

SENECA ARMY DEPOT

TECHNICAL REVIEW COMMITTEE



HAND OUTS

JUNE 1993

TECHNICAL REVIEW COMMITTEE

HANDOUT

INDEX

SECTION	TITLE
I	AGENDA FOR JUNE 9, 1993 TRC MEETING
II	SITE BRIEFING STATUS UPDATE NOTES
III	ASH LANDFILL AND OB GROUNDS FIELDWORK OVERVIEW NOTES
IV	USEPA and NYSDEC TRC CHARTER COMMENTS
V	TRC CHARTER REVISIONS ILLUSTRATED
VI	REVISED TRC CHARTER

I

AGENDA FOR JUNE 9, 1993 TRC MEETING

FINAL AGENDA
FOURTH MEETING OF THE SENECA ARMY DEPOT
TECHNICAL REVIEW COMMITTEE (TRC)

Location:
Seneca Army Depot
Officers Club

WEDNESDAY, JUNE 9, 1993

- 12:30-12:35 **Welcome**
 Colonel James B. Cross, Seneca Army Depot, Commanding Officer
- 12:35-1:15 **Site Briefing Status Update**
 Kevin Healy, Huntsville Division US Army Corps of Engineers
- 1:15-2:00 **Phase II Ash Landfill and OB Grounds Fieldwork**
 Update
 Engineering Science (ES) Inc. of Boston MA.
- 2:00-2:15 **TRC Charter Finalization**
 Jim Miller, Seneca Army Depot
- 2:15-2:30 **PSCR Draft & Information Repository**
 Randy Battaglia, Seneca Army Depot
- 2:30-3:00 **Question & Answer Session**
- 3:00-3:15 **Set Date & Agenda for next TRC meeting**
 Open Discussion

Any questions regarding this agenda should be directed to
Seneca Army Depot, Mr. James Miller (607) 869-1532

II

SITE BRIEFING STATUS UPDATE NOTES

presentation by

U.S Army Corps of Engineers, Huntsville Division

(Kevin Healy- Senior Technical Project Manager)

GLOSSARY OF TERMS

AREA OF CONCERN (AOC) - EITHER (A) A *SOLID WASTE MANAGEMENT UNIT (SWMU)* WHERE RELEASES OF HAZARDOUS SUBSTANCES MAY HAVE OCCURRED OR (B) LOCATIONS WHERE THERE HAS BEEN A RELEASE OR THREAT OF A RELEASE INTO THE ENVIRONMENT OF A HAZARDOUS SUBSTANCE, POLLUTANT OR CONTAMINANT UNDER *CERCLA*.

CERCLA - ACRONYM FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980. THIS WAS THE LEGISLATION THAT SET UP THE SUPERFUND PROGRAM, WHICH IS THE PROGRAM UNDER WHICH THE WORK AT SENECA AD IS BEING CONDUCTED. *RI/FS* IS OFTEN USED AS A GENERIC TERM TO REFER TO THE OVERALL *CERCLA* PROCESS.

PRELIMINARY ASSESSMENT (PA) - FIRST STEP IN THE *CERCLA* PROCESS. SUCH AN ASSESSMENT INVOLVES RECORD SEARCHES, INTERVIEWS AND OTHER RESEARCH REQUIRED TO DETERMINE PAST PRACTICES AND THE POTENTIAL FOR PAST CONTAMINATION.

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) - THIRD STEP IN THE *CERCLA* PROCESS. THE PURPOSE IS TO DEFINE AND DELINEATE CONTAMINATION CONFIRMED DURING THE *SITE INVESTIGATIONS (RI)* AND STUDY ALTERNATIVES FOR REMEDIATION (FS).

GLOSSARY OF TERMS (CONTINUED)

SARA - ACRONYM FOR THE "SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT" OF 1986. THIS WAS LEGISLATION REQUIRED TO REAUTHORIZE AND EXTEND THE ORIGINAL CERCLA LEGISLATION.

SITE INVESTIGATION (SI) - SECOND STEP IN THE CERCLA PROCESS. INVESTIGATIONS INVOLVE ACTUAL FIELD SAMPLING IN ORDER TO CONFIRM/DENY SUSPICIONS THAT WERE RAISED IN THE PRELIMINARY ASSESSMENT.

SOLID WASTE MANAGEMENT UNIT (SWMU) - ANY DISCERNABLE WASTE MANAGEMENT UNIT FROM WHICH HAZARDOUS CONSTITUENTS MIGHT MIGRATE IRRESPECTIVE OF WHETHER THE UNIT WAS INTENDED FOR THE MANAGEMENT OF SOLID AND/OR HAZARDOUS WASTE.

TRICHLOROETHYLENE (TCE) - MAIN CONTAMINANT AT THE ASH LANDFILL. IT IS KNOWN AS A VOLATILE ORGANIC COMPOUND (VERY HIGH VAPOR PRESSURES CAUSE RAPID VOLATILIZATION). TCE WAS USED EXTENSIVELY IN ARMY AND PRIVATE MANUFACTURING/MAINTENANCE OPERATIONS AS A SOLVENT, MOST NOTABLY FOR DEGREASING METAL MACHINE PARTS. IT IS NOW CONSIDERED A SUSPECTED CARCINOGEN. IT IS ALSO KNOWN AS TRICHLOROETHENE AND ITS BREAKDOWN PRODUCTS ARE DICHLOROETHYLENE AND VINYL CHLORIDE.

FOURTH MEETING OF THE

**TECHNICAL REVIEW
COMMITTEE**

SENECA ARMY DEPOT

9 JUNE 1993

STATUS UPDATE

ASH LANDFILL AND OPEN BURNING GROUND SITES

REMEDIAL INVESTIGATIONS

- o PHASE I COMPLETED**
- o PHASE II WORK**
 - COMPLETED AT OB GROUNDS**
 - DELAYED DUE TO WEATHER CONDITIONS AT THE ASH LANDFILL. COMPLETION EXPECTED BY LATE SUMMER**
- o RI REPORT/FEASIBILITY STUDY FINALIZATION EXPECTED BY SPRING 1994**
- o RECORD OF DECISION FINALIZATION EXPECTED BY LATE 1994**

SOLID WASTE MANAGEMENT UNITS

STATUS UPDATE

**SENECA ARMY DEPOT'S
HIGH PRIORITY AREAS OF CONCERN**

HIGH PRIORITY AREAS OF CONCERN

- SEAD-4 MUNITIONS WASHOUT FACILITY LEACH FIELD**
- SEAD-11 OLD CONSTRUCTION DEBRIS LANDFILL**
- SEAD-13 IRFNA DISPOSAL SITE**
- SEAD-16 ABANDONED DEACTIVATION FURNACE - BLD. S-311**
- SEAD-17 EXISTING DEACTIVATION FURNACE - BLD. 367**
- SEAD-24 ABANDONED POWDER BURNING PIT**
- SEAD-25 FIRE TRAINING AND DEMONSTRATION PAD**
- SEAD-26 FIRE TRAINING PIT**
- SEAD-45 OPEN DETONATION GROUNDS**
- SEAD-57 EXPLOSIVE ORDNANCE DISPOSAL AREA**

SITE INVESTIGATIONS

- o FINAL WORK PLAN REVISIONS EXPECTED BY JULY 1993**
- o SI FIELD WORK INITIATED BY SEPTEMBER 1993. ACTUAL CONTRACTS FOR IMPLEMENTATION HAVE BEEN AWARDED.**

STATUS UPDATE

**SENECA ARMY DEPOT'S
MODERATE PRIORITY AREAS OF CONCERN**

03:05PM CIVIC STRUCTURES

SITE INVESTIGATIONS

- o WORK PLAN PREPARATION ON-GOING**
 - COMPLETION OF DRAFT BY JULY 1993**
 - REGULATORY REVIEW AND REVISION**
DURING SUMMER 1993
 - INITIATION OF FIELD WORK BY FALL 1993**

MODERATE PRIORITY AREAS OF CONCERN

SEAD-5

SEAD-59

SEAD-9

SEAD-60

SEAD-12

SEAD-62

SEAD-43 **

SEAD-63

SEAD-44

SEAD-64

SEAD-46

SEAD-67

SEAD-50 *

SEAD-68

SEAD-54 *

SEAD-69 **

SEAD-56 **

SEAD-70

SEAD-58

SEAD-71

* SWMU'S 50 AND 54 WILL BE INVESTIGATED AS ONE AOC.

** SWMU'S 43, 56 AND 69 WILL BE INVESTIGATED AS ONE AOC.

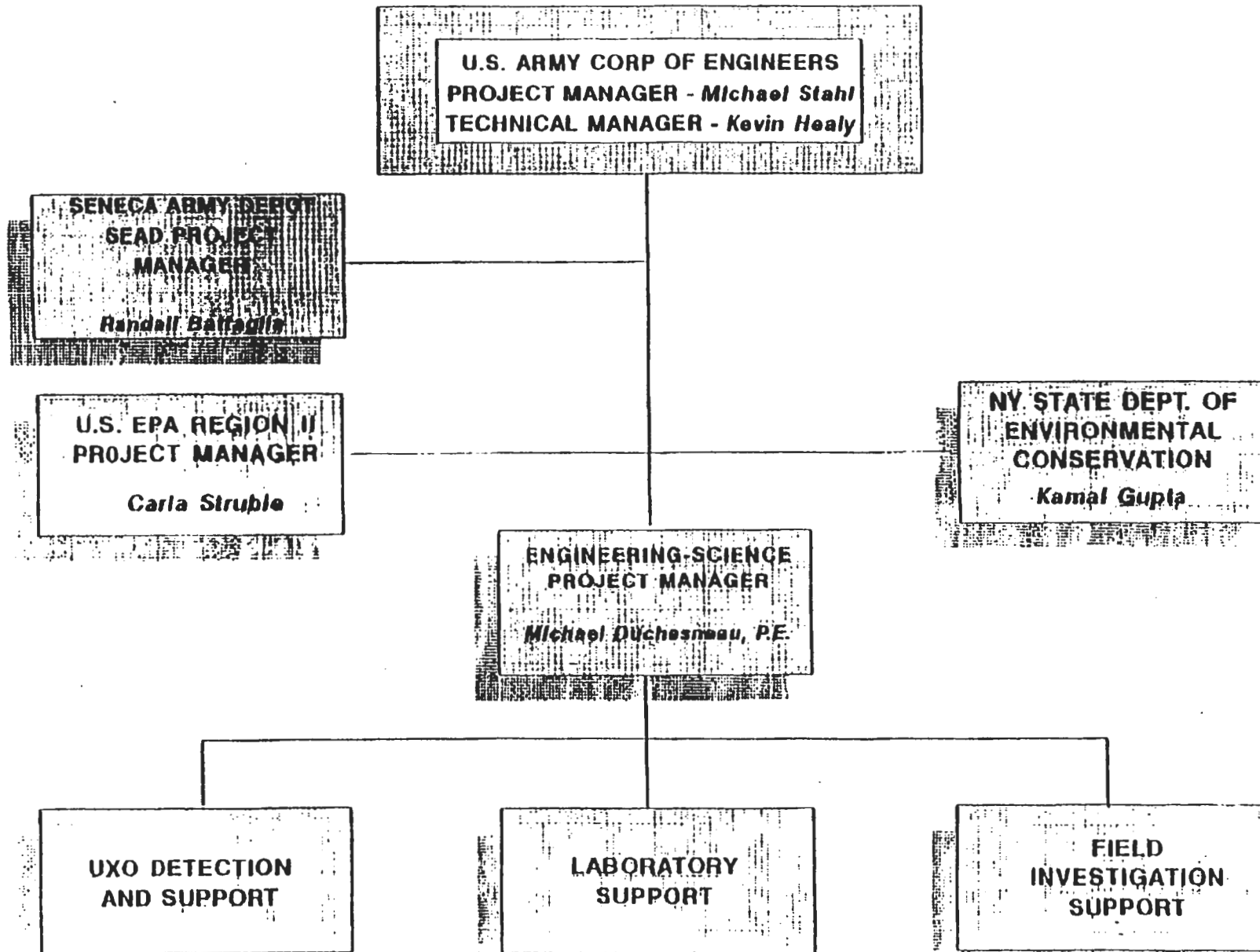
III

Phase II Fieldwork Update Overheads

prepared by

**Michael N. Duchesneau, Senior Environmental Engineer
Engineering Science, Inc.**

SENECA ARMY DEPOT PROJECT ORGANIZATION CHART



REMEDIAL INVESTIGATION (RI) OF THE FORMER OPEN BURNING GROUNDS & ASH LANDFILL

INVESTIGATIVE APPROACH AT THE OB GROUNDS

TWO-PHASED PROGRAM

CONSTITUENTS TO BE EVALUATED

- Explosives
- Heavy Metals
- Semi-Volatile Organics
- Volatile Organics
- PCBs/Pesticides
- Nitrates
- pH

SCREENING OF SOIL SAMPLES

- Heavy Metals - Lead
- Explosives - TNT
- Volatile Organics - Total Volatiles
- Geophysics

UXO CLEARANCE (REMOTE CONTROL DRILLING)

ELECTROMAGNETIC SURVEYS

GROUND PENETRATING RADAR SURVEYS

REMEDIAL INVESTIGATION (RI) OF THE FORMER OPEN BURNING GROUNDS & ASH LANDFILL

INVESTIGATIVE APPROACH AT THE OB GROUNDS



AREAS AND MEDIA TO BE EVALUATED

- Former Burn Pads (9) - Pad Borings
- Berms Surrounding Each Pad - Berm Excavations
- Low Lying Hill (2000 ft) - Hill Excavations
- Area Between Each Pad - Grid Borings
- Groundwater - Monitoring Wells
- Surface Soil - Downwind Soil Samples
- Surface Water - Reeder Creek & On-Site
- Sediment - Reeder Creek & On-Site
- Background Soils & Water
- Blota

REMEDIAL INVESTIGATION (RI) OF THE FORMER OPEN BURNING GROUNDS & ASH LANDFILL

PHASE II - OB INVESTIGATION



SOILS

- ▶ 22 Pad Boring Locations
- ▶ 14 Grid Boring Locations
- ▶ 28 Berm Excavation Locations
- ▶ 43 Low Hill Excavation Locations
- ▶ 11 Downwind Surficial Soil Sample Locations
- ▶ 4 Burn Kettle Soil Sample Locations



SURFACE WATER/SEDIMENT SAMPLING

- ▶ 10 Locations On-Site
- ▶ 3 Locations Within Reeder Creek



GROUNDWATER

- ▶ 6 Monitoring Wells Added

REMEDIAL INVESTIGATION (RI) OF THE FORMER OPEN BURNING GROUNDS & ASH LANDFILL

INVESTIGATIVE APPROACH AT THE ASH LANDFILL



TWO-PHASED PROGRAM



CONSTITUENTS OF CONCERN

- Volatile Organic Compounds
- Semi-Volatile Organic Compounds
- Herbicides
- Pesticides / PCBs
- Heavy Metals



AREAS TO BE INVESTIGATED

- Ash Landfill and adjacent areas
- Non-Combustible Fill Landfill
- Groundwater (Overburden and Bedrock)
- Soils
- Surface Water
- Soil Gas
- Air
- Sediment
- Background
- Biota



SCREENING TECHNIQUES UTILIZED

- Soil Gas Survey
- Geophysics
 - ▶ Electromagnetic Survey
 - ▶ Ground Penetrating Radar Survey
- Fracture Trace Analysis
- Geologic Mapping of Fractures

REMEDIAL INVESTIGATION (RI) OF THE FORMER OPEN BURNING GROUNDS & ASH LANDFILL

PHASE III - ASH LANDFILL INVESTIGATION

- ✓ PHOTO-LINEAMENT AND FRACTURE TRACE ANALYSIS
- ✓ GEOPHYSICAL SURVEY
 - ▶ Very Low Frequency Survey (VLF)
- ✓ SOIL GAS SURVEY
 - ▶ 50 Locations
- ✓ TEST PITS
 - ▶ 10 Test Pits
- ✓ SOILS
 - ▶ 16 Soil Boring Locations
- ✓ OVERBURDEN MONITORING WELLS
 - ▶ 8 Monitoring Wells
- ✓ BEDROCK MONITORING WELL CLUSTERS
 - ▶ 4 Double Cased to 20 Feet
 - ▶ 4 Triple Cased to a maximum of 100 Feet

2025 RELEASE UNDER E.O. 14176

IV

NYSDEC and USEPA TRC Charter Comments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278-0012

APR 23 1993

Mr. Randall Battaglia
Environmental Coordinator
Seneca Army Depot
Romulus, New York 14541

Re: TRC Charter

Dear Mr. Battaglia:

The following comments pertain to the revised Technical Review Committee (TRC) Charter:

1. Section III: Purpose, paragraphs 3, 5, and 6 - A separate section should be added to include these paragraphs. They do not describe the purpose of the TRC, but rather disclaimers.
2. Section IV: Structure, paragraph 1 - "TRC Members:" should precede "Appendix 2.0..."
3. Section VI: Specific Committee Member Responsibilities - Please identify the chair of the TRC.
4. Section VI: Specific Committee Member Responsibilities, (2)(b) and (3)(b) - These objectives are accomplished by review of actions under the Federal Facility Agreement, and not by the forum provided by the TRC. Please revise this.
5. Section VII: Revision and Termination of the Charter - Amendment of the Charter should not be limited to the Commander, but any TRC member should have this right, and any approval should be by mutual consensus.
6. Section VIII: Effective Date - The effective date of the Charter should be the date of the last signature.
7. Kathleen Callahan, Director, Emergency and Remedial Response Division will be signing the TRC Charter for the USEPA.

(2)

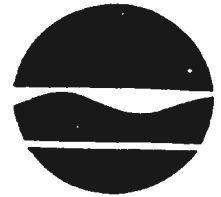
Please call me at (212) 264-4595 to discuss these comments before the document is revised.

Sincerely yours,

A handwritten signature in black ink, appearing to read "C. Struble". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Carla M. Struble
Federal Facilities Section

cc: J. Miller, SEAD
K. Gupta, NYSDEC
M. Stahl, ACE



Thomas C. Jorling
Commissioner

February 23, 1993

Mr. James Miller
Environmental Coordinator
Seneca Army Depot
Romulus, NY 14541

Re: Seneca Army Depot TRC Charter

Dear Mr. Miller:

We have reviewed the Draft Final TRC Charter for the Seneca Army Depot and find that one deficiency remains. Section VI lists the responsibilities of the members representing the agencies, i.e., the Army, the Federal Environmental Protection Agency, the State Department of Environmental Conservation and several towns (Romulus, Varick and Ovid). But two representatives namely Kim Mann (now replaced by Ms. Lonnie Rafferty, please make this change) representing State Department of Health and Brian Dombrowski representing the Seneca County Department of Health have no responsibilities. We suggest the following be added in Section VI to correct this deficiency.

5. Responsibilities of the NYSDOH Representatives:

The NYSDOH representatives should use the TRC as a forum for assisting the NYSDEC representative in proposing any State health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminant which will remain or be treated on site.

6. Responsibilities of the County Health Department Representatives:

The County Health Department representatives should use the TRC as a forum for reviewing and commenting on any proposed federal or State health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminant which will remain or be treated on site.

In addition, please make the following editorial changes:

- Section III, Item (3). Delete this subsection as the IAG is already signed by all the parties.
- Section III, Item (6). Please revise to read as follows:
"The provision of the IAG pursuant to CERCLA 120(e)(2) with reference to this site will govern if a conflict arises between the provision and the terms of this charter."
- Section VI, Item (1)(c). Please change "attenders" to "attendees".
- Section VI, Item (2)(c) and Item (3)(c) second line before the IAG change "any" to "the".

If you have any questions, please call me at (518) 457-3976.

Sincerely,



Kamal Gupta
Federal Projects Section
Bureau of Eastern Remedial Action
Div. of Hazardous Waste Remediation

cc: G. Kittal, SEAD
S. Absolom, SEAD
R. Battaglia, SEAD
C. Struble, USEPA-Region II
L. Rafferty, NYSDOH
E. Dombrowski, SCDH

V

TRC Charter Responses

Prepared By

**Jim Miller, Environmental Protection Specialist
Seneca Army Depot**

(1)

TECHNICAL REVIEW COMMITTEE CHARTER

for

SENECA ARMY DEPOT

ROMULUS N.Y.

I. Agencies Forming the Technical Review Committee (TRC) -

This Technical Review Committee (TRC) Charter is being entered into by the U.S. Army, the New York State Department of Environmental Conservation (NYSDEC), the U.S. Environmental Protection Agency (USEPA) and the local authorities.

II. Basis and Authority for the TRC Charter -

The basis and authority for this Charter is the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), particularly Sections 120(a), 120(f) and 121(f); 10 U.S.C 2705, enacted by Section 211 of SARA; Army Regulation 200-1, Section 9-10.

III. Purpose -

(1) The primary purpose of the TRC is to establish a body which will facilitate communication and coordination among members. The TRC is intended to provide a forum for cooperation between the U.S. Army, concerned local officials and citizens, and the regulatory agencies in order to provide a meaningful opportunity for members of the TRC to become informed and to express their opinion about the technical aspects of the Remedial Investigation/Feasibility Study (RI/FS) or Remedial Design/Remedial Action (RD/RA) process at any site at Seneca Army Depot (SEAD).

(2) A purpose of the TRC shall be to coordinate technical review procedures and schedules to be followed by the Army during the Installation Restoration Program (IRP) for SEAD.

CHANGES

PARAGRAPH THREE (3) HAS BEEN DELETED BASED ON 23 FEB 93 NYSDEC COMMENTS. THIS PARAGRAPH IS NO LONGER REQUIRED, SINCE A FINAL IAG HAS BEEN DEVELOPED.

~~(3) This TRC shall in no way affect the U.S. Army's obligation to develop a federal facilities Interagency Agreement (IAG) for SEAD.~~

CHANGES

PARAGRAPH FOUR (4) WILL BE MOVED TO NEW CHARTER SECTION X, ENTITLED DISCLAIMERS, BASED ON 28 APRIL 93 USEPA COMMENTS.

~~(4) The Charter does not create obligations which are legally binding on the NYSDEC, USEPA, U.S. Army, NYS Department of Health, Seneca County Department of Health, local authorities, or the signatories herein listed, including any citizen participants. The goal of the charter is to provide guidance and structure to meetings of the TRC, and to maximize efficient use of time during the meetings. This will enhance coordination among TRC members which will result in the best possible solutions regarding the Restoration of Hazardous Waste Sites at Seneca Army Depot.~~

CHANGES

PARAGRAPH FIVE (5) WILL BE MOVED TO NEW CHARTER SECTION X, ENTITLED DISCLAIMERS, BASED ON 28 APRIL 93 USEPA COMMENTS.

~~(5) Nothing in this charter impairs, alters, limits or in any way affects NYSDEC's, U.S. Army's or the USEPA's statutory or common law rights, including, but not limited to, the right under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and NYS Environmental Conservation Law. No statements made in this charter shall be deemed a statement, admission or position adopted by the NYSDEC, U.S. Army or the USEPA.~~

CHANGES

PARAGRAPH SIX (6) WILL BE REPLACED WITH PREFERRED NYSDEC LANGUAGE (see NYSDEC 23 FEB 93 COMMENTS). THIS PARAGRAPH WILL BE MOVED TO A NEW CHARTER SECTION ON DISCLAIMERS PER USEPA COMMENTS DATED 28 APRIL 93.

DELETE :

~~(6) In the event the State of New York enters into an IAG pursuant to CERCLA 120(e)(2) with reference to this site, the provisions of the IAG will govern if a conflict arises between the provisions and the terms of this charter.~~

REPLACE WITH:

(6) The provision of the IAG pursuant to CERCLA 120 (e) (2) with reference to this site will govern if a conflict arises between the provision and terms of this charter.

IV. Structure -

CHANGES

PARAGRAPH ONE (1) WILL BE AMENDED IN ACCORDANCE WITH USEPA 28 APR 93 COMMENTS. THE HEADER "TRC MEMBERSHIP" HAS BEEN ADDED. ADDITIONALLY, THE ARMY IS REVISING APPENDIX 2.0 TO REFLECT TRC MEMBERSHIP AS OF JANUARY 21, 1993.

ADD: *TRC MEMBERSHIP*

(1) Appendix 2.0 of this Charter presents a listing of TRC members as of ~~July 8, 1992~~ (replace with January 21, 1993). Absences of any of the members listed in Appendix 2.0 from the TRC due to illness, job transfer or unavailability, may be filled by a duly designated representative.

(2) *Working Sessions of the TRC:*

(a) In accordance with AR 200-1, section 9-10(b), meetings of the TRC will consist of working meetings and public information meetings. Working sessions will consist of the U.S. Army and regulatory agency conducting discussion of operational progress, recommended Applicable Relevant and Appropriate Requirements (ARAR's), problems, and scheduling. At working sessions, the TRC members, who are community representatives, are full participants in the discussions. Working meetings will be held at Seneca Army Depot on a quarterly basis during normal business hours.

(b) Working sessions will serve to facilitate and enhance the Army's decision making process regarding all phases of the IRP process leading to the implementation of remedial responses at SEAD. While concurrence and consensus on various issues will be reached at working sessions, which will ultimately provide direction to the IRP program at the Depot, final decisions will not be made by either the Army, NYSDEC or USEPA remedial Project Managers during TRC meetings. Recommendations of committee members are not binding on SEAD or the Army.

(c) Working sessions of the TRC are open to the general public and/or news media. Sufficient notice will be posted in print media and by mail, and also by broadcast media if community interest is substantial.

(3) *Public Information Meetings:*

(a) At certain milestones in the IRP process, as indicated in the soon to be finalized Community Relations Plan (CRP) for SEAD, public meetings will be held to discuss project activities. The Depot will organize these public meetings and TRC members will be expected to attend. The TRC members will constitute the panel of experts at these public meetings.

(b) Public Information Meetings will be held in the evening, during dates convenient to the general public. Advance notification of the public meeting will be provided by SEAD in a major local newspaper of general circulation.

V. General Responsibilities of Committee Members -

(1) Each TRC member will be entitled to one vote with respect to the inclusion of new members, the scheduling of meetings, and on any other issues before the committee.

CHANGES

SEAD is revising the charter to indicate the correct TRC meeting place.

(2) When requested by any TRC member, more frequent meetings or an alternate location may be called by the Chair upon a simple majority vote by present voting members. The normal meeting place for working sessions of the TRC will be at Seneca Army Depot, ~~Building 101~~, (replace with building 142. (NCO CLUB)) Romulus, N.Y.

(3) In the event that any member cannot be in attendance for a scheduled meeting of the TRC, the Chair should be contacted two (2) days in advance of the scheduled meeting. A substitute for the absentee committee member may be appointed by the non-attending member.

(4) TRC members wishing to comment on and make recommendations about proposed IRP actions to be taken at SEAD must submit their comments and recommendations, in writing, to the Chair.

(5) Members will serve without compensation. All expenses incident to travel and review inputs will be born by the respective members organization.

(6) For working sessions of the TRC, members intent on bringing guests (contractors, additional technical representatives of the TRC members agencies, or any other employee of the members agency or group) should notify the Chair in advance of any scheduled TRC meeting, to insure necessary physical accommodations. Attendance by members representing any new group or agency not described in Section IV (1) of this Charter shall be an agenda at a working session of the TRC for discussion.

(7) If an imminent health hazard is discovered by any member during the effort covered by the Charter, immediate action will be taken to notify all TRC members in addition to the required notification by the installation to regulatory agencies and appropriate local health officials. Additionally, the installation may take appropriate emergency response measures.

VI. Specific Committee Member Responsibilities -

CHANGES

THIS PARAGRAPH HAS BE REVISED TO INDICATE WHO IS RESPONSIBLE FOR CHAIRING THE TRC (see USEPA 28 APRIL 93 comments).

(1) Responsibilities of the U.S. Army:

DELETE:

~~(a) The Chair shall convene each meeting and preside over the orderly administration of TRC business.~~

REPLACE WITH:

(a) The Commanding Officer of Seneca Army Depot shall serve as the TRC Chair, and preside over the orderly administration of TRC business.

(b) The Chair is responsible for notifying each member, in writing, of the date, time, location and agenda of all TRC meetings.

CHANGES

THIS PARAGRAPH WILL BE REPLACED WITH PREFERRED NYSDEC LANGUAGE (see NYSDEC 23 FEB 93 comments).

(c) The Chair is responsible for collecting a written list of ~~attenders~~ (replace with "attendees") at each meeting and assuring the written list of attenders is incorporated into the minutes.

(d) The Chair is responsible for assuring that the minutes for each TRC meeting are recorded and copies are provided to each committee member within fifteen (15) days of the date of any such meeting. The Chair is also responsible for assuring the minutes are promptly incorporated into the Information Repository or appropriate Administrative Record files.

(e) The Chair is responsible for maintaining a mailing list for organizations that wish to receive meeting minutes, the upcoming agenda, and other TRC notices. Mailings should be sent in a timely manner.

(f) In the event that the Chair is unable to attend a TRC meeting, the Executive Secretary shall serve as Acting Chair.

(6)

(g) The TRC member representing the Huntsville Division of the U.S. Army Corps of Engineers (CEHND) is responsible for, when necessary, supplying appropriate visual aids and other materials associated with conducting presentations relating to past and future IRP projects, issues and progress at SEAD. CEHND will deliver presentations as appropriate, provided ample notification of the need for a presentation is provided by the Chair.

(2) *Responsibilities of the USEPA Representatives:*

(a) The USEPA shall notify the Chair two (2) weeks in advance of a scheduled meeting of the TRC if USEPA consultants will be attending the TRC meetings.

CHANGES

BASED ON USEPA COMMENTS, THE STATED FORUM PROVIDED BY THE TRC HAS BEEN CHANGED.

DELETE:

~~(b) The USEPA representatives should use the TRC as a forum for proposing any Federal standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site.~~

REPLACE WITH:

(b) The USEPA should use the TRC as a forum through which advice can be given to the regulated agencies on environmental restoration and waste management and technology development issues related to environmental restoration.

CHANGES

THIS PARAGRAPH WILL BE REPLACED WITH PREFERRED NYSDEC LANGUAGE (see NYSDEC 23 FEB 93 comments).

(c) The USEPA's participation in this TRC shall be in addition to and not in lieu of the relationship and obligation established by any (replace with "the") IAG developed pursuant to section 120 of CERCLA, 42 U.S.C., Section 9620 for SEAD.

(7)

(3) *Responsibilities of the NYSDEC Representatives:*

(a) The NYSDEC shall notify the Chair two (2) weeks in advance of a scheduled meeting of the TRC if NYSDEC consultants will be attending the TRC meetings.

CHANGES

BASED ON USEPA COMMENTS, THE STATED FORUM PROVIDED BY THE TRC HAS BEEN CHANGED.

DELETE:

~~(b) The NYSDEC representatives should use the TRC as a forum for proposing any State standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site.~~

REPLACE WITH:

(b) The NYSDEC should use the TRC as a forum through which advice can be given to the regulated agencies on environmental restoration and waste management and technology development issues related to environmental restoration.

(c) The NYSDEC's participation on this TRC shall be in addition to and not in lieu of the relationship and obligation established by any IAG developed pursuant to section 120 of CERCLA, 42 U.S.C. Section 9620 for SEAD.

(4) *Responsibility of Town Officials:*

(a) TRC members that are official town representatives have the responsibility of keeping Town Councilmen, relevant Town Boards and town organizations up to date regarding environmental restoration activities at Seneca Army Depot.

(b) TRC members who are local government officials have the responsibility to participate in the planning and selection of Army response actions by reviewing and, where warranted, commenting on various Installation Restoration program actions.

CHANGES

THIS SECTION HAS BEEN EXPANDED TO INCLUDE A MORE DETAILED DESCRIPTION OF NYSDOH AND LOCAL HEALTH DEPARTMENT RESPONSIBILITIES (see NYSDEC 23 FEB 93 comments).

ADD:

(5) *Responsibilities of NYSDOH Representatives:*

The NYSDOH representative should use the TRC as a forum for assisting the NYSDEC representative in proposing any State health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site.

ADD:

(6) *Responsibilities of the County Health Department Representatives:*

The County Health Department representative should use the TRC as a forum for assisting the NYSDOH representative in proposing any county or municipal health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site

VII. Revision and Termination of the Charter -

CHANGES

PARAGRAPH ONE (1) HAS BEEN REVISED TO INDICATE THAT THE CHARTER MAY BE REVISED AT THE RECOMMENDATION OF ANY MEMBER (see USEPA 28 APRIL 93 comments).

DELETE:

~~(1) This charter may be amended from time to time as requested by the Commander of Seneca Army Depot, or by mutual consensus of the TRC members. Such amendments shall be in writing.~~

ADD:

(1) This charter may be amended from time to time as requested by any charter member, and any approval should be by mutual consensus.

(2) The provisions of this Charter shall be satisfied and considered complete when all members agree so in writing.

VIII. Effective Date -

CHANGES

PARAGRAPH ONE (1) WILL BE REVISED WITH TO REFLECT USEPA'S DESIRED EFFECTIVE DATE (see USEPA 28 APRIL 93 comments).

DELETE:

~~(1) The effective date of this charter shall be the signature of the Commanding Officer of Seneca Army Depot~~

REPLACE WITH:

(1) The effective date of this charter shall be the date of the last signature.

IX. Proposed Signatories to the Implementation of the TRC Charter -

All members entering into this Charter recognize that mutual consensus and cooperation will result in the best possible solutions to potential and actual environmental problems and protect the health and welfare of the local citizenry and the environment.

CHANGE

A NEW SECTION ENTITLED DISCLAIMERS HAS BEEN ADDED.

ADD:

X. DISCLAIMERS-

(1) The Charter does not create obligations which are legally binding on the NYSDEC, USEPA, U.S. Army, NYS Department of Health, Seneca County Department of Health, local authorities, or the signatories herein listed, including any citizen participants. The goal of the charter is to provide guidance and structure to meetings of the TRC, and to maximize efficient use of time during the meetings. This will enhance coordination among TRC members which will result in the best possible solutions regarding the Restoration of Hazardous Waste Sites at Seneca Army Depot.

(2) Nothing in this charter impairs, alters, limits or in any way affects NYSDEC's, U.S. Army's or the USEPA's statutory or common law rights, including, but not limited to, the right under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and NYS Environmental Conservation Law. No statements made in this charter shall be deemed a statement, admission or position adopted by the NYSDEC, U.S. Army or the USEPA.

(3) The provision of the IAG pursuant to CERCLA 120(e)(2) with reference to this site will govern if a conflict arises between the provisions and the terms of this charter.

Allen Nivison
Town of Romulus Supervisor

DATE

Kenneth Strafford
Township of Varick Supervisor

DATE

Robert Favraeu
Ovid Town Supervisor

DATE

Michael J. O'Toole
Director, Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation

DATE

ADD:

George Pavlou
Acting Division Director, ERRD
U.S. Environmental Protection Agency, Region II

DATE

James B. Cross
Colonel, U.S. Army
Commanding Officer

DATE

(11)

APPENDIX 1.0
ARMY REGULATION 200-1
Section 9-10

VI

Final TRC Charter

Prepared By

**Jim Miller, Environmental Protection Specialist
Seneca Army Depot**

TECHNICAL REVIEW COMMITTEE CHARTER

for

SENECA ARMY DEPOT

ROMULUS N.Y.

I. Agencies Forming the Technical Review Committee (TRC) -

This Technical Review Committee (TRC) Charter is being entered into by the U.S. Army, the New York State Department of Environmental Conservation (NYSDEC), the U.S. Environmental Protection Agency (USEPA) and the local authorities.

II. Basis and Authority for the TRC Charter -

The basis and authority for this Charter is the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), particularly Sections 120(a), 120(f) and 121(f); 10 U.S.C 2705, enacted by Section 211 of SARA; Army Regulation 200-1, Section 9-10.

III. Purpose -

(1) The primary purpose of the TRC is to establish a body which will facilitate communication and coordination among members. The TRC is intended to provide a forum for cooperation between the U.S. Army, concerned local officials and citizens, and the regulatory agencies in order to provide a meaningful opportunity for members of the TRC to become informed and to express their opinion about the technical aspects of the Remedial Investigation/Feasibility Study (RI/FS) or Remedial Design/Remedial Action (RD/RA) process at any site at Seneca Army Depot (SEAD).

(2) A purpose of the TRC shall be to coordinate technical review procedures and schedules to be followed by the Army during the Installation Restoration Program (IRP) for SEAD.

IV. Structure -

TRC membership

(1) Appendix 2.0 of this Charter presents a listing of TRC members as of January 21, 1993. Absences of any of the members listed in Appendix 2.0 from the TRC due to illness, job transfer or unavailability, may be filled by a duly designated representative.

(2)

(2) *Working Sessions of the TRC:*

(a) In accordance with AR 200-1, section 9-10(b), meetings of the TRC will consist of working meetings and public information meetings. Working sessions will consist of the U.S. Army and regulatory agency conducting discussion of operational progress, recommended Applicable Relevant and Appropriate Requirements (ARAR's), problems, and scheduling. At working sessions, the TRC members, who are community representatives, are full participants in the discussions. Working meetings will be held at Seneca Army Depot on a quarterly basis during normal business hours.

(b) Working sessions will serve to facilitate and enhance the Army's decision making process regarding all phases of the IRP process leading to the implementation of remedial responses at SEAD. While concurrence and consensus on various issues will be reached at working sessions, which will ultimately provide direction to the IRP program at the Depot, final decisions will not be made by either the Army, NYSDEC or USEPA remedial Project Managers during TRC meetings. Recommendations of committee members are not binding on SEAD or the Army.

(c) Working sessions of the TRC are open to the general public and/or news media. Sufficient notice will be posted in print media and by mail, and also by broadcast media if community interest is substantial.

(3) *Public Information Meetings:*

(a) At certain milestones in the IRP process, as indicated in the soon to be finalized Community Relations Plan (CRP) for SEAD, public meetings will be held to discuss project activities. The Depot will organize these public meetings and TRC members will be expected to attend. The TRC members will constitute the panel of experts at these public meetings.

(b) Public Information Meetings will be held in the evening, during dates convenient to the general public. Advance notification of the public meeting will be provided by SEAD in a major local newspaper of general circulation.

V. General Responsibilities of Committee Members -

(1) Each TRC member will be entitled to one vote with respect to the inclusion of new members, the scheduling of meetings, and on any other issues before the committee.

(2) When requested by any TRC member, more frequent meetings or an alternate location may be called by the Chair upon a simple majority vote by present voting members. The normal meeting place for working sessions of the TRC will be at Seneca Army Depot, Building 142 (NCO Club), Romulus, N.Y.

(3)

(3) In the event that any member cannot be in attendance for a scheduled meeting of the TRC, the Chair should be contacted two (2) days in advance of the scheduled meeting. A substitute for the absentee committee member may be appointed by the non-attending member.

(4) TRC members wishing to comment on and make recommendations about proposed IRP actions to be taken at SEAD must submit their comments and recommendations, in writing, to the Chair.

(5) Members will serve without compensation. All expenses incident to travel and review inputs will be born by the respective members organization.

(6) For working sessions of the TRC, members intent on bringing guests (contractors, additional technical representatives of the TRC members agencies, or any other employee of the members agency or group) should notify the Chair in advance of any scheduled TRC meeting, to insure necessary physical accommodations. Attendance by members representing any new group or agency not described in Section IV (1) of this Charter shall be an agenda at a working session of the TRC for discussion.

(7) If an imminent health hazard is discovered by any member during the effort covered by the Charter, immediate action will be taken to notify all TRC members in addition to the required notification by the installation to regulatory agencies and appropriate local health officials. Additionally, the installation may take appropriate emergency response measures.

VI. Specific Committee Member Responsibilities -

(a) The Commanding Officer of Seneca Army Depot shall serve as the TRC Chair, and preside over the orderly administration of TRC business.

(b) The Chair is responsible for notifying each member, in writing, of the date, time, location and agenda of all TRC meetings.

(c) The Chair is responsible for collecting a written list of attendees at each meeting and assuring the written list of attenders is incorporated into the minutes.

(d) The Chair is responsible for assuring that the minutes for each TRC meeting are recorded and copies are provided to each committee member within fifteen (15) days of the date of any such meeting. The Chair is also responsible for assuring the minutes are promptly incorporated into the Information Repository or appropriate Administrative Record files.

(4)

(e) The Chair is responsible for maintaining a mailing list for organizations that wish to receive meeting minutes, the upcoming agenda, and other TRC notices. Mailings should be sent in a timely manner.

(f) In the event that the Chair is unable to attend a TRC meeting, the Executive Secretary shall serve as Acting Chair.

(g) The TRC member representing the Huntsville Division of the U.S. Army Corps of Engineers (CEHND) is responsible for, when necessary, supplying appropriate visual aids and other materials associated with conducting presentations relating to past and future IRP projects, issues and progress at SEAD. CEHND will deliver presentations as appropriate, provided ample notification of the need for a presentation is provided by the Chair.

(2) *Responsibilities of the USEPA Representatives:*

(a) The USEPA shall notify the Chair two (2) weeks in advance of a scheduled meeting of the TRC if USEPA consultants will be attending the TRC meetings.

(b) The USEPA should use the TRC as a forum through which advice can be given to the regulated agencies on environmental restoration and waste management and technology development issues related to environmental restoration.

(c) The USEPA's participation in this TRC shall be in addition to and not in lieu of the relationship and obligation established by the IAG developed pursuant to section 120 of CERCLA, 42 U.S.C., Section 9620 for SEAD.

(3) *Responsibilities of the NYSDEC Representatives:*

(a) The NYSDEC shall notify the Chair two (2) weeks in advance of a scheduled meeting of the TRC if NYSDEC consultants will be attending the TRC meetings.

(b) The NYSDEC should use the TRC as a forum through which advice can be given to the regulated agencies on environmental restoration and waste management and technology development issues related to environmental restoration.

(c) The NYSDEC's participation on this TRC shall be in addition to and not in lieu of the relationship and obligation established by any IAG developed pursuant to section 120 of CERCLA, 42 U.S.C. Section 9620 for SEAD.

(5)

(4) *Responsibility of Town Officials:*

(a) TRC members that are official town representatives have the responsibility of keeping Town Councilmen, relevant Town Boards and town organizations up to date regarding environmental restoration activities at Seneca Army Depot.

(b) TRC members who are local government officials have the responsibility to participate in the planning and selection of Army response actions by reviewing and, where warranted, commenting on various Installation Restoration program actions.

(5) *Responsibilities of NYSDOH Representatives:*

The NYSDOH representative should use the TRC as a forum for assisting the NYSDEC representative in proposing any State health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site.

(6) *Responsibilities of the County Health Department Representatives:*

The County Health Department representatives should use the TRC as a forum for assisting the NYSDOH representative in proposing any county or municipal health standard, requirement, criteria, or limitation that is legally applicable or relevant and appropriate under the circumstances of the release or threatened release of any hazardous substance, pollutant or contaminate which will remain or be treated on site

VII. Revision and Termination of the Charter -

(1) This charter may be amended from time to time as requested by any charter member, and any approval should be by mutual consensus.

(2) The provisions of this Charter shall be satisfied and considered complete when all members agree so in writing.

VIII. Effective Date -

(1) The effective date of this charter shall be the date of the last signature.

IX. Proposed Signatories to the Implementation of the TRC Charter -

All members entering into this Charter recognize that mutual consensus and cooperation will result in the best possible solutions to potential and actual environmental problems and protect the health and welfare of the local citizenry and the environment.

X. DISCLAIMERS-

(1) The Charter does not create obligations which are legally binding on the NYSDEC, USEPA, U.S. Army, NYS Department of Health, Seneca County Department of Health, local authorities, or the signatories herein listed, including any citizen participants. The goal of the charter is to provide guidance and structure to meetings of the TRC, and to maximize efficient use of time during the meetings. This will enhance coordination among TRC members which will result in the best possible solutions regarding the Restoration of Hazardous Waste Sites at Seneca Army Depot.

(2) Nothing in this charter impairs, alters, limits or in any way affects NYSDEC's, U.S. Army's or the USEPA's statutory or common law rights, including, but not limited to, the right under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and NYS Environmental Conservation Law. No statements made in this charter shall be deemed a statement, admission or position adopted by the NYSDEC, U.S. Army or the USEPA.

(3) In the event the State of New York enters into an IAG pursuant to CERCLA 120(e)(2) with reference to this site, the provisions of the IAG will govern if a conflict arises between the provisions and the terms of this charter.

(7)

Allen Nivison
Town of Romulus Supervisor

DATE

Kenneth Strafford
Township of Varick Supervisor

DATE

Robert Favraeu
Ovid Town Supervisor

DATE

Michael J. O'Toole
Director, Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation

DATE

George Pavlou
Acting Division Director, ERRD
U.S. Environmental Protection Agency, Region II

DATE

James B. Cross
Colonel, U.S. Army
Commanding Officer

DATE

(8)

APPENDIX 1.0
ARMY REGULATION 200-1
Section 9-10

Appendix 2.0 - TRC Member as of January 21, 1993

MEMBER	MEMBERS AGENCY or GROUP
Colonel James B. Cross, Chairman	U.S Army - Seneca Army Depot
Gary W. Kittell, Executive Secretary	U.S. Army - Seneca Army Depot
Stephen M. Absolom	U.S. Army - Seneca Army Depot
Jeremiah Whitaker	U.S. Army - Seneca Army Depot
Randall Battaglia	U.S. Army - Seneca Army Depot
Thomas Enroth	U.S. Army - Seneca Army Depot
Kevin Healy	U.S. Army Corps of Engineers - Huntsville Division
Dr. Kathleen Bucchi	U.S Army Toxic and Hazardous Materials Agency
John Biernacki	U.S. Army - Depot Systems Command
Emmy T. Thomee	New York State Department of Health
Brian Dombrowski	Seneca County Department of Health
Carla Struble	U.S. Environmental Protection Agency, Region II
Kamal Gupta	New York State Department of Environmental Conservation
Frank Ricotta	New York State Department of Environmental Conservation
Dr. Richard A. Durst	Township of Varick, N.Y.
Allen Nivison	Township of Romulus, N.Y.
Kenneth Strafford	Township of Varick, N.Y.
Robert Favraeu	Township of Ovid, N.Y.
James Terryberry	Township of Romulus, N.Y.
William Cool	Township of Varick, N.Y.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

THE FOURTH TECHNICAL REVIEW COMMITTEE

HELD ON: June 9th, 1993

HELD AT: Seneca Army Depot
Romulus, New York

REPORTED BY: PATRICIA A. NELK

1 MR. KITTELL: Good afternoon. My name
2 is Gary Kittell. I am the director of
3 engineering at the Seneca Army Depot. I
4 would like to welcome you to the fourth
5 technical review committee meeting, which is
6 aimed at monitoring and deciding the most
7 effective clean up methods for the sites at
8 Seneca Army Depot.

9 Colonel Cross, I believe, will be here.
10 Some of you probably don't know him. But
11 folks from Albany are meeting with local
12 representatives at Willard over the economic
13 future of the area and how Seneca Army Depot
14 might play a part in that but I do expect him
15 to come by.

16 I would like after I get done to have
17 each person introduce themselves and announce
18 what office they are with. Quite a few of
19 the folks are regulars. I have seen them
20 before. And then we will get on with the
21 site briefings by the Corps of Engineers and
22 then folks from Engineering Science will tell
23 you what progress has been made as far as
24 what actual work has been made in the field.

25 Mr. Miller, soon to depart, will talk

1 about the technical review committee charter
2 and how we might get that finalized.

3 Randy will talk about the preliminary
4 site characterization report and our
5 information repository. We'll take questions
6 and answers and then we will talk about the
7 agenda for the next meeting.

8 So if each person would please identify
9 themselves so that Trisha can get that down,
10 I would appreciate it.

11 MR. HEALY: I am Kevin Healy from Army
12 Corps of Engineers, Huntsville.

13 MR. DUCHESNEAU: Michael Duchesneau from
14 Engineering Science in Boston.

15 MR. MARINNE: Paul Marinne (phonetic),
16 Engineering Science in Boston.

17 MR. BATTAGLIA: I am Randy Battaglia. I
18 am the project manager.

19 MR. ENROTH: Thomas Enroth,
20 environmental engineer, Seneca Army Depot.

21 MR. KATZ: Steve Katz, EPA, Region II.

22 MS. STRUBLE: Carla Struble, EPA, Region
23 II.

24 MR. ABSOLOM: I am Steve Absolom from
25 the New York State DOH.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. CHEN: Marsden Chen.

MR. GUPTA: Kamal Gupta.

MR. DOMBROWSKI: Brian Dombrowski from Seneca County Health.

MS. SWEET: Mary Beth Sweet, Seneca Pure Waters.

MR. MILLER: Jim Miller from Seneca Army Depot.

MR. SCOTT: Robert Scott, State DEC.

MS. KANE: Joy Kane, U.S. Army Environmental Center.

MR. STAFFORD: Ken Stafford, supervisor of the Town of Varick.

MR. COOL: Bill Cool, committeeman for the Town of Varick.

MR. NOLL: I am not a representative. Joseph Noll (phonetic).

MS. RAFFERTY: Bonnie Rafferty, State Health Department, Bureau of Environmental Exposure.

MR. GARRETTY: Dan Garretty (phonetic) from the State Health Department. Also with the Bureau of Environmental Exposure Investigation.

MS. PEACHY: Mary Jane Peachy (phonetic)

1 with the Department of Environmental
2 Conservation out of Avon.

3 MS. VERA: Linda Vera, DEC as a citizen
4 participation specialist.

5 MR. KITTELL: Okay. Kevin Healy.

6 MR. HEALY: All right. As always I am
7 going to give you an update. For the second
8 meeting in a row we have representatives from
9 Engineering Science here who will give you
10 more in-depth. I am going to give you pretty
11 much an administrative overview.

12 COMMITTEE MEMBER: Kevin, could you
13 please move the tripod there? Thank you.

14 MR. HEALY: Is that better?

15 COMMITTEE MEMBER: Perfect.

16 MR. HEALY: First as always we are going
17 to discuss the ash landfill and open burning
18 grounds. Those are the RI/FS on the main
19 portion of the work that's been done.

20 Last time we walked we had finished the
21 Phase I and we were in the process of doing
22 the contracting of the procurement action of
23 the Phase II. That's now all been completed.
24 We have completed all of the Phase II work at
25 the OB grounds. The ash landfill was delayed

1 somewhat because of bad weather. We just
2 recently -- actually as of this morning
3 finished off the final well that was intended
4 and from there on we will be sampling in the
5 next few weeks. And then it will take about
6 another four, five days to get the analytical
7 results back. In approximately two months
8 time we will be able to put it altogether or
9 start putting it altogether in a report
10 format with some conclusions and
11 recommendations for completion. Then from
12 there we will go ahead and put together a RI
13 report along with a feasibility study. And
14 we expect to be able to finalize both of
15 those by the spring of '94. And following
16 that the record of decision, which will lay
17 out the recommendations for final
18 remediation. And that will be expected or we
19 should expect that one by late 1994. So we
20 have a lot to look forward to in the next
21 couple of months.

22 The next order of business as always is
23 the solid waste management discussion. First
24 will be the high priority areas of concerns;
25 that is the areas that we have decided in the

1 past have the greatest potential for needing
2 additional work. And this just for your
3 benefit a list. Also I noticed in the
4 packages that some of the sheets are a little
5 messed up as far as order goes from what I
6 have right here so bear with me. They are
7 all in there. Just in a different order.
8 The first one, these are the areas of high
9 priority. And that is pretty much for your
10 reference. All right. Here is an update on
11 the work that is being done. We are
12 performing site investigations at those 10
13 areas. The work plan revisions are coming
14 close to a completion. We have had some
15 regulatory review and we are now revising or
16 making final revisions to work plans. We
17 expect to have the work plan completely done
18 by July of 1993. Following that we will
19 actually be out in the field initiating the
20 field work and we hope to have that initiated
21 by September of '93. We need to finish off
22 the work plan and I need to get my act
23 together and get a contract in place so we
24 can start. And we expect to be able to do
25 that by September of '93. All right. I am

1 sorry. On the first 10 the contract has
2 already been awarded. We need to modify it
3 based on changes that were made by the
4 regulators.

5 MR. KITTELL: May I?

6 MR. HEALY: Sure.

7 MR. KITTELL: We have taken a fair
8 amount of pains with the work plans on these
9 site investigations because of two reasons.
10 If we go out and investigate one of these
11 sites and as a result of the work done
12 conclude that no more needs to be done,
13 everyone has to be in agreement that the work
14 plan was properly prepared and the work plan
15 did show that nothing more needs to be done,
16 there is no contamination. Also from the
17 Army's point of view, we want to insure if
18 something is found that it is valid and
19 everybody agrees that there is something
20 there that needs further study. There is
21 tremendous expense involved in taking it to
22 the steps beyond this initial site
23 investigation.

24 MR. HEALY: Okay. All right. Now, we
25 will talk about the second order of business.

1 And when it comes to site investigations, and
2 that is the moderate priority sites, for your
3 benefit there is a sheet in there that shows
4 which sites those are. As far as updating
5 the status of the work goes, the second 15
6 lag in the initial 10 by a couple of months.
7 So we are right now in the process of
8 preparing the work plan as opposed to the
9 first where we are trying to work the plan
10 up. We expect to complete the draft of the
11 work plan by July of '93. Following that it
12 is required that the regulatory folks review
13 it and give us comments. We hope to revise
14 the work plan and hope to have all the
15 process done by the late summer of '93 and we
16 hope to be able to initiate all the work
17 sites by the fall of '93.

18 MR. KITTELL: There are funds available
19 now slated for Seneca Army Depot to actually
20 do this field work, too.

21 MR. HEALY: All right. And also I think
22 it ended up in the front of your package but
23 we have also included a glossary of terms as
24 we were asked to do in the TRC. These are
25 the main terms we use and an explanation

1 given and a definition given for your benefit
2 and reference. All right. And then all of
3 these -- I believe all of you have received a
4 copy of the package. Take it home with you,
5 have more of a chance to look at it. If it
6 causes you to have any questions, then feel
7 free to ask. And that is it for the
8 administrative update.

9 I will now introduce Mr. Mike
10 Duchesneau, who is from Engineering Science
11 who is going to talk more in detail about the
12 actual field work.

13 MR. DUCHESNEAU: What we have here are
14 our maps that we prepared from the
15 combination of both the Phase I and Phase II
16 work that's been done to date. These are
17 preliminary maps but yet I think I wanted to
18 show you a good feel for where we stand and
19 what we have done to date. I think the maps
20 represent that as well as can be expected.

21 Just to provide an overview of the
22 organization of the project here, we have the
23 Corps of Engineers, the project manager here
24 is identified as Mike Stahl. There has been
25 a slight change recently in that Mike Stahl

1 has been replaced by Gary East but will still
2 be involved in performing the same function
3 as Mike Stahl was involved in. The technical
4 manager is Kevin Healy, who has just spoken
5 to you. We have Seneca Depot represented by
6 Randy Battaglia and EPA Region II with Carla,
7 also NYSDEC, New York State Department of
8 Environmental Conservation, represented by
9 Kamal, myself as project manager for
10 Engineering Science and support staff for
11 Drilling Laboratory and UXO.

12 MR. HEALY: UXO standing for unexploded
13 ordinances.

14 MR. DUCHESNEAU: The approach at the OB
15 grounds was a two prong approach involving
16 explosives, heavy metals, semi-volatile as
17 well as volatile as well as PCBs and nitrate
18 and pH. We employed a screening program.
19 The last time we spoke I talked in depth
20 about what that program was; to screen the
21 soil samples that we collected in order to
22 then select a group which would go for more
23 extensive complete analysis. As part of this
24 project, we needed unexploded ordinance
25 support so we maintain a high degree of

1 safety and our people don't get hurt. These
2 areas are still active areas for GB OD. We
3 performed electromagnetic surveys to screen
4 the areas for any potential pits or drums of
5 that nature. We also performed ground
6 penetrating radar services to a follow-up of
7 the EM surveys to better define any anomalies
8 for the EM. Then we used an electromagnet.

9 MR. KITTELL: It is like a manual
10 sweeper.

11 MR. DUCHESNEAU: It detects any manual
12 anomaly in the grounds. It is more
13 sophisticated than the type that you see
14 people using on the beach. It provides a
15 hard copy out-put of the results of the
16 electromagnet waves penetrating the soils.
17 The areas that we are interested in were the
18 burn pads. The burn pads -- maybe I should
19 just move over this way. How is that? The
20 burn pads, which are nine in number, which is
21 where formally munitions were burned on the
22 ground; the berm surrounding these pads and
23 each pad had a berm to prevent material from
24 migrating away from the pad; the low lying
25 hill, which was a hill that runs pretty much

1 the entire length of the site; ground water
2 monitoring wells, which you see located
3 periodically, to monitor the quality of the
4 ground water and also the direction of flow
5 which flows to Reeder Creek. Reeder Creek is
6 located over in this direction. Also of
7 interest here is the open detonation mound.
8 This is an OB OD facility. Burning was done
9 here. Open detonation is performed here. We
10 have also collected surface soils back
11 further in this area to identify the
12 potential for -- as materials were released
13 during the burning process what was the
14 potential for that material to then be
15 re-deposited on the surface further downwind;
16 surface water and sediments in both Reeder
17 Creek and on the site.

18 There are several wetlands identified
19 here as W's, W-8, for example, W-13.
20 Basically, these are manmade wetlands as a
21 result of the movement of the earth to build
22 the pads. We have sampled those wetlands and
23 the biota in the streams and the on site
24 wetland. The results of all this data have
25 been compiled. We have sent the samples to

1 the lab. We have received them back. They
2 have finished the data evaluation to evaluate
3 the quality of the data we have collected.

4 The next step in the progress and the
5 phase of the program that we are in is to
6 perform a risk assessment, a containment and
7 transport analysis and also followed by a
8 risk assessment and that is right where we
9 are right now. You see a much broader
10 picture of the OB OD site here; the OB site
11 and OD site, Reeder Creek and how it flows
12 out to the road. This identifies the areas
13 of the surface water samples that we have
14 collected not only on site and in the
15 adjacent area of Reeder Creek but also
16 downstream from the site. I might add that
17 these lines here are the New York State
18 Cordinant (phonetic) System, the entire
19 facility. All the samples that we have
20 collected, all the wells that we have
21 installed are all in reference to the New
22 York State Cordinant (phonetic) System so
23 that they are clearly identified in space
24 here.

25 We have provided you this just to show

1 you where the network of monitoring wells are
2 installed on the site. We have two layers of
3 monitoring wells. We have a layer of
4 monitoring wells that are located in the
5 overburden, which is approximately 10 to 15
6 feet thick. It is essentially what is called
7 glacial. Glacial is an unsorted mixture of
8 sand, silt, gravel, all pretty much swished
9 together. When the glacier rolled over this
10 area you get dense, compacted material. So
11 what we have is that layer of soil called the
12 overburden overlying fractured bedrock, a
13 zone of between two to five feet thick,
14 weather bedrock, I should say, followed by
15 shale. We have screened wells in the
16 overburden. The majority of the wells are
17 screened in the overburden. We also have a
18 set of wells, couplets if you will, located
19 adjacent to the overburden wells that are
20 screened in this weather bedrock. We will
21 have to identify whether or not vertical
22 penetration of any potential contaminant has
23 moved down into the weathered rock. What we
24 have found to date is there is no difference
25 between the piezometric (phonetic) head

1 between the wells that are screened in the
2 weather bedrock and the wells that are
3 screened in the overburden. Proving there is
4 no vertical migration pathway, which is good
5 news.

6 MR. CHEN: When you say pisametric
7 (phonetic) --

8 MR. DUCHESNEAU: A pisametric (phonetic)
9 head is the height of the evaluations of the
10 well.

11 MR. CHEN: It is the same in all wells?

12 MR. DUCHESNEAU: The couplets and the
13 screen of the overburden and the screen in
14 the bedrock -- basically the water rises to
15 the same level in the well implying that
16 there is no difference in the head,
17 pisametric (phonetic) head, that would cause
18 water to want to flow vertically down. So
19 what we are saying is water generally flows
20 as a wall, if you will, towards Reeder Creek.

21 The Phase II program that we have
22 processed involved sampling additional
23 samples on the pad borings, additional soil
24 sampling on the pads, on the grids -- grids
25 being the areas in between the pads

1 designated as GB here on the map -- the berm
2 excavations, which are excavations in the
3 berm surrounding each of the pads, also the
4 low lying hill and the burn kettle. The burn
5 kettle was a new discovery that we hadn't
6 identified in the first phase of work. It is
7 basically identified as a small square in
8 this area and apparently it was used many
9 years ago to burn munitions, I guess. That
10 is what we think.

11 MR. HEALY: Would you just explain why
12 we went ahead with the Phase II? Why it was
13 necessary?

14 MR. DUCHESNEAU: Phase II was a
15 requirement. What we wanted to do in the
16 Phase I is identify if there was potential
17 for the presence of contaminants there and
18 what those levels were and if there was a
19 necessary step to go further into the
20 investigation. From the Phase I information
21 we looked at, it looked as though there was
22 some heavy metals and some explosives in the
23 soils and we wanted to better define the
24 extent of some of those materials. Based on
25 some geophysical analysis that we had

1 performed we identified grid spacings that
2 were necessary and followed it up with the
3 Phase II which was just, you know, a
4 collection of additional samples to better
5 define the X, Y areas of concern.

6 Surface water sediment sampling was
7 performed. Same reason. We had some Phase I
8 data, evaluated it and it appeared there was
9 some potential for metals in the stream so we
10 followed on to collect some additional
11 samples to better define it.

12 A lot of these locations and the numbers
13 were negotiated in the work plan with the
14 regulatory folks. Ground water monitoring,
15 we added additional wells based on comments
16 from EPA and NYSDEC to better define radial
17 flow and the potential for some of the down
18 gradient locations from some of the pads that
19 we were interested in knowing more about; if
20 they had released any metals or explosives to
21 the ground water.

22 Moving on to the ash landfill. We have
23 completed all of the field work, other than
24 sampling the ground water wells that we have
25 installed. As of this morning, Paul and I

1 actually went and observed some of the wells
2 and talked to the geologist who is installing
3 the final well. That well is installed. It
4 is just a bedrock well. So all of the wells
5 have been installed. All of the soil samples
6 that we are going to collect have been
7 completed. The lab has all of the soils
8 data. We have not sampled the ground water
9 wells but that should be happening within a
10 couple of weeks. At which time we will
11 submit samples to the laboratory and within
12 35 to 40 days from that point we will receive
13 the ground water samples and then begin the
14 same process that we are beginning that we
15 are at the OB grounds; that being contaminant
16 interest and transport study and a risk
17 assessment.

18 The areas to be investigated here are
19 the non-combustible landfill over in this
20 area, the ground water, surface water. And
21 the areas that we are interested in are right
22 in here. Again we have used screening tools,
23 soil gas, geophysics, fracture trace analysis
24 to locate some of the bedrock wells. We have
25 also done geologic mapping to identify the

1 fractures to identify the best location to
2 position our bedrock wells. The
3 photo-lineament and the fracture trace
4 analysis, as I mentioned, we performed to
5 identify the location of the bedrock wells.
6 We have -- we don't have them yet.

7 Maybe what I will do is back up and jump
8 on the soil gas survey because that is what
9 this overview here says or identifies. We
10 performed soil gas in this area that we call
11 the bend in the road. We have identified two
12 areas that appear to have elevated VOC soil
13 gas numbers. And based on the work that we
14 have done and the follow-up bores that we did
15 around the perimeters of these areas we think
16 these two areas constitute the source of the
17 ground water plume that is emanating towards
18 off post. The technique that we used was a
19 head space technique. We drove a split spoon
20 into the sample, collected a spoon sample,
21 removed the sample and put it in a jar and
22 extracted a portion of the gas. And based on
23 that information we were able to delineate
24 the extent of these two areas. This is an
25 identification of the borings that were

1 performed also, the test pits that were
2 performed in the areas that we are interested
3 in with the high VOC's and this ground water
4 plume that we currently know to exist in that
5 area. We have dashed these lines based on
6 only the Phase I data because again we don't
7 have Phase II data. We expect this plume to
8 this line to probably bend a little bit more
9 around this area in here.

10 MR. KITTELL: You did take quite a bit
11 of -- or did do quite a bit of sampling off
12 the post in areas that would be downstream of
13 the direction of the plume, correct?

14 MR. DUCHESNEAU: Down in this area?

15 MR. KITTELL: Yes.

16 MR. DUCHESNEAU: We have installed wells
17 right at the top of this plume to better
18 define what the extent of this plume is.
19 This plume has not reached any residences off
20 post that we know and we have been sampling
21 one in particular.

22 MR. KITTELL: I see some new faces here
23 today. I think it is important that people
24 know that this investigation is not strictly
25 based on the property the Army owns. We have

1 permission and have been actively doing
2 samples off the post so that we know the full
3 extent of this plume.

4 COMMITTEE MEMBER: What's the
5 concentration of the plume and what type of
6 contaminant are you referring to?

7 MR. DUCHESNEAU: Good question. The
8 concentration on the plume depends on where
9 you are in the plume.

10 COMMITTEE MEMBER: What's the highest
11 and lowest?

12 MR. DUCHESNEAU: The highest number we
13 have to date is total volatiles 11.5 or 11.6
14 ppm and that is right around zero.

15 MR. KITTELL: Parts percent million?

16 MR. DUCHESNEAU: Right.

17 COMMITTEE MEMBER: Parts per billion?

18 MR. DUCHESNEAU: Million. The
19 contaminants that we are finding are
20 basically TCE, trichloroethylene, and the
21 breakdown products of TCE; that being DCE and
22 some vinyl chloride, which are known
23 breakdown products of TCE.

24 MR. KITTELL: The dotted line at the end
25 of the plume --

1 COMMITTEE MEMBER: Ten ppm.

2 COMMITTEE MEMBER: Neither one of them
3 are soluble with water.

4 MR. DUCHESNEAU: Some of them are.

5 COMMITTEE MEMBER: Not very much.

6 MR. DUCHESNEAU: Not very much.

7 COMMITTEE MEMBER: What's the vapor
8 pressure of your DCE?

9 MR. DUCHESNEAU: I don't know.

10 COMMITTEE MEMBER: Vinyl chloride is a
11 polymer.

12 MR. DUCHESNEAU: This is not a polymer.

13 COMMITTEE MEMBER: In fact, it is one
14 of the basic building blocks for your plastic
15 industry because of its beautiful
16 characteristic of leakages and it tends to
17 link up with other items which become inert,
18 same as your chlorine in that salt shaker.
19 Once its leaked --

20 MR. DUCHESNEAU: We are not talking
21 about that.

22 COMMITTEE MEMBER: We are talking about
23 elements and toxic materials. There is a
24 toxic state of an element and there is an
25 inert material. I would like to have you

1 make that clear when you refer to these
2 contaminants.

3 MR. DUCHESNEAU: Okay. We are talking
4 about vinyl chloride. That is two -- we are
5 talking about vinyl chloride and it is -- I
6 don't know what the vapor pressure is off the
7 top of my head. I know it is a very volatile
8 compound. I believe at room temperature it
9 is a gas. It is relatively low. Simply, TCE
10 solubility is 1100 ppm. Vinyl chloride, I
11 believe it is in the 900 ppm range.

12 Generally in an environmental investigation
13 you never find dissolved chlorinated solvents
14 at those solubility limits. They are much,
15 much less. Which is exactly what we are
16 finding here. We are talking parts per
17 billion. And only in the very center of the
18 source area are we finding ppm, parts per
19 million levels.

20 MR. HEALY: Paul, I believe you were
21 obscured when you were pointing out the
22 concentration down toward --

23 COMMITTEE MEMBER: At the toe, this
24 lowest -- well, first east to the west is 104
25 parts per billion.

1 COMMITTEE MEMBER: Is that total?

2 MR. DUCHESNEAU: That is total. Most of
3 that -- I happen to know these wells in
4 particular but most of those 104 is DCE.
5 There is very little TCE and there is no
6 vinyl chloride. It is all DCE. Where you
7 find the vinyl chloride and the TCE is more
8 up in this area here. Apparently, as things
9 migrate through here they are degraded to the
10 point where all you see is DCE at this toe
11 over here.

12 COMMITTEE MEMBER: I would like to make
13 a comment. I grant you years ago we would
14 have approved 1100 part per million. For
15 your drug industry we used to have four
16 grades. If I might go back, we used to have
17 a commercial grade, a technical grade and an
18 analytical grade and USP. Now, we have gone
19 way up because of solid state devices and
20 computers to go out to a gnat's eyebrow,
21 which is beyond the commonsense of
22 practicality I call it. You will find these
23 things almost anywhere. If you look far
24 enough, you would probably find some
25 particles of gold because their

1 instrumentation is accurate today. We talk
2 about toxic materials. I think we better
3 confine ourselves to those areas that are
4 really toxic.

5 MR. KITTELL: Sir, under this particular
6 procedure that we are in we are not
7 unilaterally allowed to decide what are or
8 are not toxic levels. There are certain
9 standards that have been established; health
10 based standards for water purity based upon
11 presumed long term exposure to these
12 chemicals. It is a standard that we have to
13 analyze and a standard that we have to clean
14 up. As to part per billion, we have
15 absolutely no choice to --

16 COMMITTEE MEMBER: I certainly can. Can
17 I give you the perimeters on toxicity? They
18 are arbitrary. Can I make another comment?

19 MR. KITTELL: The purpose of this
20 discussion and in this group is to not rule
21 upon what scientific basis was written into
22 the laws that we have to confirm to. We
23 can't change those. The Army is duty bound
24 to follow and clean up to the standards that
25 have been set in the law.

1 COMMITTEE MEMBER: I think you are going
2 to go by recommendations from the group here.
3 Let's not go on witch hunts. Let's be
4 practical in what we tell them. You said
5 there are funds available. How much?

6 MR. KITTELL: Funds, I believe, to do
7 the site investigations. However, these
8 gentlemen -- if you remember earlier in Mr.
9 Duchesneau's opening statement -- will be
10 preparing a risk analysis and a risk
11 assessment. At that point they will go into
12 the possible toxicity concentrations and
13 possible receptors at each site. And I think
14 at that point that would be the ideal time
15 for the body to collectively debate the risk
16 and cost associated with mitigating that
17 risk.

18 COMMITTEE MEMBER: The question was
19 brought up and I think you brought it up that
20 there were funds available. Can you tell me
21 the total of these funds?

22 MR. KITTELL: There is eleven million
23 dollars.

24 COMMITTEE MEMBER: We have to burn it
25 up.

1 MR. KITTELL: No, we don't. We are not
2 at a stage where we are spending money for
3 clean up and we are still defining the
4 problems so that we can make an intelligent
5 decision, informed decision on how much more
6 money needs to be made or spent to effect
7 clean up, if clean up is required.

8 COMMITTEE MEMBER: I don't disagree with
9 you on going through all these technical
10 terms and using forms not generally common
11 knowledge to the general public. I think you
12 can narrow it all down to three points: What
13 is the problem? Is there a problem? What we
14 do about it and how we do it? That is all
15 there is to it.

16 MR. KITTELL: I agree.

17 COMMITTEE MEMBER: Are we in the first
18 phase? Is there a problem?

19 MR. KITTELL: There certainly appears to
20 be a problem.

21 COMMITTEE MEMBER: You are determining
22 if there is a problem? Okay. Yes.

23 MR. DUCHESNEAU: I just might want to
24 add a little bit about the bedrock
25 investigation that we did seeing it is the

1 last item on the list here. We have drilled
2 bedrock wells to, basically -- again as I was
3 mentioning earlier -- to look at the
4 potential for vertical migration at the site
5 and we have completed those wells. We have
6 four monitoring well clusters. The clusters
7 include an overburden well, a shallow bedrock
8 well and the competent bedrock. Call it
9 zero -- for talking purposes at this point,
10 zero data. The second rock well is screened
11 from the zero to 20 feet and the third rock
12 well is a deep rock well which is screened
13 from 20 to some interval down to 100 feet.
14 That interval is determined based on Packard
15 tests that we performed. Packard tests are
16 inflating two large balloons and pushing
17 water between the two balloons to see how
18 much water can be penetrated into the rock.
19 We can determine the ability of the rock to
20 transmit the water when we find the zone that
21 has the highest ability to transmit the
22 water. We have completed all that work also.

23 MR. HEALY: Let's just point out that
24 the purpose for establishing what the
25 permeability of the deeper rock is is to make

1 sure there is nothing in this higher aquifer
2 which is contaminated that is migrating down
3 to the deeper layer of water which is where
4 the drinking water is coming from.

5 MR. DUCHESNEAU: Correct.

6 COMMITTEE MEMBER: I want to point out
7 the location of those. We have got one up
8 here in the downgrading and three -- excuse
9 me -- four located down near the toe of the
10 plume.

11 MR. DUCHESNEAU: That is basically all I
12 had to discuss. We will know a little bit
13 more about some of the numbers and where we
14 stand as far as the potential and the risk
15 analysis the next time we meet because we are
16 in the process of doing that now. Thanks.

17 MR. MILLER: To keep this rather short
18 since the TRC charter is something that we
19 have gone over before before the committee
20 and it has been distributed in the past to
21 all members and we have had some comments on
22 it and today we are planning to discuss the
23 second round of comments on this charter
24 which were received by -- which were received
25 from the EPA and New York State DEC. Seneca

1 has incorporated all these comments into the
2 charter that you have in your handout
3 section. Actually section five shows --
4 spells out the changes that were made. The
5 provisions that are being deleted or moved
6 are represented by the slash line through
7 them. The material that has been added into
8 the charter is the shaded area. This is in
9 section five. The comments that we received
10 from NYSDEC and EPA are included in your
11 packet as well. We could run through the
12 changes real quickly just to simplify it.

13 Section five, page one. The first item
14 that we see deleted there is number three on
15 the bottom. Since the time -- since actually
16 the first of the year -- since that time we
17 have signed our federal facilities
18 interagency agreement. This is just bringing
19 things up to current tense. So we have
20 substituted language in the charter that
21 shows the IAG has been signed.

22 Changes, we have numerous provisions in
23 the charter which relate to disclaimers.
24 This TRC Charter is by no means to act in
25 lieu of the IAG or take precedence over the

1 Interagency Agreement that we have signed.
2 These disclaimers -- we have actually created
3 an entire section on disclaimers. It is
4 pretty straightforward. It is on page two on
5 section five.

6 Over on page three we have just added a
7 header which talks about TRC membership.
8 That was inadvertently deleted from the last
9 version. Everyone has looked at it. Shaded
10 area, "TRC members." We have updated the
11 charter with a current list of members as of
12 January 21st.

13 Really straightforward changes here. We
14 are not making much of a change on page four.
15 The normal meeting place for the TRC meetings
16 will be the NCO Club, which you all know is
17 being remodeled at the current time. That is
18 why we are here right now.

19 Page five. Minor revision as far as the
20 role of the chair of the TRC Committee. Just
21 some basic words missing there. We have
22 replaced in "C" on page five attenders with
23 attendees.

24 Page six. This is language that the EPA
25 has recommended that we include and we have

1 worked with them on that language and it is
2 word-for-word as they wish that it be
3 presented in the charter.

4 Page seven. A very similar change for
5 New York State DEC responsibilities.

6 I guess the next somewhat significant
7 change is on page eight where we talk about
8 responsibilities. The one change that occurs
9 here at the request of New York State DEC is
10 that we make it explicitly clear that the New
11 York State Department of Health
12 representative will be assisting the New York
13 State DEC representative in proposing any
14 State health standard requirement, criteria
15 or limitation as legally applicable. The
16 previous language did not state the New York
17 State Department of Health role was more to
18 assist the DEC. Rather than prior to this
19 the language indicated they would be speaking
20 as an equal to the DEC in working matters
21 regarding the clean up activities.

22 Everything else is quite straightforward
23 here. These are really minor changes. We
24 are hoping to have this document signed in
25 the near future. This is, like I say, the

1 second round of comments on that and we are
2 on our fourth TRC meeting. I hope that we
3 can rap this up and have it signed within the
4 next meeting.

5 MR. CHEN: Jim, in the draft that you
6 just read, page 10, third item. If you
7 compare that to the final copy on page six,
8 it needs to be changed. In the draft copy
9 page 10, the one you just read, item number
10 three on the top of the page.

11 MR. MILLER: Page 10 I have as the
12 signatore section.

13 MR. CHEN: "The provision of the IAG
14 shall control" or is that on some other page?

15 MR. MILLER: I am not sure I am
16 following. What is wrong?

17 MR. CHEN: This is the draft. You got
18 that number three there and on the final --

19 MR. MILLER: Marsden has pointed out
20 that some of the changes were not carried
21 over into the final charter. We have
22 illustrated the changes in section five but
23 it has not been carried over into the final
24 charter which is enclosed in section six.
25 That will be corrected. If anyone else notes

1 something that should be changed or takes
2 objection to, definitely get in contact with
3 us.

4 MR. KITTELL: You are planning to send
5 it out for signature when?

6 MR. MILLER: We can say 30 days. Does
7 that seem reasonable?

8 MR. KITTELL: Will it go out in 30 days?

9 MR. MILLER: If in 30 days there is no
10 further comments, we can send it out for
11 signature. If you feel that it should be
12 shorter --

13 MR. CHEN: I have seen this thing three
14 or four times. Why don't we cut it shorter
15 to two weeks?

16 MR. KITTELL: Does anybody have any
17 problem with sending this thing out in two
18 weeks for finalizing the signatures? Okay.

19 MR. MILLER: Excellent. Give the floor
20 over to Randy Battaglia. He's going to talk
21 about PSCR's.

22 MR. BATTAGLIA: For our new faces here
23 today we have in the Willard Town Hall an
24 administrative record and information
25 repository that is available there as a

1 public record. And a lot of these documents
2 when finalized are kept in the public record
3 in Willard.

4 Currently down in the record we have
5 work plans that detail all the work that is
6 going on at these two sites. One part of the
7 process is a draft preliminary site
8 characterization report, which is a draft
9 report that the regulators wanted that
10 summarized in a preliminary form all this
11 information that we have at the ash landfill
12 and open burning grounds.

13 We are going -- we normally do not
14 include draft reports in a public record
15 until they become finalized because some of
16 the information in those reports is subject
17 to change.

18 The draft preliminary site contracts
19 report or PSCR will be included down there.
20 All we have in there is the work plan of what
21 is to be done at the sites. The preliminary
22 site characterization report will be used and
23 included is the remedial investigation report
24 which will probably be done this winter
25 sometime after we get the Phase II

1 information.

2 There will not be a final draft -- final
3 preliminary site characterization report.
4 That information is simply going to be used
5 in the remedial investigation report.

6 Other documents included in the public
7 record will be the remedial investigation
8 report, which will include the risk
9 assessment which discusses the relative
10 health and environmental risks of
11 contaminants that are found and assesses how
12 much risk there is for a particular site;
13 that is included in the RI report; and also
14 feasibility studies with respect to what kind
15 of remediation will be done and which is the
16 most cost effective remediation for a site;
17 and also for the other areas of concern
18 documentation that no contaminants have been
19 found if there happened to be a no action
20 site. All that information when finalized
21 will be included in that public record.

22 And prior to doing a remediation there
23 will be a preliminary remedial action plan
24 that is used also for public comment. That
25 is the time when the public actually can make

1 formal comments as far as being addressed in
2 the remediation.

3 The reason we are putting the
4 preliminary site characterization report in
5 draft form is because technically we don't
6 have any technical data in the repository. I
7 am just announcing that we will put it down
8 there and it will be available for the ash
9 landfill and other opening burning sites.

10 The other areas we are concerned with
11 will have a site investigation report for
12 each representative area. We will summarize
13 what is found at those areas. And any of
14 those other areas that become no action sites
15 have to be included in a record of decision,
16 either a separate document or that maybe tied
17 onto a record decision that is made regarding
18 the ash landfill or burning ground site. Of
19 course, if any of the other areas of concern
20 need any further investigation, we will go
21 onto the entire remedial investigation
22 feasibility process.

23 Okay. That is all. I just wanted to
24 announce those documents are going to be
25 included in there.

1 MR. KITTELL: We are back to questions
2 and answers. Before we do that I would like
3 to introduce Colonel Cross for those of you
4 who haven't met him before. Would you like
5 to make a comment?

6 COLONEL CROSS: Since when have I ever
7 turned down an opportunity like that. First
8 of all, I would like to apologize for being a
9 little late. We had two meetings going on at
10 the same time. One of them is the community
11 meeting that was called by the Governor of
12 New York, Mario Cuomo, to get the State and
13 the local agencies and people together to
14 talk about the reuse of the facilities that
15 Seneca has that would be under utilized.
16 That meeting is going on at Willard as we
17 speak. I was down there for the first half.
18 I will finish the second half down here.

19 I do want to make some comments. I
20 think the TRC is an extremely important
21 outreach vehicle of the environmental program
22 at Seneca. I think one of the big concerns
23 in many people's minds is, "well, you are
24 leaving. What's going to happen?" We have
25 heard all types of things. The first thing

1 is, Seneca is not going to close. Seneca has
2 been downsized. We will have slightly over
3 300 people left here. We will still have
4 three main missions between conventional
5 ammunitions and storage and maintenance of
6 industrial plant equipment.

7 I will be replaced by an O-5, a
8 lieutenant colonel commander who has been --
9 his name his Lieutenant Colonel Roy Johnson.
10 He's coming out of the ammunition division
11 and 82nd Airborne Division. He should arrive
12 toward the end of this month for the change
13 in command on the 15th of July of this year.

14 What is interesting about the Army is
15 that the Army's commitment to the environment
16 transcends whoever sits in the commander's
17 position. The Army's commitment to
18 environmental stewardship, appliance,
19 restoration and preservation and conservation
20 remains unchanged. When I leave, somebody
21 else comes in. You will have somebody better
22 to look at when you come back the next time;
23 that will be the SEAD commanding officer,
24 which means that Lieutenant Colonel Johnson
25 will be the head.

1 What's been the impact of this? When we
2 went into the RI/FS at the beginning -- keep
3 in mind that we are talking about over 900
4 civilian positions shrinking down to about
5 300 positions -- we originally had an
6 environmental staff of six individuals. We
7 retained five of those six during the cut.
8 So we cut the rest of the Depot by two-thirds
9 and we only cut the environmental staff by
10 one-sixth. And, of course, part of the
11 rationale for that is the special weapons
12 operation, the industrial plant equipment
13 operations and generators and a lot of the
14 hazardous waste and not so much the restore
15 and restoration side of it but the daily
16 operations and conservation. We are not
17 generating as much as we used to. So the
18 environmental staff was maintained. That
19 happens to be a pet favorite of mine. I
20 think everybody understands that a commander
21 at an installation is legally and personally
22 liable should they not support an
23 environmental program. I don't know if
24 everybody realizes that but that is what the
25 lesson of Aberdeen was. Quite frankly, there

1 has been tremendous interest in this. My
2 advice to my successor will be to become
3 personally involved. It will be important
4 for himself, the County of Seneca and the
5 Depot.

6 The reports after the RI/FS remains
7 unchanged. We have signed the IAG. It is
8 operational for most intents and purposes.
9 What you see will not show any significant
10 change at all. Unless you drive on the north
11 side of the Depot and you see the grass is
12 12, 16 inches higher. We are no longer
13 mowing. That is the intent of what will be
14 visible to you.

15 I am really gratified for the way the
16 TRC has matured from the first meeting that
17 we had in the NCO Club and the participation
18 for all the players. I think it bodes well
19 for doing the progress right. When you get
20 many people looking at it from many different
21 perspectives, you generally get better
22 solutions. I will shut up with that.

23 MR. KITTELL: Thank you very much.
24 Questions and answers?

25 COMMITTEE MEMBER: It is Dick Durst from

1 Cornell Analytical Labs.

2 COLONEL CROSS: He was late for the same
3 reason.

4 COMMITTEE MEMBER: Colonel Cross had
5 mentioned the fact how little of the Depot
6 actually will be available for community use
7 in terms of the land area and so on. I am
8 just curious -- since the mission of
9 ammunitions storage will continue -- how much
10 of the burning of old ammunitions will go on
11 and what impact will this have on the ongoing
12 clearing of the facility as far as
13 remediation efforts?

14 MR. KITTELL: The facility that we are
15 clearing is more a campus like setting where
16 most of the soldiers live in the North Depot
17 that is becoming available. It is about 165
18 acres out of the 11,000.

19 As far as munition destruction, the
20 place where we actually blow up ammunition
21 versus the place where we burn it, which is
22 located at the site but not on top of each
23 other, there will be burning continuing on in
24 the future. But the burning that we are
25 doing is in accordance with RCRA. We

1 constructed a steel burning tray about as
2 wide as this table and 40 feet long. The
3 burning is conducted in a tray. The residue
4 is vacuumed up. You don't have this problem
5 about metals to be discovered by people 20
6 years later. There might be scheduling
7 conflicts with the clean up in the burn pads
8 if clean up is indicated but we are not using
9 the burn pads actively now.

10 As far as the demolition goes, we have
11 applied for a continued operating permit as a
12 hazardous waste disposal site. Because when
13 you blow up a bomb you are disposing of a
14 hazardous waste. That will have to be
15 operated and managed in that way. Under the
16 RCRA law when you vacate the site you are
17 bound to clean up the site.

18 COMMITTEE MEMBER: Do you have
19 specifications on the air pollution on those
20 sites?

21 MR. KITTELL: We have a permit from the
22 State of New York to open burn. There are
23 regulations associated with that. Their
24 studies have shown where we have been able to
25 demonstrate that there is very little --

1 although I am not going to say there is
2 none -- there is very, very little pollution
3 that comes off. It is so energetic. And
4 most of the reaction just results in energy.

5 As far as our final operating permit
6 from RCRA, there are air model studies that
7 have to be done. Stop me if I wander off
8 here, folks. They demand from us air
9 modeling standards and also modeling that
10 says how much actual weight of pollutant goes
11 up in the air when you do certain types of
12 operations. Our final operating permit when
13 it is granted will probably also regulate
14 frequency and that sort of thing for air
15 pollution considerations.

16 MR. BATTAGLIA: One of the concerns that
17 the regional air people have in Avon was
18 submissions of metals, heavy metals. At that
19 time we did a review of the type of
20 propellants that were open burning for
21 disposal. It did not have the poundage of
22 metals in them that they were concerned with.
23 I presume that the heavy metals that we have
24 contamination in or around the burn pads was
25 from past burning. The burning of bulk

1 propellants which send a rocket out of a tank
2 does not have the concentration of heavy
3 metals in the propellants itself. There
4 maybe a grain in the initiating part that
5 initially ignites.

6 They were concerned -- I think this goes
7 back to '88 when we started looking and
8 finding information of what kind of chemicals
9 is in the propellants for the regional air
10 people. As Gary said, it is part of our
11 permit application. To get a final we have
12 to do a risk assessment where they monitor
13 the type of air emissions and what type of
14 health risks from those emissions.

15 One of the things that we have been
16 talking about with the DEC just lately is
17 what kind of alternatives there are for
18 opening burn detonation. The Army is
19 researching alternatives, such as recycling
20 the propellant. I personally don't know how
21 far along the Army is in doing that. I think
22 feasibly -- I don't know how far they are in
23 developing those processes. One of the
24 things about the open burning, open
25 detonation is the only way to -- we have

1 anti-tank rockets. They are not made to be
2 taken apart and have the explosive destroyed
3 some other way. The only thing you can do is
4 detonate.

5 The Army has done studies at open
6 burning and open detonation grounds across
7 the country. In general they found little
8 can be done. They have found some
9 contamination at some burning areas. Quite
10 commonly you find contamination at the
11 burning areas.

12 Other things like fuses or bombs or
13 artillery shells, the only way -- they
14 weren't designed to be taken apart. I have
15 heard that the Army is researching and doing
16 things in developing new processes so they
17 can be disposed of in other ways. I have no
18 idea how far along the Army is in getting
19 those things changed over. The trouble is
20 everything that was in storage wasn't
21 designed that way. There are cases whereby
22 in routine inspections the quality assurance
23 people will find munitions that might be
24 corroded and so forth. And the only safe way
25 to get rid of it is to take it to the demo

1 grounds and detonate it.

2 We have identified all the percentage of
3 the chemicals in those ammunitions. That is
4 being reviewed by the DEC for that part of
5 the permit to be allowed to do that.

6 COLONEL CROSS: There are locations and
7 there are processes to recycle ammunitions.
8 Some of the materials -- some of them are so
9 energetic you don't want to bother with them
10 because it is more hazardous to do it. The
11 problem with those is depending upon what
12 kind of process you use you may end up -- in
13 many cases you end up with more hazardous
14 fluid streams coming out of the items rather
15 than taking them out to a ground area where
16 it doesn't migrate and you can pull it up
17 later. That is the biggest problem they are
18 having. It turns out it generates more
19 hazardous waste than the traditional methods.

20 COMMITTEE MEMBER: I have a question for
21 you. I am with the State DEC in the permit
22 process. I am concerned about how long it
23 takes to get through the current process and
24 get a permit that relates to the opening burn
25 area and open demo area. I realize the State

1 takes a long time. We are at fault. We are
2 strict in the process. But when you
3 mentioned cutting the staff from six to five,
4 is there plans to decrease staff or is this
5 cut going to delay the process further? That
6 is what my concern would be.

7 MR. KITTELL: That is an excellent
8 question. Let me tell you how we have tried
9 to manage our way through that difficulty.
10 We started out, maybe naively, when RCRA was
11 started thinking we would be able to write
12 our permits. The Army had all best
13 intentions. They had blanket contracts that
14 wrote permits for multiple sites across the
15 country. We were caught up in a process
16 where the environmental programs in various
17 States matured. Parts of those programs were
18 transferred over to the State's control or
19 the States had their own regulations, own way
20 of doing things. We seemed to be caught
21 up -- not that there was any negative intent.
22 We seemed to be caught up in our inability to
23 make or hit a moving target as it appeared
24 that the requirements changed. So we went
25 through a series of many submissions of our

1 RCRA permit to the DEC folks. The different
2 folks that were here. We thought we were
3 getting close in the process and then it
4 appeared as if things had reversed.

5 What we did at that point was we got
6 together with the people -- the permit
7 administrators at that time in Albany and
8 explained our dilemma. They explained our
9 dilemma, too. Because they thought we
10 weren't doing a very good job in submitting
11 the permits. We offered to hire the
12 expertise that it takes. We were able to get
13 the same folks -- a large firm that's
14 represented here today -- to help us with the
15 permit process. We were able to bring the
16 administrative and technological capability
17 together and put together a permit and pursue
18 it.

19 I would say at this point right now with
20 their assistance we are looking for action on
21 the State's side to bring this thing to
22 closure before we end up in another situation
23 where human nature makes it difficult for us
24 to perceive. There seems to be a fair amount
25 of turnover in staffing and project managers

1 in all offices. And when a new person comes
2 to the job and looks over something as
3 complex as that, I know I would like to go
4 back and look at it from square one. Human
5 nature prevents progress. We are looking for
6 some activity soon in getting an operating
7 permit for our part B. We did the very same
8 thing with the part X permit, which deals
9 with the demo grounds. We did the same thing
10 with the hazardous waste incinerator. This
11 is the popping plant for the de-activation
12 for small arms; where we shoot bullets off in
13 a confined furnace. Not what is sometimes
14 thought of as a hazardous waste incinerator.
15 It is classified like that under the law. We
16 do not have the staff but we have hired a
17 consulting staff to make up for the loss. We
18 would like to see things move along now.

19 COLONEL CROSS: I think the other side
20 is certainly the TRC's principles, the
21 mediation efforts. The other side of this is
22 the day-to-day operations. We have to
23 prevent future problems like our predecessor
24 left us years ago and years ago. And with
25 the reduction in two very major missions you

1 just reduce the amount of time and people
2 that you need to track all of those
3 day-to-day type things. That is the other
4 side.

5 COMMITTEE MEMBER: I hope it is not cut
6 to four or three.

7 COLONEL CROSS: It is not going below
8 five while I am here, I will tell you that.

9 COMMITTEE MEMBER: Gary, first of all, I
10 would like to compliment Colonel Cross for
11 his comments on the downsizing of the base
12 instead of closing. That is a very
13 significant statement in my mind. Number
14 two, we are all here because we were all
15 interested in the environment. Some are just
16 private tax payers, some with a pecuniary
17 interest. I think we are all interested in
18 the environment and we would like to keep it
19 in perspective. We would not want Seneca
20 Army Depot to become a Love Canal. I could
21 give you an hour in verse on that but I won't
22 go into that.

23 Part per billion. Now, an article
24 published last July on the Depot said cancer
25 causing substances at Depot. Well, they

1 listed five parts per million as being the
2 maximum toxic level and 10 part per billion
3 were found. Let me tell you what it meant.
4 Let me give you what a part per billion is.
5 If you took one gallon of this toxic
6 material, it means one gallon in a billion
7 gallons. It would mean one gallon in
8 twenty-three million eight hundred and nine
9 thousand five hundred and twenty-three
10 barrels of the stuff. Let's go a little
11 farther. Each barrel by the way is a 42
12 gallon barrel. Suppose now we took that one
13 part and broke it down to a drop. We can
14 take that drop and break it down to 100
15 pieces. It would mean that we would have
16 sixteen one-hundredths of a drop of material
17 in every 42 gallon barrel. And I doubt that
18 there is anybody in this room can clean a
19 barrel to that purity and stake his life on
20 it. So we talk about 100 parts per billion
21 or 10 parts per billion. We are talking
22 about numbers that are beyond comprehension
23 to the general public and beyond toxicity.

24 I will tell you this. Whoever took
25 these measurements, if you go out here and

1 take any booze bottle out there, you will
2 find ketones and fuel oils. I don't know
3 human toxicity but these are ingested
4 everyday but we don't hold a big program and
5 spend eleven billion dollars on a search to
6 find out if the public is going to be harmed.
7 Enough said. I quit.

8 MR. KITTELL: I appreciate your
9 comments. I think I am going to build on
10 them at the risk of boring everyone. You had
11 the same problem when I started in this
12 business. When I tried to, I was able
13 finally to get parts per billion. Our water
14 reservoir, which is probably four times the
15 size of this building, holds 100,000 gallons
16 of water. And I was able to conclude after a
17 little hen scratching one tear drop in that
18 reservoir is a part per billion.

19 Let's talk about toxicity and long term
20 health effect. Think, if you will, how big a
21 cigar or cigarette you would have to smoke to
22 kill you there on the spot. However, science
23 has proven that long term ingestion from
24 smoke or smoking is a health hazard. And I
25 think that is the problem that we are in here

1 now. I think what you are talking about --
2 some of the chemicals that we are talking
3 about takes a large dose of that particular
4 chemical to have an immediate toxic effect on
5 the human body. But it is unclear in many
6 cases with these chemicals what happens to
7 the human body if you ingest them in water
8 day in day out for a lifetime. I think that
9 is where some of the confusion comes up with.
10 Why we are worrying about parts per billion?
11 And why we are chasing after a problem like
12 this?

13 COMMITTEE MEMBER: Gary, let me add
14 another point. I spent a good part of my
15 life in industry working with trichloroethy,
16 acetone and some of the other items that were
17 mentioned in the newspaper article. I
18 appreciate the safety. There is no security
19 on it.

20 First of all, let's not come to the
21 conclusion we are going to live forever.
22 Number two, on the heavy metal end of it we
23 would have to shut down the State of
24 Illinois. The people have dug wells there
25 and the lead deposits are so heavy and they

1 are drinking this water and they have been
2 all their life. If we were going to go and
3 take contamination levels of it, we would
4 find cities full of it. Let's go farther
5 south, Dakota, their Badlands. I thought
6 they were Badlands because of the indians and
7 the cowboys. They are Badlands because of
8 the chemical deposits. People live there and
9 cows eat this grass and we use the wheat from
10 there and whatnot. You know what it will do
11 to your eyes and your nails and all of that?
12 Gary, you don't have to smoke as many
13 cigarettes either.

14 MR. CHEN: Sir, if I could just try to
15 tell you something. I am from the State of
16 New York Conservation Office. I hear what
17 you are saying. I cannot --

18 COMMITTEE MEMBER: I agree with you.

19 MR. CHEN: It is not a matter of
20 containing. I think I hear you saying it is
21 104 parts per billion. There is a farm house
22 further down. Is that farmer willing to
23 drink that 104 parts per billion? I would
24 say that one in a million persons is willing
25 to drink that water. Maybe I am and you are

1 but the rest of us here are not. If we
2 ignore that concentration of water, we are in
3 fact saying to the United States this is a
4 bunch of baloney. We cannot do that under
5 the system that we live. And a lot of these
6 concerns, as Gary said earlier, are based on
7 health studies. A lot of the health studies
8 are very conservative and say you have to
9 drink so many quarts of water for your
10 lifetime.

11 MR. KITTELL: We need to move this
12 along. I will say, as long as you brought up
13 the farm house, we are -- for those of you
14 who are new here. Since we have found this
15 problem we are testing the water at the farm
16 house every quarter and sending those tests
17 to all the people involved that have lived
18 there. We know we are not effecting those
19 folks at this time.

20 I also want to reiterate this process.
21 When we go through it, it is a risk based
22 process. There will be a risk analysis done
23 of possibly the people that can be effected
24 and that sort of thing. There is an economic
25 part to that. That is how final remediation

1 will be determined publicly and risk and cost
2 based.

3 MR. HEALY: I would just like to point
4 out at the very first meeting I laid out the
5 program that we are doing, the RI/FS process,
6 what that is about. And just everything we
7 are doing is legally mandated, the whole
8 process; what we test to, what we test for
9 and how we go about doing everything is
10 legally mandated. So the Army is doing what
11 the Army has been directed to do. It would
12 be nice to cut down cost. It might be nice
13 to cut down the scope of the cost but we have
14 the EPA and NYSDEC telling us that you will
15 do it this way.

16 MR. KITTELL: As Marsden pointed out, we
17 are doing what the laws tell us.

18 We need to set another date. We have
19 been developing these agendas ourselves. It
20 would be nice to get a little feedback on the
21 adequacy of the presentations. We would
22 certainly like any possible agenda topics
23 mailed to us within the -- we take them
24 within a week or two of the next meeting. Of
25 course, if they come late, that limits our

1 ability to address what will be discussed.

2 So with that said how about a date?

3 COMMITTEE MEMBER: How about early
4 October because that is the end of our fiscal
5 year.

6 MR. KITTELL: It has been proposed that
7 the next meeting be October. The entire
8 government fiscal year ends in September.
9 October would be a good time for you to talk
10 about what we are able to get obligated for
11 the end of the fiscal year and also to talk
12 about what the '94 budget year holds. It
13 would, I think, give the folks from Boston
14 and Huntsville quite a bit to talk about, you
15 think?

16 MR. HEALY: Yes.

17 MR. DUCHESNEAU: Early October?

18 MR. KITTELL: Yes. We may also at that
19 time know a little bit more about the
20 proposal that we have to perhaps start
21 removing some of those materials at the ash
22 landfill where we know we don't need to study
23 further. So October. Would you like to
24 pick a day and time?

25 COMMITTEE MEMBER: Second Wednesday.

1 How does that sound? I don't know the date.

2 MR. CHEN: The second Wednesday is the
3 13, October.

4 COMMITTEE MEMBER: We had tried to stay
5 to Thursdays because there are things that go
6 on at the Depot.

7 MR. KITTELL: It is Wednesday, 13,
8 October. We maybe back in the NCO Club; and
9 if not, we will be down here. I guess that
10 is a rap.

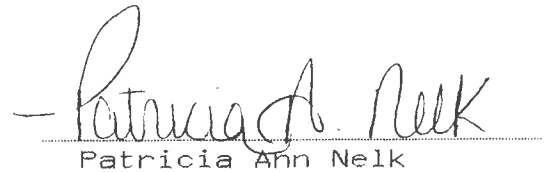
11 * * *

12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T I O N

1
2
3 I, Patricia Ann Nelk, hereby certify that I reported
4 in stenotype shorthand the proceedings had on the 9th day
5 of June, 1993, in the matter of the Technical Review
6 Committee.

7 And that the foregoing transcript, herewith numbered
8 pages 2 through 60, is a true, accurate and correct record
9 of those stenotype shorthand notes to the best of my
10 ability.

11
12 
13 Patricia Ann Nelk

14 DATED AT: Rochester, New York
15 this 3rd day of July, 1993.