DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

Code 1823/JS

10 SEP 1998

Ms. Kymberlee Keckler
U.S. EPA Region I
Federal Facilities Superfund Section
John F. Kennedy Federal Building
Boston, MA 02203-0001

Mr. Paul Kulpa
Rhode Island Department of Environmental Management
Division of Site Remediation
291 Promenade Street
Providence, RI 02908-5767

Dear Ms. Keckler and Mr. Kulpa:

SUBJECT: RELATIVE RISK RANKING NETC NEWPORT IR PROGRAM

The enclosed relative risk evaluation worksheets for Sites 1,2,11,12 and 17 were reviewed during our 11 August 1998 meeting at NETC Newport. Any changes made to the worksheets during the meeting are now incorporated into the main NORM database. As a result of these changes the relative risk rankings for Site 2 (Melville North Landfill), Site 11 (Tank Farm 3) and Site 17 (Gould Island) have changed to a High Site Ranking. The Navy is submitting these revised worksheets in lieu of responding to all comments that were received from the USEPA in December 1997.

Thank you for attending the meeting and the comments that have contributed to updating the enclosed relative risk ranking worksheets. Please contact me at (610) 595-0567 extension 241 if you have any questions.

Sincerely,

James Shafer
Remedial Project Manager
By direction of the
Commanding Officer

Copy to:
NETC/M. Griffin

RELATIVE RISK EVALUATION WORKSHEET

SITE (1) BACKGROUND INFORMATION

Installation/Site Name for FUDS NEWPORT RI NETC

Date Entered (Day, Month, Year): 11/17/97

Location (State): RI

Media Evaluated (GW, SW, Sediment, Soil): GW SEDEM SOIL

Site (Name/RMIS ID) / Project for FUDS: SITE 00001

Phase of Exec. (SI, RI, FS, Remv, RD/RA, or equiv. RCRA Stage): CERCLA RI/FS

RMIS Site Type: LANDFILL

Agr. Status (Y/N, If yes, type of agreement e.g., FFA, Permit, Order) Yes

Point of Contact (Name/Phone): Brad Wheeler

National Priority List (Y/N): No **Site Rank:** High

SITE SUMMARY

(Include only key elements of information used to [illegible] relative [illegible] Attach map view of site if desired.)

Brief Site Description (Include site type, materials disposed of, dates of operation, and other relevant information):
Site 1 is an 11 acre landfill which was operated from 1955 until the mid 1970's. The landfill received wastes generated at the base which included operational areas (machine shops) to family housing (domestic refuse) to ships homeported materials including spent acids, solvents, waste oil, PCB transform oil, and construction/domestic debris. A waste incinerator operated between 1965 and early 1970's with ash residue disposed of on-site.

Brief Description of Pathways (Groundwater, Surface Water, Sediment, Soil):
Groundwater, soil and sediments are of potential concern Currently installation of a RCRA subtitle C cap will eliminate direct contact to soils

Brief Description of Receptors (Human and Ecological):
Receptors include both human and ecological.

(1) Use to record information on Sites and Areas of Concern (AOC) for Relative Risk Site Evaluation. The term Site is defined as a discrete area for which suspected contamination has been verified and req A Site by definition has been, or will be, entered into RMIS. For the FUDS Program, "projects" equates to sites for current installations. An AOC is a discrete area of contamination, or suspected contaminati (or RFA) phase that has not been entered into RMIS

Ground Water

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
Arsenic (cancer endpoint)	311 0	4 5	69.110
Manganese and compounds	12,000 0	180 0	66 670
Calcium	162,000 0	11,000 0	14 730
Aluminum	284,000 0	37,000 0	7 680
Lead	19 8	4 0	4.950
Cobalt	737 0	180 0	4 090
Cadmium and compounds	57 1	18 0	3 170
Vanadium	432 0	260 0	1.660
Zinc	12,100 0	11,000 0	1 100
Aroclor-1254	0 76	0 73	1 040
		Total:	**179.263**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note. Only top ten contaminants are displayed.

(Place an "X" next to one below)

Significant (If Total > 100): X

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is moving away from the source.

Confined - Information indicates that the potential for contaminant migration from the source is limited (due to geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection: Contaminants found in the groundwater appear to be filtered by geological conditions, howe - ver tidal flushing still appears to be a possible migration route

RECEPTOR FACTOR (RF)

Identified - There is a threatened or potentially threatened water supply downgradient of the source The GW (cont or not) is a current drinking water source or is equiv to (Class I or IIA aquifer)

Limited - There is no potentially threatened water supply well downgradient of the source The groundwater is not considered a potential source of DW or is of limited benificial use (IIIA, IIIB or perched aquifer)

Potential - There is no potentially threatened water supply well downgradient of the source The groundwater is potentially usable for DW, irrigation or agriculture, but not presently used (Class IIB aquifer)

(Place an "X" next to one below)

Identified: _____

Potential: _____

Limited: X

Brief Rationale for Selection Classification of groundwater is GA-NA aquifer It is not considered suitable as drinking - water due to proximity to salt water and use as a landfill

Activity Name NEWPORT RI NETC **Site Name:** SITE 00001 **Groundwater Category:** Med
(High, Medium, Low)

Sediment Eco Marine

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Chromium VI and compounds	67 0	8 0	8 380
Copper and compounds	19 0	7 0	2 710
Lead	49 6	35 0	1 420
Mercury	0 15	0 15	1 000
Nickel and compounds	23 1	30 0	0 770
		Total:	**14.276**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note: Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is present at, is moving toward, or has moved to a point of exposure

Confined - Information indicates a low potential for contamination to a potential point of exposure (could be due to the presence of geological structures or or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: X

Potential: _____

Confined: _____

Brief Rationale for Selection: Analytical data shows elevated levels in sediments in the bay adjacent to the site

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to sediment

Limited - Little or no potential for receptors to have access to sediment

Potential - Potential for receptors to have access to sediment

(Place an "X" next to one below)

Identified: X

Potential: _____

Limited: _____

Brief Rationale for Selection: Ecological receptors have been identified

Activity Name NEWPORT RI NETC **Site Name:** SITE 00001 **Sediment Marine Category:** High
(High, Medium, Low)

Soil

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Lead	1,980 0	400 0	4 950
Benzo[a]pyrene	27 0	6 1	4 430
Antimony and compounds	91 4	31 0	2 950
Copper and compounds	6,070 0	2,800 0	2 170
Calcium	45,500 0	23,000 0	1 980
Manganese and compounds	678 0	380 0	1.780
Chrysene	33 0	24 0	1 380
Arsenic (cancer endpoint)	24 1	22 0	1 100
Zinc	19,200 0	23,000 0	0 830
Benz[a]anthracene	43 0	61 0	0 700
		Total:	**26.732**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note. Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination is present at, is moving towards, or has moved to a point of exposure

Confined - Low possibility for contamination to be present at or migrate to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: _____

Confined: X

Brief Rationale for Selection Due to the placement of a RCRA subtitle C Cap- there will be a low to none possibility for - exposure

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to contaminated soil

Limited - Little or no potential for receptors to have access to contaminated soil

Potential - Potential for receptors to have access to contaminated soil

(Place an "X" next to one below)

Identified: _____

Potential: _____

Limited: X

Brief Rationale for Selection Under future conditions there will be little potential for human contact

Activity Name NEWPORT RI NETC **Site Name:** SITE 00001 **Soil Category:** Low
(High, Medium, Low)

RELATIVE RISK EVALUATION WORKSHEET

SITE (1) BACKGROUND INFORMATION

Installation/Site Name for FUDS NEWPORT RI NETC

Date Entered (Day, Month, Year): 8/12/98

Location (State): RI

Media Evaluated (GW, SW, Sediment, Soil): GW SOIL

Site (Name/RMIS ID) / Project for FUDS: SITE 00002

Phase of Exec. (SI, RI, FS, Remv, RD/RA, or equiv. RCRA Stage): RI

RMIS Site Type: LANDFILL

Agr. Status (Y/N, If yes, type of agreement e.g., FFA, Permit, Order) Yes

Point of Contact (Name/Phone): Brad Wheeler

National Priority List (Y/N): No **Site Rank:** High

SITE SUMMARY

(Include only key elements of information used to conduct the relative risk site evaluation. Attach map view of site if desired.)

Brief Site Description (Include site type, materials disposed of, dates of operation, and other relevant information):
Site 2 is a 10 acre landfill located adjacent to Narraganseit Bay. The landfill was operated following world war II until 1955. Wastes disposed of include spent acids, paints, oils, and PCB's. The site was excessed by the Navy in 1983.

Brief Description of Pathways (Groundwater, Surface Water, Sediment, Soil):
Suspected pathways include groundwater and soil.

Brief Description of Receptors (Human and Ecological):
Receptors are human.

(1) Use to record information on Sites and Areas of Concern (AOC) for Relative Risk Site Evaluation. The term Site is defined as a discrete area for which suspected contamination has been verified and req A Site by definition has been, or will be, entered into RMIS. For the FUDS Program, "projects" equates to sites for current installations. An AOC is a discrete area of contamination, or suspected contaminati (or RFA) phase that has not been entered into RMIS.

Ground Water

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
Manganese and compounds	4,210 0	180 0	23 390
Antimony and compounds	118 0	15 0	7 870
Arsenic (cancer endpoint)	22 4	4 5	4 980
Aluminum	93,200 0	37,000 0	2 520
Beryllium and compounds	3 8	1 6	2 380
Chlorobenzene	79 0	39 0	2 030
Dichlorobenzene, 1,4-	83 0	47 0	1 770
Calcium	18,000 0	11,000 0	1 640
Methylnaphthalene, 2-	210 0	0 0	1.170
Cobalt	192 0	180 0	1 070
		Total:	**54.265**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note: Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is moving away from the source

Confined - Information indicates that the potential for contaminant migration from the source is limited (due to geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection: Geologic conditions provide the potential for groundwater migration.

RECEPTOR FACTOR (RF)

Identified - There is a threatened or potentially threatened water supply downgradient of the source The GW (cont or not) is a current drinking water source or is equiv. to (Class I or IIA aquifer)

Limited - There is no potentially threatened water supply well downgradient of the source The groundwater is not considered a potential source of DW or is of limited benificial use (IIIA, IIIB or perched aquifer)

Potential - There is no potentially threatened water supply well downgradient of the source The groundwater is potentially usable for DW, irrigation or agriculture, but not presently used (Class IIB aquifer)

(Place an "X" next to one below)

Identified: _____

Potential: _____

Limited: X

Brief Rationale for Selection: There is no known water supply well down gradient however classification identifies the aq - uifer as a non drinking water aquifer (class GB)

Activity Name NEWPORT RI NETC **Site Name:** SITE 00002 **Groundwater Category:** Low
(High, Medium, Low)

Soil

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Aroclor	500 0	6 6	75 760
Lead	1,970 0	400.0	4 930
Arsenic (cancer)	30 1	22 0	1 370
Manganese and compounds	490 0	380.0	1 290
Benzo[a]pyrene	5 9	6 1	0 970
Chrysene	11 0	24 0	0 460
Calcium	8,720 0	23,000 0	0 380
Antimony and compounds	10 3	31 0	0 330
Dibenz[ah]anthracene	1 6	6 1	0 260
Aluminum	12,700 0	77,000 0	0 160
		Total:	**86.808**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination is present at, is moving towards, or has moved to a point of exposure

Confined - Low possibility for contamination to be present at or migrate to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

Brief Rationale for Selection Samples indicated contamination has moved away from the source

(Place an "X" next to one below)

Evident: X

Potential: _____

Confined: _____

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to contaminated soil

Limited - Little or no potential for receptors to have access to contaminated soil

Potential - Potential for receptors to have access to contaminated soil

Brief Rationale for Selection Under current conditions there receptors have direct access to soils

(Place an "X" next to one below)

Identified: X

Potential: _____

Limited: _____

Activity Name NEWPORT RI NETC **Site Name:** SITE 00002 **Soil Category:** High
(High, Medium, Low)

RELATIVE RISK EVALUATION WORKSHEET

SITE (1) BACKGROUND INFORMATION

Installation/Site Name for FUDS NEWPORT RI NETC

Date Entered (Day, Month, Year): 8/12/98

Location (State): RI

Media Evaluated (GW, SW, Sediment, Soil): GW SOIL

Site (Name/RMIS ID) / Project for FUDS: SITE 00011

Phase of Exec. (SI, RI, FS, Remv, RD/RA, or equiv. RCRA Stage):

RMIS Site Type: UNDERGROUND TANK FARM

Agr. Status (Y/N, If yes, type of agreement e.g., FFA, Permit, Order) Yes

Point of Contact (Name/Phone): Brad Wheeler

National Priority List (Y/N): No **Site Rank:** High

SITE SUMMARY

(Include only key elements of information used to conduct the relative risk site evaluation. Attach map view of site if desired.)

Brief Site Description (Include site type, materials disposed of, dates of operation, and other relevant information):
Tank farm #3 is 30 acres in size and consists of 5 concrete underground storage tanks (1.55M gallon capicity) and 2 steel underground storage tanks (2 1M gallon capicity) Tanks were used to store JP-4 and JP-5 jet engine fuel.

Brief Description of Pathways (Groundwater, Surface Water, Sediment, Soil):
Potential pathways include groundwater and soil.

Brief Description of Receptors (Human and Ecological):
Potential receptors include human.

(1) Use to record information on Sites and Areas of Concern (AOC) for Relative Risk Site Evaluation. The term Site is defined as a discrete area for which suspected contamination has been verified and req A Site by definition has been, or will be, entered into RMIS. For the FUDS Program, "projects" equates to sites for current installations. An AOC is a discrete area of contamination, or suspected contaminati (or RFA) phase that has not been entered into RMIS.

Ground Water

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
1,1'-Oxybis(2-chloro)ethane	35 0	0 98	35 710
Naphthalene	140 0	240 0	0 580
(2-Chloroethoxy)ethene	10 0	150 0	0 070
Tetrachloroethylene (PCE)	5 4	110 0	0 050
Xylene	3 6	1,400 0	0 000
		Total:	**36.414**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed.

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is moving away from the source

Confined - Information indicates that the potential for contaminant migration from the source is limited (due to geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

Brief Rationale for Selection Information is not sufficient to make a determination

(Place an "X" next to one below)

Evident: X

Potential: _____

Confined: _____

RECEPTOR FACTOR (RF)

Identified - There is a threatened or potentially threatened water supply downgradient of the source The GW (cont or not) is a current drinking water source or is equiv to (Class I or IIA aquifer)

Limited - There is no potentially threatened water supply well downgradient of the source The groundwater is not considered a potential source of DW or is of limited benificial use (IIIA, IIIB or perched aquifer)

Potential - There is no potentially threatened water supply well downgradient of the source The groundwater is potentially usable for DW, irrigation or agriculture, but not presently used (Class IIB aquifer)

Brief Rationale for Selection GW presumed to be GA quality and close location of public ground water supply wells is cro - ss gradient of site

(Place an "X" next to one below)

Identified: X

Potential: _____

Limited: _____

Activity Name NEWPORT RI NETC **Site Name:** SITE 00011 **Groundwater Category:** High
(High, Medium, Low)

Soil

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Naphthalene	77 0	800 0	0 100
Ethyl benzene	5 3	690 0	0 010
Xylene (mixed)	7 2	990 0	0 010
		Total:	**0.111**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): X

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination is present at, is moving towards, or has moved to a point of exposure

Confined - Low possibility for contamination to be present at or migrate to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

Brief Rationale for Selection Information is not sufficient to make determination.

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to contaminated soil

Limited - Little or no potential for receptors to have access to contaminated soil

Potential - Potential for receptors to have access to contaminated soil

Brief Rationale for Selection· Potential for receptors to have access exists since tank farm is operational

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Activity Name NEWPORT RI NETC **Site Name:** SITE 00011 **Soil Category:** Low
(High, Medium, Low)

RELATIVE RISK EVALUATION WORKSHEET

SITE (1) BACKGROUND INFORMATION

Installation/Site Name for FUDS NEWPORT RI NETC

Date Entered (Day, Month, Year): 11/26/97

Location (State): RI

Media Evaluated (GW, SW, Sediment, Soil): GW SWH SEDEM SOIL

Site (Name/RMIS ID) / Project for FUDS: SITE 00012

Phase of Exec. (SI, RI, FS, Remv, RD/RA, or equiv. RCRA Stage):

RMIS Site Type: UNDERGROUND TANK FARM

Agr. Status (Y/N, If yes, type of agreement e.g., FFA, Permit, Order) Yes

Point of Contact (Name/Phone): Brad Wheeler

National Priority List (Y/N): No **Site Rank:** High

SITE SUMMARY

(Include only key elements of information used to conduct the relative risk site evaluation. Attach map view of site if desired)

Brief Site Description (Include site type, materials disposed of, dates of operation, and other relevant information):
Site 12 is an 80 acre tank farm which consists of 12 underground storage tanks each with a 2.5M gallon capacity. Diesel and fuel oil were historically stored at the site. A brook crosses the western portion of the site and discharges to the bay.

Brief Description of Pathways (Groundwater, Surface Water, Sediment, Soil):
Potential pathways consist of groundwater, sediment and soil

Brief Description of Receptors (Human and Ecological):
Potential receptors include both human and ecological

(1) Use to record information on Sites and Areas of Concern (AOC) for Relative Risk Site Evaluation. The term Site is defined as a discrete area for which suspected contamination has been verified and req A Site by definition has been, or will be, entered into RMIS. For the FUDS Program, "projects" equates to sites for current installations An AOC is a discrete area of contamination, or suspected contaminati (or RFA) phase that has not been entered into RMIS.

Ground Water

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
Arsenic (cancer endpoint)	448 0	4 5	99 560
Manganese and compounds	9,740 0	180 0	54 110
Lead	156 0	4 0	39 000
Calcium	86,600 0	11,000 0	7 870
Aluminum	251,000 0	37,000 0	6 780
Beryllium and compounds	8 5	1 6	5 310
Cobalt	669 0	180 0	3 720
Chromium (total)	391 0	180 0	2 170
Nickel and compounds	749 0	730 0	1 030
Vanadium	168 0	260 0	0 650
		Total:	**221.534**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): X

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is moving away from the source

Confined - Information indicates that the potential for contaminant migration from the source is limited (due to geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection Information is not sufficient to make a determination of evident or confined

RECEPTOR FACTOR (RF)

Identified - There is a threatened or potentially threatened water supply downgradient of the source The GW (cont. or not) is a current drinking water source or is equiv to (Class I or IIA aquifer)

Limited - There is no potentially threatened water supply well downgradient of the source The groundwater is not considered a potential source of DW or is of limited benificial use (IIIA, IIIB or perched aquifer)

Potential - There is no potentially threatened water supply well downgradient of the source The groundwater is potentially usable for DW, irrigation or agriculture, but not presently used (Class IIB aquifer)

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Brief Rationale for Selection: There is no potentially threatened water supply well down gradient however classification - of groundwater identifies is as non-attainment area but suitable for drinking water

Activity Name NEWPORT RI NETC **Site Name:** SITE 00012 **Groundwater Category:** High
(High, Medium, Low)

Surface Water Human

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
Manganese and compounds	1,930 0	180 0	10 720
Calcium	20,300 0	11,000 0	1 850
Carbon disulfide	26 0	21 0	1 240
Lead	3 8	4 0	0 950
Cadmium and compounds	3 3	18.0	0 180
Carbon tetrachloride	3 0	17 0	0 180
Zinc	1,190 0	11,000 0	0 110
Chromium (total)	4 0	180 0	0 020
Vanadium	5 0	260 0	0 020
Selenium	3 1	180 0	0 020
		Total:	**15.287**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note. Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is present at, is moving toward, or has moved to a point of exposure

Confined - Information indicates a low potential for contamination to a potential point of exposure (could by due to the presence of geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection: Insufficient data to determine an Evident or Confined pathway

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to surface water

Limited - Little or no potential for receptors to have access to surface water

Potential - Potential for receptors to have access to surface water

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Brief Rationale for Selection: Potential for receptors to have access to contaminants in the surface water

Activity Name NEWPORT RI NETC **Site Name:** SITE 00012 **Surface Water Human Category:** Med
(High, Medium, Low)

Sediment Eco Marine

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Calcium	791 0	120 0	6 590
Chromium (total)	25 9	8 0	3 240
Copper and compounds	17 8	7 0	2 540
Zinc	82 0	120 0	0 680
Arsenic (cancer endpoint)	21 1	33 0	0 640
Lead	12.1	35 0	0 350
Cobalt	25 0	80 0	0 310
Cadmium and compounds	0 78	5 0	0 160
		Total:	**14.509**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is present at, is moving toward, or has moved to a point of exposure

Confined - Information indicates a low potential for contamination to a potential point of exposure (could be due to the presence of geological structures or or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection. lLimited analytical data indicates possibility for contamination to be present in sediment - s and migrating towards the bay

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to sediment

Limited - Little or no potential for receptors to have access to sediment

Potential - Potential for receptors to have access to sediment

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Brief Rationale for Selection· Potential receptors present due to proximity to the bay

Activity Name NEWPORT RI NETC **Site Name:** SITE 00012 **Sediment Marine Category:** Med
(High, Medium, Low)

Soil

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Manganese and compounds	471 0	380 0	1 240
Arsenic (cancer endpoint)	8 5	22 0	0 390
Lead	67 9	400 0	0 170
Aluminum	9,530 0	77,000 0	0 120
Cobalt	13 9	380 0	0 040
Vanadium	18 1	540 0	0 030
Calcium	741 0	23,000 0	0 030
Benzo[a]pyrene	0 11	6 1	0 020
Nickel and compounds	18 7	1,500 0	0 010
Copper and compounds	25 8	2,800 0	0 010
		Total:	**2.083**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination is present at, is moving towards, or has moved to a point of exposure

Confined - Low possibility for contamination to be present at or migrate to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

Brief Rationale for Selection Information not sufficient to make a determination

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to contaminated soil

Limited - Little or no potential for receptors to have access to contaminated soil

Potential - Potential for receptors to have access to contaminated soil

Brief Rationale for Selection: Potential for human receptors if future use scenerio assumes industrial/residential

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Activity Name NEWPORT RI NETC **Site Name:** SITE 00012 **Soil Category:** Med
(High, Medium, Low)

RELATIVE RISK EVALUATION WORKSHEET

SITE (1) BACKGROUND INFORMATION

Installation/Site Name for FUDS NEWPORT RI NETC

Date Entered (Day, Month, Year): 8/12/98

Location (State): RI

Media Evaluated (GW, SW, Sediment, Soil): GW SEDH SEDEM SOIL

Site (Name/RMIS ID) / Project for FUDS: SITE 00017

Phase of Exec. (SI, RI, FS, Remv, RD/RA, or equiv. RCRA Stage):

RMIS Site Type: PLATING SHOP

Agr. Status (Y/N, If yes, type of agreement e.g., FFA, Permit, Order) Yes

Point of Contact (Name/Phone): Brad Wheeler

National Priority List (Y/N): No **Site Rank:** High

SITE SUMMARY

(Include only key elements of information used to conduct the relative risk site evaluation. Attach map view of site if desired.)

Brief Site Description (Include site type, materials disposed of, dates of operation, and other relevant information):
Site 17 is a 4,275 SQ. FT. electroplating shop located on Gould Island. The Plating Shop was used during the 1940's for torpedo overhauls. The shop included numerous metal vats, 3 trench drains and discrete floor drains. Disposal location of wastes are unknown. However, wastewater discharges were to either a septic system or off-shore outfall pipes. Sediment data is taken from Loureido Engineering Associates of Avon, Ct. and is dated 5/15/86. Cyanide in the sediment media which is above background levels was not evaluated because there is not a value containeed in the Lookup Tables at this time.

Brief Description of Pathways (Groundwater, Surface Water, Sediment, Soil):
Potential pathways are sediments.

Brief Description of Receptors (Human and Ecological):
Potential receptor is ecological.

(1) Use to record information on Sites and Areas of Concern (AOC) for Relative Risk Site Evaluation. The term Site is defined as a discrete area for which suspected contamination has been verified and req A Site by definition has been, or will be, entered into RMIS. For the FUDS Program, "projects" equates to sites for current installations. An AOC is a discrete area of contamination, or suspected contaminati (or RFA) phase that has not been entered into RMIS.

Ground Water

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. ug/L	Standard ug/L	Ratio (2)
Trichloroethylene (TCE)	9 0	160 0	0 060
		Total:	0.056

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note. Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): X

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is moving away from the source

Confined - Information indicates that the potential for contaminant migration from the source is limited (due to geological structures or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure; or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: _____

Potential: _____

Confined: X

Brief Rationale for Selection· Ground aquifer is classified as a GB class aquifer and is not used for drinking water

RECEPTOR FACTOR (RF)

Identified - There is a threatened or potentially threatened water supply downgradient of the source. The GW (cont or not) is a current drinking water source or is equiv to (Class I or IIA aquifer).

Limited - There is no potentially threatened water supply well downgradient of the source The groundwater is not considered a potential source of DW or is of limited benificial use (IIIA, IIIB or perched aquifer)

Potential - There is no potentially threatened water supply well downgradient of the source. The groundwater is potentially usable for DW, irrigation or agriculture, but not presently used (Class IIB aquifer)

(Place an "X" next to one below)

Identified: _____

Potential: _____

Limited: X

Brief Rationale for Selection· There is not a receptor due to aquifer classification

Activity Name NEWPORT RI NETC **Site Name:** SITE 00017 **Groundwater Category:** Low
(High, Medium, Low)

Sediment Human

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Cyanide (free)	150 0	1,300 0	0 120
		Total:	**0.115**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): X

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is present at, is moving toward, or has moved to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure, or information is not sufficient to make a determination of Evident or Confined

Confined - Information indicates a low potential for contamination to a potential point of exposure (could be due to the presence of geological structures or or physical controls)

Brief Rationale for Selection

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to sediment

Potential - Potential for receptors to have access to sediment

Limited - Little or no potential for receptors to have access to sediment

Brief Rationale for Selection·

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Activity Name NEWPORT RI NETC **Site Name:** SITE 00017 **Sediment Human Category:** Low
(High, Medium, Low)

Sediment Eco Marine

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Copper and compounds	26 0	7 0	3 710
Lead	6 5	35 0	0 190
Cyanide (free)	150 0	0 0	0 000
		Total:	3.896

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note· Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): X

Minimal (If Total < 2): _____

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination in the media is present at, is moving toward, or has moved to a point of exposure

Confined - Information indicates a low potential for contamination to a potential point of exposure (could be due to the presence of geological structures or or physical controls)

Potential - Possibility for contamination to be present at or migrate to a point of exposure; or information is not sufficient to make a determination of Evident or Confined

(Place an "X" next to one below)

Evident: X

Potential: _____

Confined: _____

Brief Rationale for Selection· Information is not sufficient to make a determination of Evident or Confined

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to sediment

Limited - Little or no potential for receptors to have access to sediment

Potential - Potential for receptors to have access to sediment

(Place an "X" next to one below)

Identified: X

Potential: _____

Limited: _____

Brief Rationale for Selection· There is a potential for receptors to have access to the sediment to which contamination h - as moved or can move

Activity Name NEWPORT RI NETC **Site Name:** SITE 00017 **Sediment Marine Category:** High
(High, Medium, Low)

Soil

CONTAMINANT HAZARD FACTOR (1) (CHF)

Contaminant	Maximum Conc. mg/Kg	Standard mg/Kg	Ratio (2)
Cyanide (free)	150 0	1,300 0	0 120
Fluorene	0 65	300 0	0 000
Bis(2-ethylhexyl)phthalate (DEHP)	1 7	3,200 0	0 000
Methylene chloride	0 42	1,100 0	0 000
		Total:	**0.118**

(1) Evaluate for human contaminants only
(2) Ratio = Maximum Concentration/Standard
Note Only top ten contaminants are displayed

(Place an "X" next to one below)

Significant (If Total > 100): _____

Moderate (If Total 2 - 100): _____

Minimal (If Total < 2): X

MIGRATION PATHWAY FACTOR (MPF)

Evident - Analytical data or observable evidence indicates that contamination is present at, is moving towards, or has moved to a point of exposure

Potential - Possibility for contamination to be present at or migrate to a point of exposure; or information is not sufficient to make a determination of Evident or Confined

Confined - Low possibility for contamination to be present at or migrate to a point of exposure

(Place an "X" next to one below)

Evident: _____

Potential: X

Confined: _____

Brief Rationale for Selection:

RECEPTOR FACTOR (RF)

Identified - Receptors identified that have access to contaminated soil

Potential - Potential for receptors to have access to contaminated soil

Limited - Little or no potential for receptors to have access to contaminated soil

(Place an "X" next to one below)

Identified: _____

Potential: X

Limited: _____

Brief Rationale for Selection:

Activity Name NEWPORT RI NETC **Site Name:** SITE 00017 **Soil Category:** Low
(High, Medium, Low)