PARSONS

100 Summer Street • Boston, Massachusetts 02110 • (617) 457-7900 • Fax: (617) 457-7979 • www.parsons.com

March 28, 2003

Commander
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
Attn: CEHNC-FS-IS (Marshall Greene)
4820 University Square
Huntsville, Alabama 35816-1822

00853

SUBJECT: Seneca Army Depot Activity, Response to Comments on Draft Final Decision Document for the Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Sites (SEAD-13)

Dear Mr. Greene:

Parsons is pleased to submit the response to comments on the Draft Final Decision Document at SWMU SEAD-13, the Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Sites, at the Seneca Army Depot Activity (SEDA) located in Romulus, New York. This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 0023 to the Parsons Contract DACA87-95-0031.

The responses were prepared based on comment letters from the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) dated December 12, 2002 and January 30, 2003, respectively. The responses are submitted for review prior to providing the revised document. The Army believes that the document revision/review process can be streamlined by submitting comment responses for general review prior to revising the document. Following general agreement on the provided responses, the Army will submit the Final Decision Document at SWMU SEAD-13 for formal review and comment.

Parsons appreciates the opportunity to provide you with these responses. Should you have any questions, please do not hesitate to call me at (617) 457-7905 to discuss them.

Sincerely,

Todd Heino, P.E.
Program Manager

Enclosure

cc: S. Absolom, SEDA
T. Enroth, USACE-NY District
T. Matthews, OSC
K. Hoddinott, USACHPPM
C. Boes, AEC

PARSONS

100 Summer Street • Boston, Massachusetts 02110 • (617) 457-7900 • Fax: (617) 457-7979 • www.parsons.com

March 28, 2003

Mr. Julio Vazquez
USEPA Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Ms. Alicia Thorne
New York State Department of Environmental Conservation (NYSDEC)
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
625 Broadway 11th Floor
Albany, NY 12233-7015

SUBJECT: Seneca Army Depot Activity, Response to Comments on Draft Final Decision Document for the Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Sites (SEAD-13)

Dear Mr. Vazquez/Ms. Thorne:

Parsons is pleased to submit the response to comments on the Draft Final Decision Document at SWMU SEAD-13, the Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Sites, at the Seneca Army Depot Activity (SEDA) located in Romulus, New York.

The responses were prepared based on comment letters from the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) dated December 12, 2002 and January 30, 2003, respectively. The responses are submitted for review prior to providing the revised document. The Army believes that the document revision/review process can be streamlined by submitting comment responses for general review prior to revising the document. Following general agreement on the provided responses, the Army will submit the Final Decision Document at SWMU SEAD-13 for formal review and comment.

Should you have any questions, please do not hesitate to call me at (617) 457-7905 to discuss them.

Sincerely,

Todd Heino, P.E.
Program Manager

Enclosure

cc: S. Absolom, SEDA
E. Kashdan, Gannett Fleming
T. Matthews, OSC
M. Greene, USACE
K. Hoddinott, USACHPPM
T. Enroth, USACE
C. Boes, AEC

Response to the Comments from the United States Environmental Protection Agency

Subject: Draft Final Decision Document for SEAD-13
Seneca Army Depot
Romulus, New York

Comments Dated: January 30, 2003

Date of Comment Response: March 28, 2003

General Comments - Human Health:

All general comments relating to the human health risk assessment were adequately addressed.

New Comments:

Comment 1: Residential receptors are assessed in Appendix B. These receptors are also briefly discussed in Section 3.6. While it is clear that the Army considers these receptors to represent an unlikely scenario, they should be integrated into the overall risk assessment. In some instances, the risk assessment is misleading in that the evaluation of the residential receptors is not even identified (e.g., see the bulleted lists in Section 3.3.5.1 and Section 3.3.5.2).

Response 1: Agreed. Discussion on the residential receptor has been integrated throughout Section 3.0. The tables of risk calculations remain in Appendix B.

Comment 2: The method of background comparison is not very conservative. Comparing the site average to twice the average background value for inorganics allows potential hotspots to be overlooked. Please reference the specific guidance that was used in establishing this comparison technique. At a minimum, Tables A-5 and A-6 should list maximum detected values.

Response 2: In a letter dated November 25, 1997, EPA recommended that the Army compare the site average to twice the average background value for inorganics. EPA proposed this method as a more practical and sufficient method of assessing the data, instead of using Wilcoxon Rank Sum, or other more complex statistics. The comment from EPA is quoted below:

> USEPA Region II typically recommends using a much simpler technique for comparing site data to background data than the Wilcoxon Rank Sum test: selecting as chemicals of potential concern those inorganic chemicals detected in site samples with an average concentration (of the detected values) greater than two times the average concentration (of the detected values) in the background samples. It appears that using this technique would have achieved essentially the same results as the statistical treatments conducted here, without the uncertainty of the validity of the statistical treatments used.

The Army followed this recommendation.

Agreed. The maximum detected values have been added to Tables A-5 and A-6.

Specific Comments - Human Health:

All specific comments relating to the human health risk assessment were adequately addressed.

New Comments:

Comment 1: Page 3-6, Section 3.2.2, Identification of Chemicals of Potential Concern (COPCs): The second paragraph under the heading "Soil" indicates that chloroform was not retained as a COPC for surface soil because it was detected at levels below the PQL in 1 out of 13 samples. The frequency of detection (FOD) is greater than 5% and, as such, eliminating this chemical is in conflict with the last paragraph on Page 3-5 which indicates that organics will be eliminated only if the FOD is less than 5%. Revise to address this apparent inconsistency.

Response 1: Upon review of the data, it was determined that the detection of chloroform at a value of 2 J was the result of a lab error, and is not considered a reliable data value. The table has been revised to reflect that the concentration of chloroform in sample SB13-7-1 is 12 U µg/kg. This detection is below the quantitation level and is not considered part of the data set. Therefore, chloroform will not be added as a COPC. This explanation has been added to the text for clarification.

Comment 2: Page 3-16, Section 3.3.5.2, Exposure Scenarios: The paragraph under the "Recreational Visitor" scenario indicates that the assumed exposure for this receptor is two weeks a year for five years. This exposure scenario is not conservative enough. If the area potentially will be used as a recreational facility, it is possible that a nearby resident could visit on a regular basis. Additionally, it would be appropriate and more conservative to evaluate the youth recreational users and adult recreational users in addition to child recreational users. Not only would these analyses result in risk estimates for these receptors, but it would also allow for the calculation of the lifetime cancer risk for the recreational user.

Response 2: The recreational visitor is assumed to reside at the site during a camping event and the camping event is assumed to last two consecutive weeks (24 hours/day, 14 days/year) each year for 5 years. As presented in Appendix B, with exposure to groundwater prevented, the total cancer risks and hazard indices for residential receptors, who are exposed to COCs at the site 350 days/year, are within the EPA risk limits. Therefore, although more conservative exposure scenarios (i.e., exposure more than two weeks a year for five years) are not evaluated for this mini risk assessment, they are not expected to result in unacceptable risk based on the risk evaluation for residential scenario.

Similarly, although youth recreational users and adult recreational users were not evaluated, risks for residential receptors can be used as conservative surrogates. Since risks for residential receptors are within the EPA limits with a restriction on groundwater use placed at the site, it is concluded that risks for adult recreational users would be within the EPA limits with exposure to groundwater prevented.

General Comments – Ecological Risk Assessment:

Comment 1: The response provided adequately addresses the concerns presented in the comment. As the response states, the Process Document was followed correctly during the compilation of the SLERA, and the conclusions of the ERA portion of the mini risk assessment correspond with the Process Document requirements for the conclusion of a SLERA. However, common practice is to compare maximum concentrations of detected contaminants in each media to predetermined screening values as a way of determining those contaminants that should be considered COPCs in the ERA.

Response 1: Comment noted. A screening-level ecological effects evaluation (i.e., Step 1.3) was not performed for this mini-ERA to reduce the list of COPCs. This is a conservative approach as all compounds detected were retained as COPCs, and, therefore, this approach will not affect the risk assessment results.

Specific Comments – Ecological Risk Assessment:

All specific comments relating to the ecological risk assessment were adequately addressed.

Specific Comments – Nonrisk Related:

New Comments:

Comment 1: Figure 1-2, Wind Rose Syracuse, New York: The predominant wind directions differ substantially between the wind rose charts presented in the April 2000 Draft Decision Document and the October 2002 Draft Final Decision Document. Revise accordingly.

Response 1: Acknowledged. The Wind Rose Figure included in the October 2002 Draft Final Decision Document reflects the most current conditions at SEDA. The figure provided in the April 2000 document is outdated.

Comment 2: Page 2-5, Section 2.4.3, Groundwater: This paragraph indicates that for SEAD-13-West, monitoring well 13-(1)2 is upgradient and monitoring well 13-6 is a downgradient well. The paragraph also indicates that the presumed direction of groundwater flow was to the northeast for SEAD-13-West. Based on Figure 2-3, the presumed groundwater

flow is in conflict with the upgradient and downgradient designations for the wells. Revise accordingly.

Response 2: The Army believes that based on historic knowledge and groundwater monitoring results that the west disposal pits do not exist. A 1960s report on the disposal of IRFNA discussed the "disposal site" and the construction of 6 pits (east disposal area). The location marked on an old map appears to be in an area that was east of the future Duck Pond. It should be noted that the Army investigated the assumed west disposal area due to the presence of the aboveground piping. It appears that the piping was installed in the event that it was required at a later date. Groundwater results show that the nitrate concentrations are not elevated in the assumed area of the west disposal area. The nitrate concentrations (up to 0.17 ppm) are well below the Class GA standard of 10 mg/l. As a comparison, the nitrate concentrations are over 1,000 times higher in the east disposal area.

Since there is no actual source material, upgradient and downgradient determinations cannot be made. The text will be revised accordingly.

The presumed groundwater flow is now discussed in new Section 2.5.4 and shown on Figure 2-6.

Comment 3: Page 3-4, Section 3.2.1.1, QA/QC Methods: The fifth sentence in this section uses the phrase "field equipment decontamination event." Revise text for clarity.

Response 3: Agreed. One field equipment blank was collected each time the field equipment was decontaminated in order to detect possible sources of contamination introduced from field sampling equipment or from carry over from one sample to the next. The text has been revised.

Comment 4: Page 3-5, Section 3.2.1.3, Data Validation: The second sentence of this section uses the term "sample reservations." Please correct this text.

Response 4: Agreed. The text should read "sample preservations". The text has been revised.

Comment 5: Page 3-11, Section 3.3.4.2, Fate and Transport: The second to last sentence under the "Metals" heading refers to cyanide as a metal. Revise text for clarity.

Response 5: Agreed. The sentence has been rephrased as follows: "Two metals, aluminum and manganese, and cyanide were considered COPCs in groundwater.

Response to the Comments from New York State Department of Environmental Conservation

Subject: Draft Final Decision Document – Mini Risk Assessment for the Inhibited Red Fuming Nitric Acid (IRFNA) Disposal Site (SEAD-13)
Seneca Army Depot
Romulus, New York

Comments Dated: December 12, 2002

Date of Comment Response: March 28, 2003

Army's Response to NYSDEC Comments:

Comment 1: In NYSDEC's Specific Comment #1, the Department requested that "(S)urface and subsurface soil samples should be taken from within the IRFNA pits themselves (0-2 inches, plus others)." However, the Army only took one additional surface soil sample from within the IRFNA pits as indicated in Figure 2-3. One surface soil sample appears inadequate to characterize the extent of surface and subsurface contamination of IRFNA pits that are described in this report as "six elongated disposal pits (possibly seven)" that are "30 feet long, 8 feet wide and 4 feet deep." Also, for the one soil sample that was collected from the disposal pits, what type of surface soil was tested? The site description states that the pits are covered with crushed gravel and limestone fragments. Please explain the surface soil sampling methodology used.

Response 1: Disagreed. The Army submitted an initial work plan to NYSDEC and EPA for the supplemental fieldwork on January 11, 2001. A revised work plan was submitted on July 31, 2001 and this plan modified well locations slightly from the January 11, 2001 work plan. No locations were moved from the pits themselves. Both plans proposed one surface soil sampling point and no subsurface sampling points within the pits. The Army did not receive agency comments regarding the soil sample locations or the notice to proceed with sampling. The Army believed that NYSDEC considered the Army's proposed scope and sampling locations to be acceptable prior to beginning the work.

The surface soil sample collected in the disposal pit (SS13-9) was composed of shale fragments and limestone gravel. This description confirms that the sample was collected from the IRFNA pit contents. The sample was a grab sample and was collected using a spade.

The Army does not intend on performing additional surface or subsurface sampling within the disposal pits or in any other location at SEAD 13.

Comment 2: In the Army's response to NYSDEC's Specific Comment #2, the Army states that the "nitrate/nitrite concentrations in the groundwater in the IRFNA pit area have been generally consistent over time." However, the Army has not adequately defined the source of this contamination. If there is no source, then why haven't the groundwater concentrations decreased

with time? The consistent levels of nitrate/nitrite contamination may be indicative of a continuing source of groundwater contamination that may require further investigation. Please address.

Response 2: Disagreed. The source of the groundwater plume is the east disposal pit area. The plume extends in the directions of groundwater flow away from the east disposal pit area towards the Duck Pond. The Army contends that the nitrate plume has been adequately characterized by a combination of the nitrate groundwater results (Figure 2-9) and the geophysical survey results (Figure 2-5). The highest areas of conductivity as identified by the geophysical survey correspond well to the areas of high nitrate concentrations. Further, the two wells (MW13-3 and MW13-7) where the wells are consistently dry show as areas of low conductivity. Therefore, although the wells do not necessarily bracket the outside edge of the plume, the geophysical results show that the high conductivity dissipates outside of monitoring wells MW13-11, MW13-13 and MW-13-14.

The Army recognizes that the disposal pits were the source of groundwater contamination. However, further investigation of the source is not necessary as discussed above. The Army understands that a groundwater use restriction will be required to prevent ingestion of groundwater. Ingestion of groundwater was the only risk identified for SEAD 13.

General Comments:

Comment 3: This document recommends institutional controls in the form of "a restriction on the use of groundwater for drinking water purposes together with a groundwater monitoring program is recommended due to the presence of elevated levels of nitrate/nitrite-nitrogen in the groundwater at SEAD-13 East." However, the Army does not present how this remedial action would achieve ARARs. The document simply recommends "five-year reviews will be performed until data shows that they are no longer required." The Army needs to thoroughly demonstrate how institutional controls would be protective of human health and the environment, in addition to compliance with ARARs.

Response 3: Agreed. Groundwater monitoring and land use restriction for groundwater will be implemented at the site until contaminant concentrations meet Class GA groundwater standards and EPA MCLs. The restriction on groundwater use at the site would eliminate contact with groundwater as an exposure pathway for human health risk, thereby reducing risk to within acceptable levels for potential human receptors. With the exception of groundwater use, there are no other unacceptable risks at this site. This clarification has been added to the text.

Comment 4: Although one of the Army's goal for this decision document is to provide a recommendation that the area warrants no remedial action for soil, sediment, and surface water by providing, in the Army's opinion, adequate site information to warrant this recommendation,

the State believes that the Army has overlooked the actual source area, i.e., the disposal pits. Since the proposed future use of SEAD-13 is conservation/recreation, there is the potential for human contact, either by a construction worker, park worker or recreational visitor. Because the source was not addressed, and this exposure scenario was not addressed in the mini-risk assessment, the NYSDOH considers the risk assessment incomplete. At a minimum, a source area management plan is needed until the requested disposal pit information, as described below, is evaluated.

Response 4: Disagreed. The Army believes that the source of contamination has been sufficiently delineated. See Response No. 1. The Army disagrees that the source area was not evaluated in the mini-risk assessment. There was one surface soil sample (SS13-9) that was collected from the source materials. The risk assessment did not show unacceptable risk for contact with surface soil.

Comment 5: Clarification is sought as to why soil boring samples were not collected within the disposal pits. It is unclear how much soil, if any, is actually in the pits or if the disposal pits are even considered soil. The analysis of the waste for contaminants of concern (i.e., degradation products of IRFNA) and the physical parameter of pH would allow for a more complete evaluation of the potential for future exposures and additional migration of contaminants to surrounding soil and groundwater. In addition, the pH of the soil and groundwater adjacent to the pit area was not examined. As stated above, this information is necessary to evaluate the potential of (disposal pit related) decreased pH of soil or groundwater to leach "site background" inorganics not related to the disposal of IRFNA from surrounding soils into groundwater and subsequently the Duck Pond. In the document discussion of groundwater contamination, the Army states that some of the elevated inorganics, decreased pH and background leaching may also be the cause. Without turbidity data or dissolved inorganic/pH data, these two scenarios cannot be separated as to which may be the cause of the elevated inorganics.

Response 5: See Response No. 1 for rationale behind the subsurface exploration program. As stated above, the Army believes that the source has been sufficiently delineated, based on geophysical and groundwater data.

As shown on Figure 2-10, a review of groundwater sampling parameters shows that the pH of the groundwater at SEAD-13 is not lowered and is in the same range as the pH of groundwater at other background locations at SEDA. The pH levels measured at the site does not cause additional leaching of metals.

The elevated metals concentrations correlate with higher turbidity levels. The maximum concentrations of magnesium, iron, manganese and chromium were all detected in the September 2001 sampling round in MW13-13 where the turbidity measurement was 999 NTUs as compared to a turbidity of 13.7 NTUs in April 2002. In general, the metals results were significantly lower

where turbidity values were lower. For instance, the following table of results for MW13-13 demonstrates this.

Analyte	September 2001 (ug/l)	September 2001 Duplicate (ug/l)	April 2002 (ug/l)
Turbidity	999 NTUs	999 NTUs	13.7 NTUs
Aluminum	39,700	70,900	27.2
Chromium	62.5	109	<1.4
Copper	25.9	35	<1.4
Iron	57,300	97,900	59.2
Lead	27.1	32.5	0.8
Manganese	1,740	3,210	397
Nickel	80.2	134	9.5
Zinc	146	223	1.9

The Army does not dispute that there are metals concentrations that are exceeding Class GA Standards, however, there is no defined plume of high metals concentrations. As demonstrated above, the highest concentrations of metals were due to a sampling event where high turbidity groundwater was analyzed.

A new Section 2.6.3.7 has been added to summarize the turbidity and pH data.

Comment 6: Has the groundwater contamination been sufficiently delineated? If so, please provide a plume sketch, depicting both nitrate/nitrite and metals contamination.

Response 6: The groundwater contamination has been sufficiently delineated. Figure 2-9 provides a plume sketch, as well as nitrate/nitrite data.

As discussed in Response No. 5, there is no metals plume map to present.

Comment 7: There should be a conclusions section, preceding the Army's recommendations. In this conclusions section, the Army should indicate that SEAD-13 failed a residential risk assessment.

Response 7: The conclusions are presented in Section 3 and 4 and reiterated in Section 5. An additional section is not required. The results of the residential risk assessment are presented in Section 3.5.4 (formerly numbered Section 3.6). In the same manner that risk is not an issue for a recreation/conservation land use scenario, risk is not a threat to human health under a residential scenario. The risk assessment showed that the cancer risk to a future resident (child and/or adult) is within EPA's acceptable range. The non-cancer risks for the resident adult and resident child

Response 12: Agreed. See Response No. 5. The turbidity data is included in the tables in Appendix A (Table A-2). The text has been revised to add turbidity data.

Comment 13: Page 5-2, Section 5.1, Expanded Investigation Results Supporting the Recommended Action: The Army should denote which document "the details of the groundwater monitoring program will be provided in."

Response 13: Agreed. The details will be provided in a Post-Closure Groundwater Monitoring Plan.

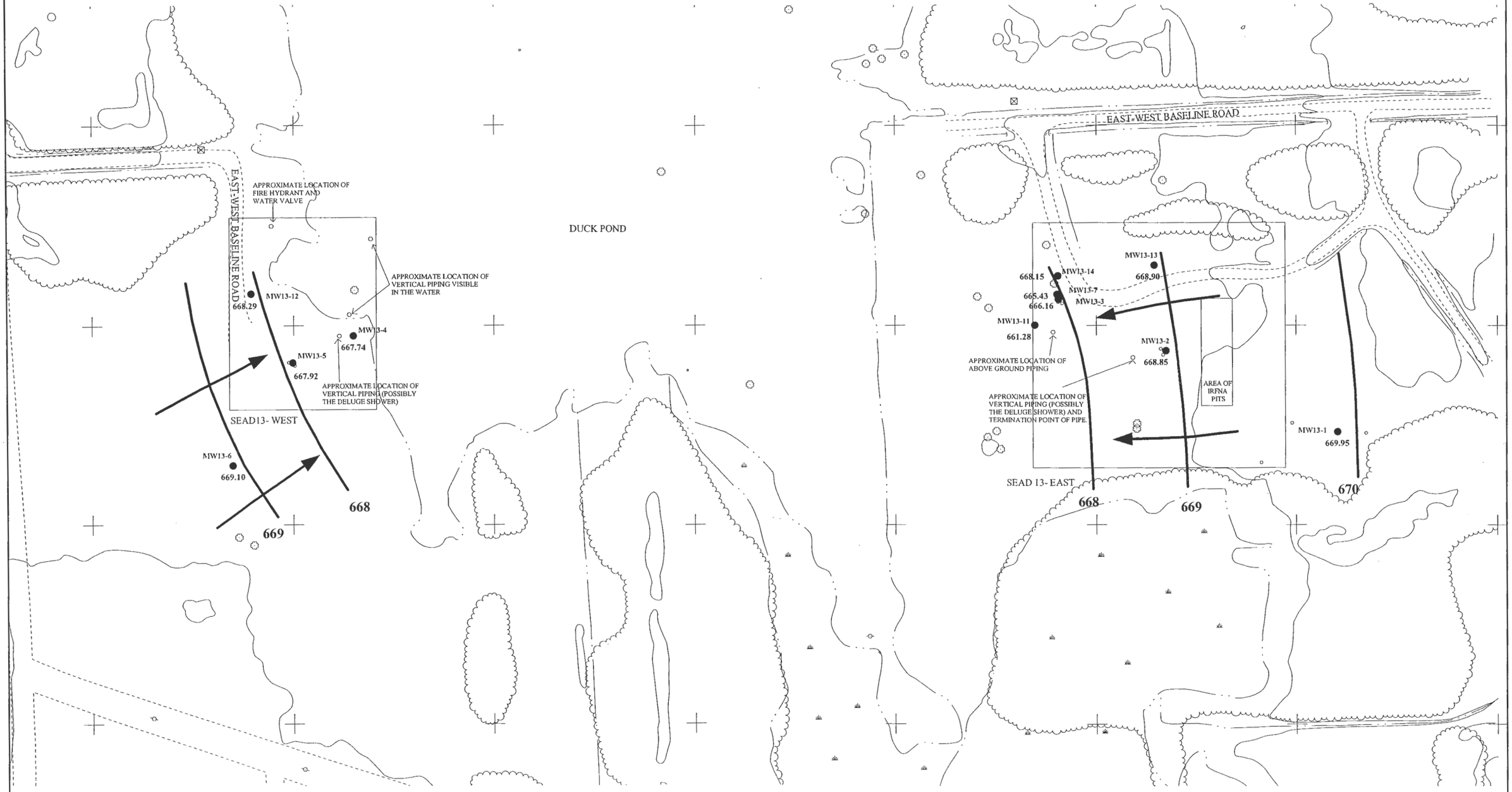
Comment 14: Figures 2-1 through 2-7: On these figures it is unclear where the suspected IRFNA pits are on the west side of the site. Therefore it is difficult to support the Army's location of monitoring wells and sampling points on the west portion of the site. Also, groundwater direction should be indicated where appropriate.

Response 14: The Army believes that based on historic knowledge and groundwater monitoring results that the west disposal pits do not exist. A 1960s Army report on the disposal of IRFNA discussed the "disposal site" and the construction of 6 pits (east disposal area). The location marked on an old map appears to be in an area that was east of the future Duck Pond. It should be noted that the Army investigated the assumed west disposal area due to the presence of the aboveground piping. It appears that the piping was installed in the event that it was required at a later date. Groundwater results show that the nitrate concentrations are not elevated in the assumed area of the west disposal area. The nitrate concentrations (up to 0.17 ppm) are well below the Class GA standard of 10 mg/l. As a comparison, the nitrate concentrations are over 1,000 times higher in the east disposal area.

The direction of groundwater flow has been added to a new Figure 2-6. In general, groundwater flows toward the Duck Pond. It should be noted that Figures 2-6 and 2-7 have been renumbered as figures 2-7 and 2-8, respectively.

Comment 15: Page 3-42, Section 3.6, Risk Characterization for Residential Land Use: The risk assessment section should be made more consistent by including this section as a sub-section under Section 3.5, Risk Characterization.

Response 15: Agreed. The section *Risk Characterization for Residential Land Use* has been renumbered Section 3.5.4.



LEGEND

MW-13
670.00 Monitoring Well Location with Water Table Elevation

670 Groundwater elevation contour
Arrow indicates direction of flow

100 0 100 200 Feet

N

PARSONS

SENECA ARMY DEPOT ACTIVITY
SEAD-13

FIGURE 2-6
SEAD-13 IRFNA Disposal Site
Groundwater Elevation Plan
April 2002

SCALE	DATE	
1:120	MARCH 2003	Sheet 1 of 1

O:\SENECA\SEAD13\PROP_SA.APR

EAST-WEST BASELINE ROAD

APPROXIMATE LOCATION OF FIRE HYDRANT AND WATER VALVE

DUCK POND

APPROXIMATE LOCATION OF VERTICAL PIPING VISIBLE IN THE WATER

2002
0.014
0.005U

MW13-12

MW13-4

1993/94	2001	2002
0.12	0.11	0.17
		0.005U

MW13-5

1993/94	2001	2002
0.03	0.13	0.059
		0.005U

APPROXIMATE LOCATION OF VERTICAL PIPING (POSSIBLY THE DELUGE SHOWER)

SEAD13- WEST

1993/94	2001	2002
0.16	0.076	0.086
		0.005U

MW13-6

EAST-WEST BASELINE ROAD

2002
139
1.1

MW13-13

MW13-14

MW13-7

MW13-3

2001	2002
604/582 DUP	731/664 DUP
	0.034/0.03 DUP

?

2002
119
2.1

MW13-11

APPROXIMATE LOCATION OF ABOVE GROUND PIPING

MW13-2

NITRATE PLUME

AREA OF IRFNA PITS

APPROXIMATE LOCATION OF VERTICAL PIPING (POSSIBLY THE DELUGE SHOWER) AND TERMINATION POINT OF PIPE.

1993/94	2001	2002
460	603	445
		0.048

?

1993/94	2001	2002
0.01U	0.56	0.045
		0.005U

MW13-1

SEAD 13- EAST

LEGEND

- ● Monitoring Well Location
- U Not detected
- DUP Duplicate Sample
- Sampling Year / 0.076 — Nitrate/Nitrite - Nitrogen Concentration (mg/L)
- Sampling Year / 0.17 — Nitrate Concentration (mg/L)
- 0.005U — Nitrite Concentration (mg/L)
- \ Boundary of Nitrate Plume

Delineation based on groundwater test results and geophysical survey

Note:

MW13-11, MW13-12, MW13-13 and MW13-14 were installed in 2001.

100 0 100 200 Feet

N

PARSONS

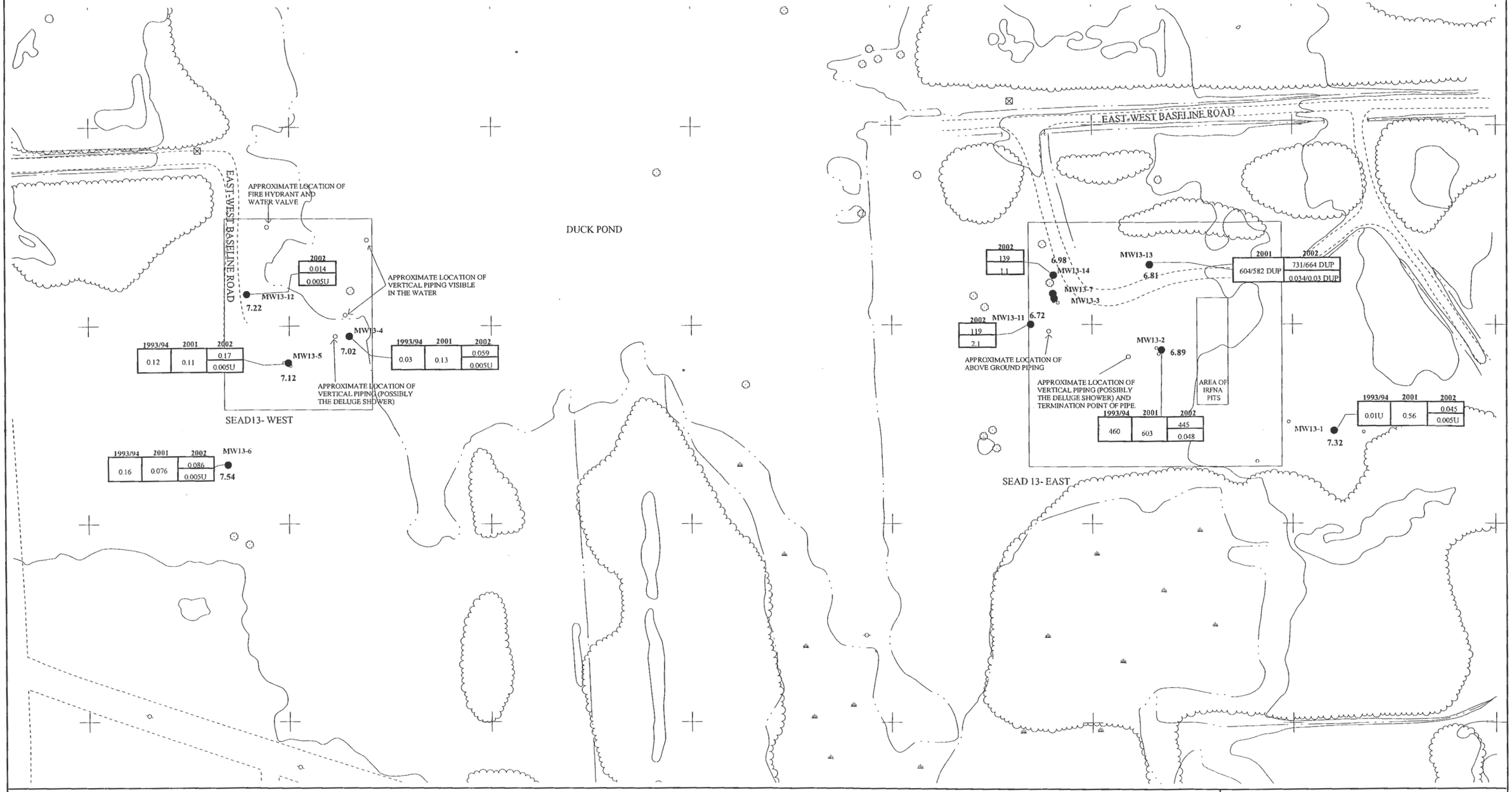
SENECA ARMY DEPOT ACTIVITY
SEAD-13

FIGURE 2-9

SEAD-13 IRFNA Disposal Site
Plume Delineation

SCALE	DATE	
1:120	MARCH 2003	Sheet 1 of 1

O:\SENECA\SEAD13\PROP_SA.APR



LEGEND

● 7.54 Monitoring Well Location with pH reading taken during sampling activities

Sampling Year
0.076 Nitrate/Nitrite - Nitrogen Concentration (mg/L)

Sampling Year
0.17 Nitrate Concentration (mg/L)
0.005U Nitrite Concentration (mg/L)

Data Qualifiers:

U Not detected

DUP Duplicate Sample

Note: MW13-11, MW13-12, MW13-13 and MW13-14 were installed in 2001.

100 0 100 200 Feet

N

PARSONS

SENECA ARMY DEPOT ACTIVITY
SEAD-13

FIGURE 2-10

SEAD-13 IRFNA Disposal Site
pH Readings - April 2002

SCALE	DATE	
1:120	MARCH 2003	Sheet 1 of 1

O:\SENECA\SEAD13\PROP_SA_APR