the issue was not whether it will get funding, but rather how much. USACE anticipated close to full funding, given the large Congressional oversight of FUSRAP.


C. G. OVERTON

Attachment 1: DOE FUSRAP proposed schedule for the CE Windsor Site presented during the May 1997 meeting at the CE Windsor Site

cc: C. H. Schmitt, NR
J. J. Mangeno, NR
T. H. Beckett, NR
A. C. Smith, NR
C. E. Pearson, NR
S. J. Wenderoth, NAVSEA
P. E. Salm, SNR
H. J. Van Dyke, SNR

FUSRAP
PROPOSED CE CHARACTERIZATION/REMEDIATION SCHEDULE



Project: CESCHEDULE
Date: Fri 5/2/97

Task

Progress

Milestone

Summary

Rolled Up Task

Rolled Up Milestone

Rolled Up Progress