

1/1/92-01356

SITE SUMMARY

Issue:

- o Naval Amphibious Base at Little Creek, Virginia:
School of Music Plating Shop (Site 11)

Summary:

- o Groundwater and soil samples were collected from this site. Chromium and cyanide in the soil sample from the dry well was elevated compared to other soil samples. Volatile organic compound concentrations exceeded MCLs in a well 25 feet south of the plating shop.

Background:

- o The site is a small shop adjacent to the School of Music where musical instruments were electroplated from 1964 to 1974. Plating wastes totalling 1,320 gallons and including silver and copper cyanide, chromic acid, nickel plating baths, acids, lacquers, and lacquer strippers were poured down the shop drain and into the adjacent limestone dry well during this period.

Discussion:

- o Three groundwater samples and nine soil samples were collected in May 1986.
- o Concentrations of constituents were generally below or near detection levels. The shallow soil sample from the dry well showed elevated chromium (4,200 ppm) and cyanide (19 ppm) compared to the other samples, which were taken from the boreholes. The borehole soil samples generally showed low concentrations of acetone. No federal standards exist for these constituents in soils.
- o Eight volatile organic compounds (VOC) were found in the groundwater sample LC11-GW1 taken southeast of the dry well. Four of these volatile organic compounds were found at levels exceeding the MCLs. These were:

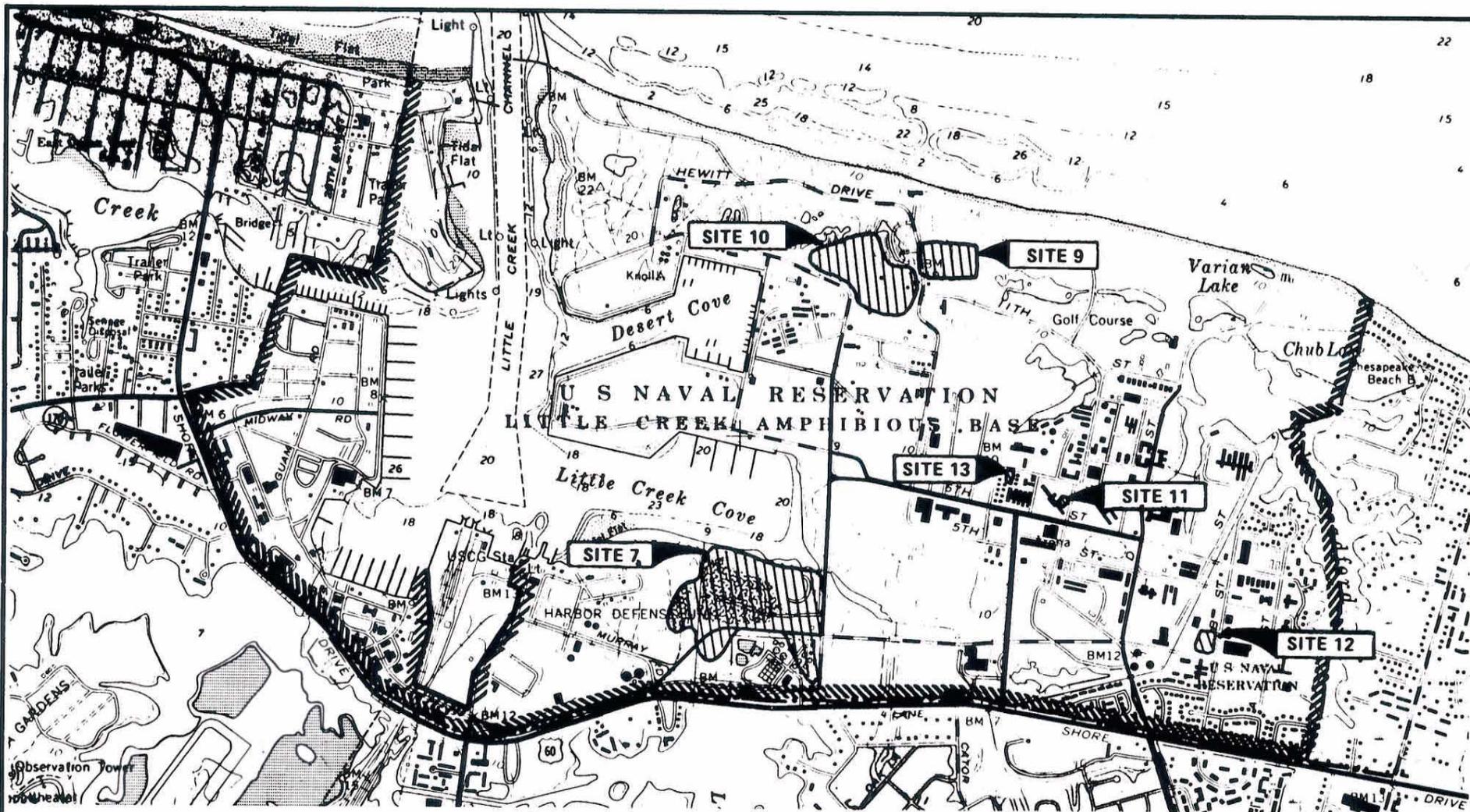
<u>Compound</u>	<u>MCL (ppb)</u>	<u>Concentration Detected in LC11-GW1 (ppb)</u>
1,1-dichloroethene	7	34
1,2-dichloroethane	5	37
1,1,1-trichloroethane	200	340
trichloroethene	5	490

- o These results suggest that wastes from the plating shop have been retained by the soil in the dry well and that little or no migration has occurred to the sampling points. Volatile organics may have come from the plating shop or from another source. The primary means of migration is likely to be by groundwater transport.

Future Plans:

- o Future plans are to perform an additional round of sampling and analysis of the water from the monitoring wells and to sample the soil and water from the dry well.

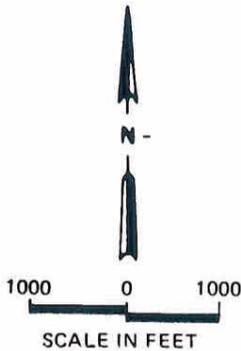
WDR06/042



LEGEND

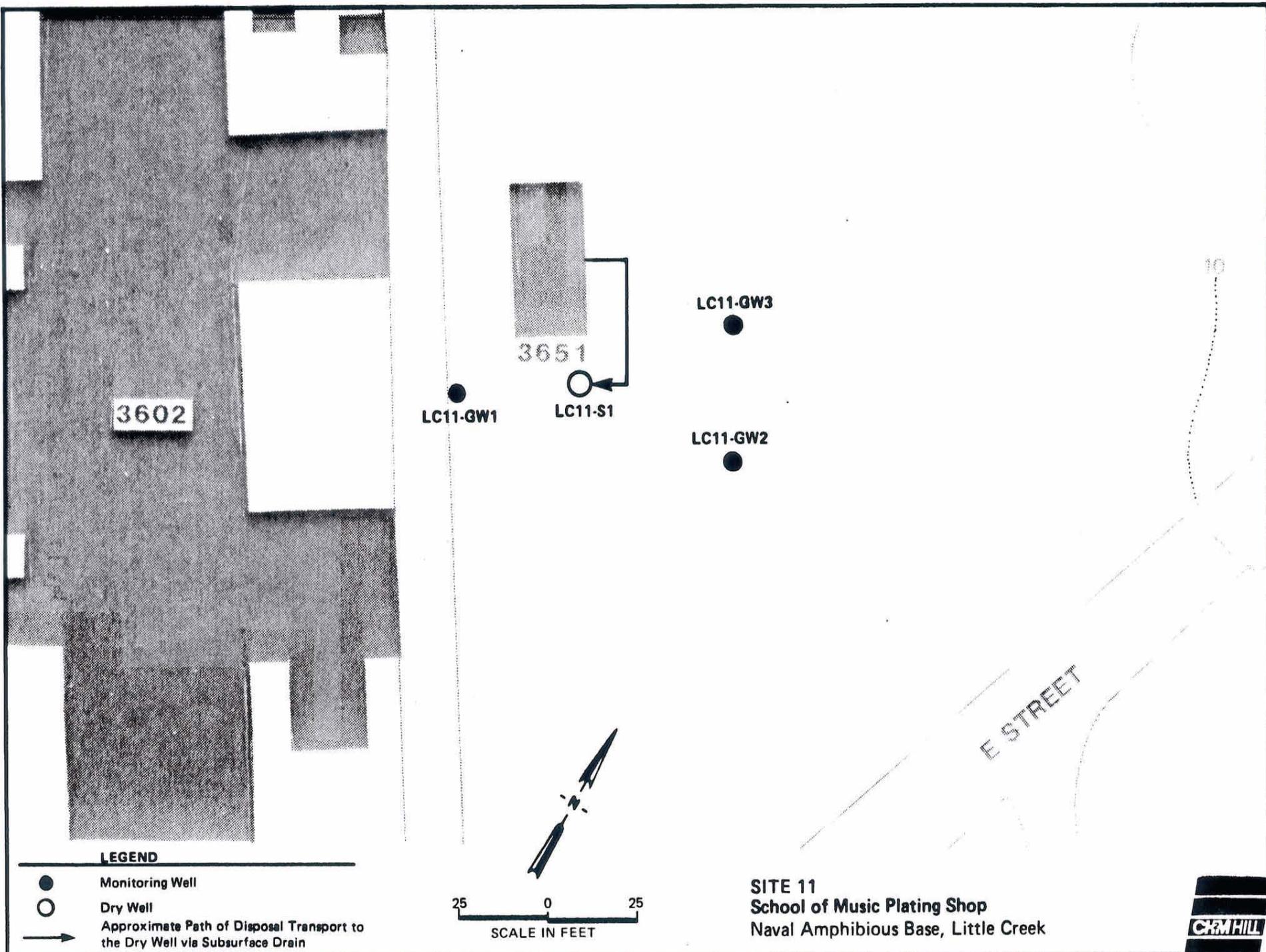
-  Base Boundary
-  Site Boundary

- SITE 7 - Amphibious Base Landfill
- SITE 9 - Driving Range Landfill
- SITE 10 - Sewage Treatment Plant Landfill
- SITE 11 - School of Music Plating Shop
- SITE 12 - Exchange Laundry Waste Disposal Area
- SITE 13 - Public Works Compound PCP Dip Tank/Metals Shop



Site Locations
Naval Amphibious Base, Little Creek





3602

3651

LC11-GW1

LC11-S1

LC11-GW3

LC11-GW2

E STREET

10

LEGEND

- Monitoring Well
- Dry Well
- Approximate Path of Disposal Transport to the Dry Well via Subsurface Drain



SITE 11
School of Music Plating Shop
 Naval Amphibious Base, Little Creek



SITE SUMMARY REPORT

Site: #11--Music School Plating Shop

Period of Operation: 1964-1974

Area of Contamination: 1 acre

Materials Disposed: Silver cyanide, copper cyanide, chromic acid,
nickel plating baths, acids, lacquer, lacquer
stripper (1,320 gal.).

Hazards: Potential soil and ground water contamination.

Status

- 12/84 Initial Assessment conducted by NEESA. Site identified for Confirmation Study.
- 10/86 First round of Confirmation Study (RI/FS) completed. Site recommended for second round sampling.
- 5/88 HRS scoring package submitted to EPA.
- 1/89 TRC meeting held to review first round sampling results.
- 9/90 Contract awarded for second round RI/FS sampling and support for TRC meeting.

Schedule

- 10/29/90 Work Plan, Sampling Plan, Safety/Contingency Plan submitted.
- 11/19/90 Approve WP, SP, SSP.
- 12/3/90 Initiate drilling.
- 2/11/91 Initiate sampling.
- 6/10/91 Meet with contractor and LANTDIV to discuss site-specific recommendations.
- 7/22/91 Draft RI Interim Report submitted.
- 9/2/91 Comments due on RI interim report.
- 9/30/91 Submit draft final RI interim report.
- 11/4/91 Present RI results to TRC.