

U.S. DEPARTMENT OF NAVY
INSTALLATION RESTORATION PROGRAM

RI/FS WORK PLAN
FOR THE
NAVAL EDUCATION AND TRAINING CENTER
NEWPORT, RHODE ISLAND

- SUMMARY SHEETS -

TECHNICAL REVIEW COMMITTEE MEETING
NOVEMBER 9, 1988

Prepared for:

Northern Division - Naval Facilities
Engineering Command
Philadelphia, PA

TRC Project No. 5383-N81-50
Contract No. N62472-86-C-1282

MCALLISTER POINT LANDFILL

- SITE 01 -

Surface Soil Sampling

- 15 on-site locations: analyze for TCL and archive for dioxin
- 2 off-site locations: analyze for TCL metals

• Test Boring Sampling

Twenty (20) borings on a 50-foot grid:

- continuous split spoon sampling
- 2 to 3 samples for analyses per boring in fill (complete beyond fill); of fill, at water table, beneath fill
- 1 sample for analyses per boring outside of fill (to 6-foot depth); at surface (optional additional samples)
- analyze all samples for TCL; fill samples for dioxin; select number (approximately 50%) for TCLP.

• Monitoring Wells

Eight (8) on-site monitoring wells and 1 off-site monitoring well:

- on-site: 3 overburden/bedrock well sets
2 overburden wells
- off-site: 1 overburden well
- analyze ground water samples for TCL
- water level measurements; initial, 3-day continuous, and once per month over three months
- well permeability tests
- well boring sampling and analyses scheme similar to that planned for the site test borings
- Shelby tube samples from three borings for permeability, grain size, and Atterburg limit tests.

Surface Water Media

Twenty-five (25) sediment and mussel sample locations in bay:

- 15 near-shore samples separated by either 50-, 100-, or 200-foot intervals
- 5 sample locations 200 feet from shoreline
- 5 sample locations 400 feet from shoreline
- 2 sediment samples at the 20 locations nearest the shore
- analyze all sediment and mussel samples for TCL SVOCs, Inorganics, and PCBs; and sediment samples for TCL VOCs

2 leachate spring samples:

- analyze for TCL.



APPROXIMATE
SITE BOUNDARY

NARRAGANSETT
BAY

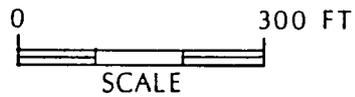
PENN CENTRAL RR

DEFENSE HIGHWAY

FENCE X

GATE

DIRT ROAD



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East Hartford, Connecticut 06108
(203) 289-8631

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SITE 01 - McALLISTER POINT LANDFILL

FIGURE 1.
SITE MAP

MELVILLE NORTH LANDFILL

- SITE 02 -

• Surface Soil Sampling

- 15 across site locations: analyze for TCL and archived dioxin
- 5 around oily deposits: analyze for TCL (optional pesticide/PCB).

Test Pit Sampling

- 4 samples; 1 soil and 1 sludge sample per lagoon area (possibly only soil samples): analyze for TCL, dioxin, and TCLP.

• Test Boring Sampling

Eighteen (18) borings on a 50-foot grid:

- continuous split spoon sampling
- 2 to 3 samples for analyses per boring in fill (complete beyond fill); of fill, at water table, beneath fill
- 1 sample for analyses per boring outside fill (to 6-foot depth); at surface (optional additional samples)
- analyze all samples for TCL; fill samples for dioxin; select number (approximately 50%) for TCLP.

Monitoring Wells

Four (4) on-site monitoring wells and/off-site monitoring well:

- all overburden wells
- analyze all ground water samples for TCL
- water level measurements; initial, 3-day continuous, and once per month over three months
- well boring sampling and analyses scheme similar to that planned for the site test borings
- Shelby tube samples from three borings
- well permeability tests.

- Surface Water Media

Five (5) sediment and mussel sample locations in bay and 3 sediment samples in wetlands:

- 5 near-shore samples separated by approximately 300-foot intervals
- analyze all bay sediment and mussel samples for TCL SVOCs, inorganics, and PCBs; and bay sediment for TCL VOCs
- analyze wetland sediment samples for TCL.



NARRAGANSETT BAY

OILY DEPOSITS

WETLANDS

DIRT ROAD

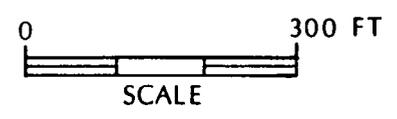
PENN CENTRAL RR

DEFENSE HIGHWAY

GATE

X FENCE X

APPROXIMATE SITE BOUNDARY



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SITE 02 - MELVILLE NORTH LANDFILL

FIGURE 2.
SITE MAP

OLD FIRE FIGHTING TRAINING AREA

- SITE 09 -

- Soil Gas Survey: 100-foot grid

- Surface Soil Sampling

- 12 to 15 samples across site: TCL and archived dioxin

- Test Boring Sampling

Possibly 20 to 24 borings across site (soil gas and geophysical survey information may refine scope):

- continuous split spoon sampling; to beyond contamination or bedrock
- 1 to 2 samples for analyses per boring; one at highest contamination and one beneath contamination (option: only one sample at water table)
- if contamination in boring, analyze all for TCL and archive for dioxin analysis
- if no contamination in boring, analyze one sample at water table for TPHs

Monitoring Wells

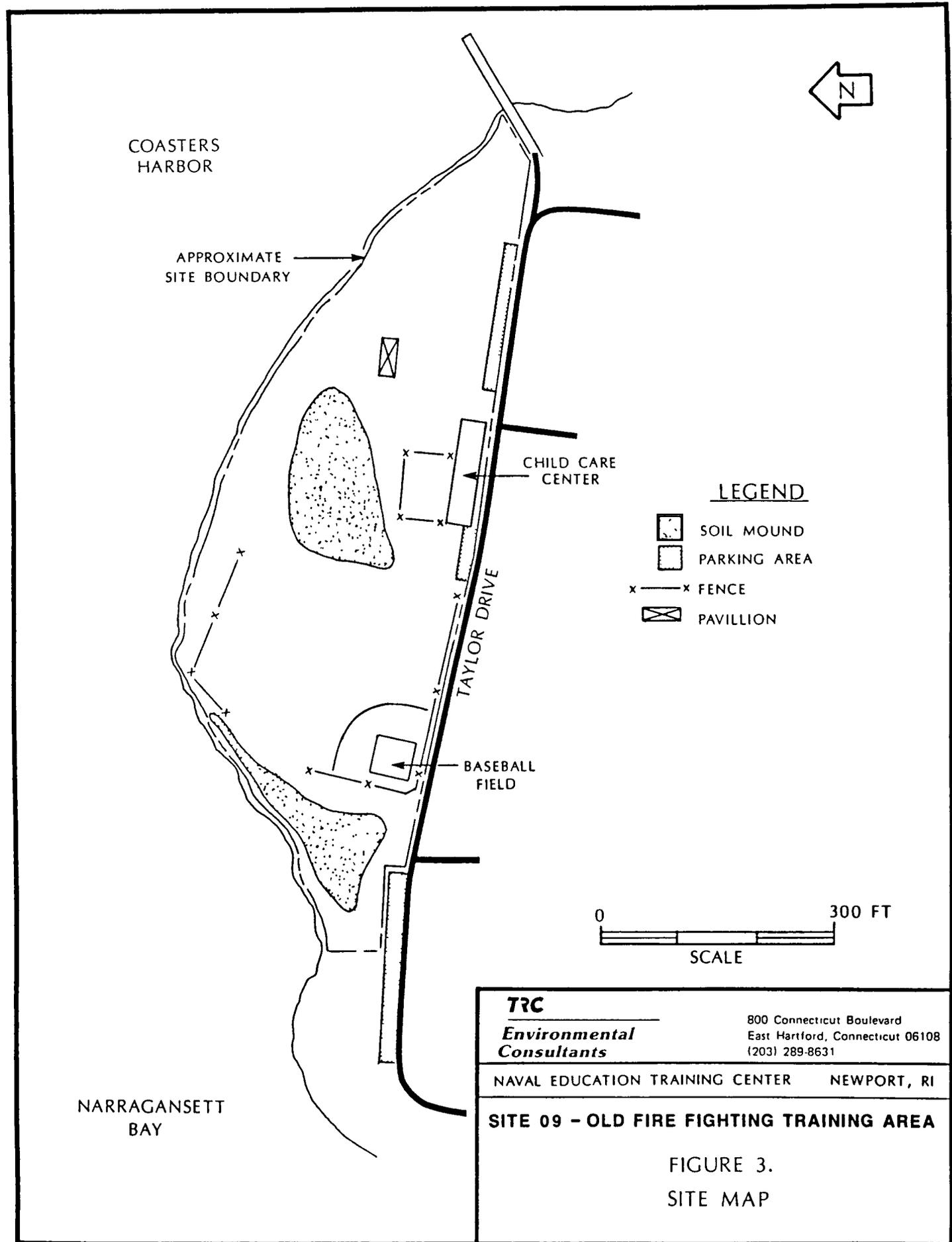
Four (4) on-site monitoring wells and 1 off-site monitoring well:

- analyzed all ground water samples for TCL
- water level measurements; initial, 3-day continuous, and once per month over three months
- well boring sampling and analyses scheme similar to that planned for the site test borings
- Shelby tube samples from three borings
- well permeability tests.

Surface Water Media

Five (5) sediment and mussel sample locations in bay:

- 5 near-shore samples separated by approximately 200-foot intervals
- analyze all sediment and mussel samples for TCL SVOCs, inorganics, and PCBs.



TANK FARM FOUR

- SITE 12 -

- Soil Gas Survey

- 400-foot grid (one initial test traverse)
- 50-foot grid around each underground storage tank (UST)
- 20-foot grid around oil/water separator.

- Surface Soil Sampling

Phased approach:

- 60 samples; estimated as 4 from around each UST, 4 from around oil/water (o/w) separator, and 8 optional: analyze for TPH and lead
- 30 samples from areas of TPH or lead; estimated as 2 from around each UST, 2 from around o/w separator, and 4 optional: analyze for TCL and 1 sample/area for TCL pesticides/PCBs.

Monitoring Wells

Eight on-site monitoring wells: 3 overburden/bedrock well sets
2 overburden wells

- sample existing 2 wells
- analyze ground water samples from all wells for TCL
- water level measurements; initial, 3-day continuous, and once per month over three months
- well permeability tests.

- Surface Water Media

Six (6) surface water and sediment sample locations in brook:

- 4 on-site and 2 off-site surface water/sediment sample locations
- 2 sediment samples per location at the four on-site and one off-site downstream location
- water level elevations; at each surface water sample location and in adjacent well points.

• Tanks and Structures Sampling

Twelve USTs at site:

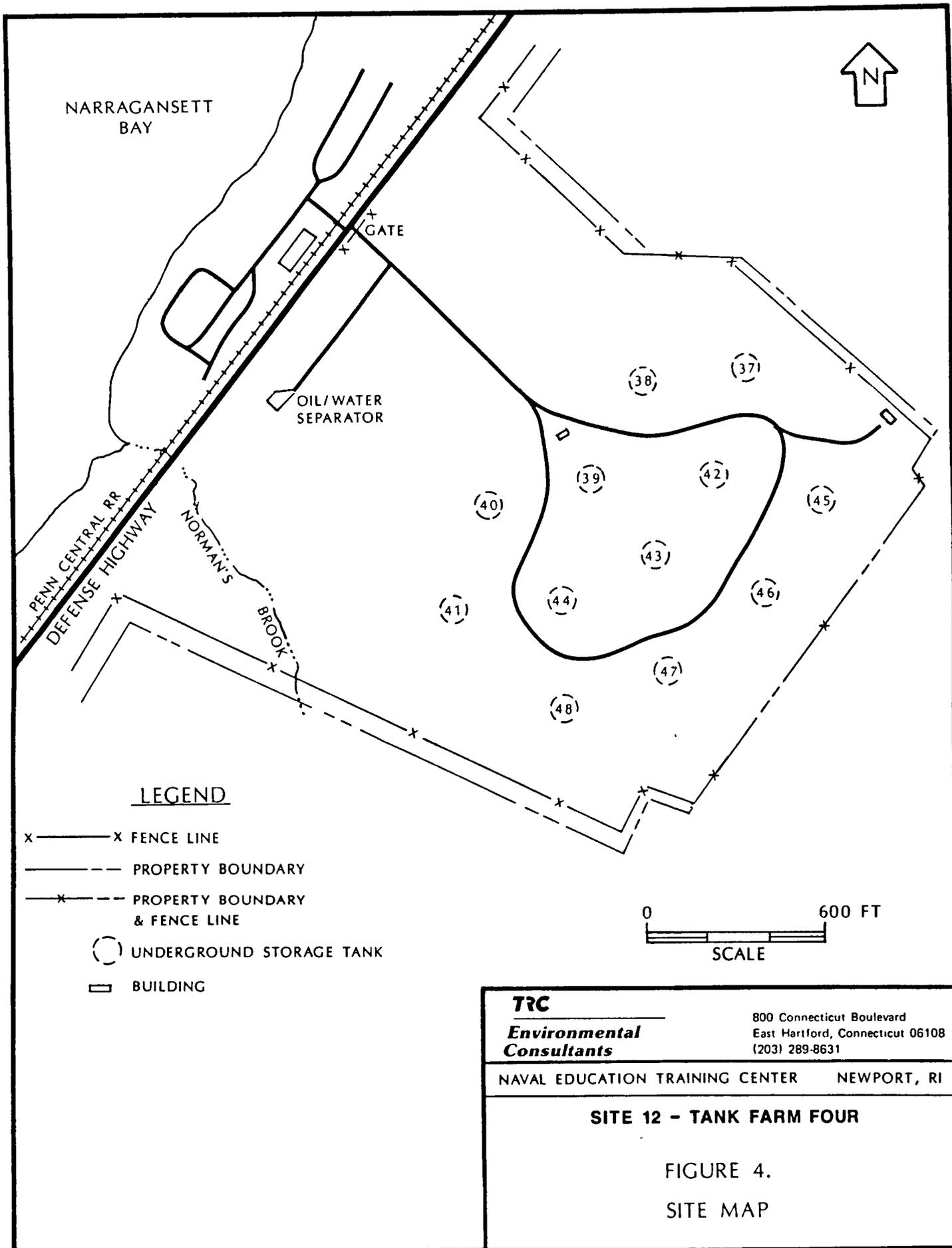
- physically characterize and sample oil, water, and oil layer in each UST
- analyze sludge samples for TCL (less pesticides) and EP Toxicity characteristics; water samples for TCL (less pesticides); oil samples for TCL (less pesticides)

Oil/water separator area:

- samples from 2 locations (composites of oil, water, and/or sludge)
- analyze samples for TCL (less pesticides)

Burning pit area:

- continuous split spoon sampling in 2 borings
- maximum of one sample per boring
- analyze samples for TCL (less pesticides) and dioxin.



NARRAGANSETT BAY



GATE

OIL/WATER SEPARATOR

PENN CENTRAL RR
DEFENSE HIGHWAY

NORMAN'S BROOK

LEGEND

- x — x FENCE LINE
- — — PROPERTY BOUNDARY
- x — — — PROPERTY BOUNDARY & FENCE LINE
- () UNDERGROUND STORAGE TANK
- ▭ BUILDING



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East Hartford, Connecticut 06108
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SITE 12 - TANK FARM FOUR

FIGURE 4.
SITE MAP

TANK FARM FIVE

- SITE 13 -

- Soil Gas Survey

- 400-foot grid (one initial test traverse)
- 50-foot grid around each UST
- 20-foot grid around burning pit

- Surface Soil Sampling

Phased approach:

- 60 samples; estimated as 4 from around each UST, 4 from around burning pit, and 8 optional: analyze for TPH and lead
- 30 samples from areas of TPH or lead; estimated as 2 from around each UST, 2 from around burning pit, and 4 optional: analyzed for TCL and 1 sample/area for TCL pesticides/PCBs.

Monitoring Wells

- Six (6) on-site monitoring wells
- sample existing ten wells
- analyze ground water samples from the 6 new wells and 2 of the existing wells for TCL and TPH; analyze samples from the other 8 existing wells for TPH and lead
- water level measurements; initial and once per month over three months
- permeability tests.

- Surface Water Media

Five (5) surface water and sediment sample locations in brook:

- 3 on-site and 2 off-site surface water/sediment sample locations
- water level elevations; at each surface water sample location and in adjacent well point.

• Tanks and Structures Sampling

Eleven (11) USTs at site:

- physically characterize and sample oil, water, and oil layer in each UST
- analyze sludge samples for TCL (less pesticides) and EP Toxicity characteristics; water samples for TCL (less pesticides); oil samples for TCL (less pesticides)

Burning pit:

- continuous split spoon sampling in 2 borings
- maximum of 2 samples per boring (one if concrete bottom)

(Option to use scheme planned for site 12.)



NARRAGANSETT BAY

GREENE'S LANE
GATE X
GATE X
GATE X

GOMES BROOK
GATE X

BURNING PIT

PENN CENTRAL RR
GATE X
DEFENSE HIGHWAY
GATE X



LEGEND

- x — x FENCE LINE
- x — — — — — PROPERTY BOUNDARY & FENCE LINE
- () UNDERGROUND STORAGE TANK
- BUILDING



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SITE 13 - TANK FARM FIVE

FIGURE 5.
SITE MAP

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- East Hartford, CT
(203) 289-8631
- Los Angeles, CA
(714) 581-6860
- Denver, CO
(303) 792-5555
- Washington, DC
(202) 337-0307
- Somerset, NJ
(201) 563-1100
- Seattle, WA
(206) 485-2992

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