English Station
Summary of Soil Analytical Data
Gasoline USTs
(AOC 2)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-218<br>TB-218(0-2)<br>03/30/2000<br>1.00 | TB-218<br>TB-218(4-6)<br>03/30/2000<br>5.00 | TB-226<br>TB-226(2-4)<br>03/31/2000<br>3.00 | TB-227<br>TB-227(4-6)<br>03/31/2000<br>5.00 |
|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | (ug/kg) | | 2500000 | 84000 | <100 | 2020.0 | <100 | NA |
| Anthracene | (ug/kg) | | 2500000 | 400000 | <100 | 1304.0 | <100 | NA |
| Benzo(a)anthracene | (ug/kg) | | 7800 | 1000 | <100 | 3445.0 | <100 | NA |
| Benzo(a)pyrene | (ug/kg) | | 1000 | 1000 | <100 | [5584.0] | <100 | NA |
| 3,4-Benzofluoranthene | (ug/kg) | | 7800 | 1000 | <100 | 4605.0 | <100 | NA |
| Benzo(k)fluoranthene | (ug/kg) | | 78000 | 1000 | <100 | 3665.0 | <100 | NA |
| Chrysene | (ug/kg) | | 780000 | 960 1000 | <100 | 3607.0 | <100 | NA |
| Fluoranthene | (ug/kg) | | 2500000 | 56000 | <100 | 4434.0 | 1303.0 | NA |
| Fluorene | (ug/kg) | | 2500000 | 56000 | <100 | 1603.0 | <100 | NA |
| Naphthalene | (ug/kg) | | 2500000 | 56000 | <100 | 5066.0 | <100 | NA |
| Phenanthrene | (ug/kg) | | 2500000 | 40000 | <100 | 5639.0 | 1034.0 | NA |
| Pyrene | (ug/kg) | | 2500000 | 40000 | <100 | 4745.0 | 1100.0 | NA |
| ETPH | (mg/kg) | | 2500 | 2500 | 534 | 162 | 39 | 99 |
| Arsenic | (mg/kg) | | 10 | | 3.3 | NA | 4.2 | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Gasoline USTs
(AOC 2)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-227<br>TB-227(10-12)<br>03/31/2000<br>11.00 | TB-228<br>TB-228(2-4)<br>03/31/2000<br>3.00 | TB-228<br>TB-228(4-6)<br>03/31/2000<br>5.00 | TB-229<br>TB-229(0-2)<br>03/31/2000<br>1.00 |
|---|---|---|---|---|---|---|---|
| Acenaphthylene | (ug/kg) | 2500000 | 84000 | NA | <100 | NA | <100 |
| Anthracene | (ug/kg) | 2500000 | 400000 | NA | <100 | NA | <100 |
| Benzo(a)anthracene | (ug/kg) | 7800 | 1000 | NA | 114.0 | NA | 129.0 |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | NA | 126.0 | NA | 100.0 |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | NA | 158.0 | NA | 135.0 |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | NA | 135.0 | NA | 124.0 |
| Chrysene | (ug/kg) | 780000 | 960 | NA | 135.0 | NA | 237.0 |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | NA | 219.0 | NA | 170.0 |
| Fluorene | (ug/kg) | 2500000 | 56000 | NA | <100 | NA | <100 |
| Naphthalene | (ug/kg) | 2500000 | 56000 | NA | <100 | NA | <100 |
| Phenanthrene | (ug/kg) | 2500000 | 40000 | NA | <100 | NA | <100 |
| Pyrene | (ug/kg) | 2500000 | 40000 | NA | 212.0 | NA | 334.0 |
| ETPH | (mg/kg) | 2500 | 2500 | 954 | 133 | 172 | 45 |
| Arsenic | (mg/kg) | 10 | | NA | 2.5 | NA | 6.4 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Gasoline USTs
(AOC 2)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-229<br>TB-229(4-6)<br>03/31/2000<br>5.00 |
|---|---|---|---|---|
| Acenaphthylene | (ug/kg) | 2500000 | 84000 | NA |
| Anthracene | (ug/kg) | 2500000 | 400000 | NA |
| Benzo(a)anthracene | (ug/kg) | 7800 | 1000 | NA |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | NA |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | NA |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | NA |
| Chrysene | (ug/kg) | 780000 | 960 | NA |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | NA |
| Fluorene | (ug/kg) | 2500000 | 56000 | NA |
| Naphthalene | (ug/kg) | 2500000 | 56000 | NA |
| Phenanthrene | (ug/kg) | 2500000 | 40000 | NA |
| Pyrene | (ug/kg) | 2500000 | 40000 | NA |
| ETPH | (mg/kg) | 2500 | 2500 | <25 |
| Arsenic | (mg/kg) | 10 | | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil Pump Room/Waste Oil AST
(AOC 7)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-207<br>TB-207(0-2)<br>03/30/2000<br>1.00 | TB-208<br>TB-208(0-2)<br>03/30/2000<br>1.00 | TB-209<br>TB-209(2-4)<br>03/30/2000<br>3.00 | TB-210<br>TB-210(0-2)<br>03/30/2000<br>1.00 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | NA | NA | NA | NA |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | 215.0 | [2138.0] | [1385.0] | <100 |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | 158.0 | 2437.0 | 1076.0 | <100 |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | 122.0 | 1491.0 | <100 | <100 |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | <100 | 1250.0 | <100 | <100 |
| Pyrene | (ug/kg) | 2500000 | 40000 | <100 | 1179.0 | <100 | <100 |
| ETPH | (mg/kg) | 2500 | 2500 | <25 | <25 | 291 | 65 |
| Arsenic | (mg/kg) | 10 | | 3.9 | 2.8 | 5.2 | 2.2 |
| Barium | (mg/kg) | 140000 | | 33 | 30 | 20 | 32 |
| Cadmium | (mg/kg) | 1000 | | <0.5 | <0.5 | <0.5 | <0.5 |
| Chromium | (mg/kg) | | | 7.5 | 6.2 | 8.0 | 9.3 |
| Lead | (mg/kg) | 1000 | | 87.1 | 11.5 | 28.5 | 31.3 |
| Mercury | (mg/kg) | 610 | | 0.06 | 0.06 | 0.06 | 0.03 |
| Selenium | (mg/kg) | 10000 | | <0.5 | <0.5 | <0.5 | 2.5 |
| Silver | (mg/kg) | 10000 | | <0.2 | <0.2 | <0.2 | <0.2 |
| Lead (SPLP) | (mg/l) | | 0.15 | 0.010 | <0.005 | <0.005 | 0.006 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil Pump Room/Waste Oil AST
(AOC 7)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-223<br>TB-223(3.5-3.8)<br>03/31/2000<br>3.65 | TB-224<br>TB-224(1-1.3)<br>03/31/2000<br>1.15 | TB-224<br>TB-224(2-3)<br>03/31/2000<br>2.50 | TB-225<br>TB-225(1.7-2.0)<br>03/31/2000<br>1.85 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | <1.0 | 5 | 7 | [14] |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | NA | NA | NA | NA |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | NA | NA | NA | NA |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | NA | NA | NA | NA |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | NA | NA | NA | NA |
| Pyrene | (ug/kg) | 2500000 | 40000 | NA | NA | NA | NA |
| ETPH | (mg/kg) | 2500 | 2500 | <25 | 54 | 428 | 236 |
| Arsenic | (mg/kg) | 10 | | NA | NA | NA | NA |
| Barium | (mg/kg) | 140000 | | NA | NA | NA | NA |
| Cadmium | (mg/kg) | 1000 | | NA | NA | NA | NA |
| Chromium | (mg/kg) | | | NA | NA | NA | NA |
| Lead | (mg/kg) | 1000 | | NA | NA | NA | NA |
| Mercury | (mg/kg) | 610 | | NA | NA | NA | NA |
| Selenium | (mg/kg) | 10000 | | NA | NA | NA | NA |
| Silver | (mg/kg) | 10000 | | NA | NA | NA | NA |
| Lead (SPLP) | (mg/l) | | 0.15 | NA | NA | NA | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil Pump Room/Waste Oil AST
(AOC 7)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-225<br>TB-225(3.7-4.0)<br>03/31/2000<br>3.85 |
|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | 4 |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | NA |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | NA |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | NA |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | NA |
| Pyrene | (ug/kg) | 2500000 | 40000 | NA |
| ETPH | (mg/kg) | 2500 | 2500 | 1235 |
| Arsenic | (mg/kg) | 10 | | NA |
| Barium | (mg/kg) | 140000 | | NA |
| Cadmium | (mg/kg) | 1000 | | NA |
| Chromium | (mg/kg) | | | NA |
| Lead | (mg/kg) | 1000 | | NA |
| Mercury | (mg/kg) | 610 | | NA |
| Selenium | (mg/kg) | 10000 | | NA |
| Silver | (mg/kg) | 10000 | | NA |
| Lead (SPLP) | (mg/l) | | 0.15 | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil ASTs
(AOC 8)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | SS-104<br>SS-04<br>03/31/2000<br>0.15 | SS-105<br>SS-05<br>03/31/2000<br>0.15 | SS-106<br>SS-06<br>03/31/2000<br>0.15 | SS-107<br>SS-07<br>03/31/2000<br>0.15 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | 3 | 2 | 1 | <1.0 |
| ETPH | (mg/kg) | 2500 | 2500 | <25 | <25 | <25 | <25 |
| Arsenic | (mg/kg) | 10 | | NA | NA | NA | NA |
| Barium | (mg/kg) | 140000 | | NA | NA | NA | NA |
| Chromium | (mg/kg) | | | NA | NA | NA | NA |
| Lead | (mg/kg) | 1000 | | NA | NA | NA | NA |
| Mercury | (mg/kg) | 610 | | NA | NA | NA | NA |
| Selenium | (mg/kg) | 10000 | | NA | NA | NA | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil ASTs
(AOC 8)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | SS-108<br>SS-08<br>03/31/2000<br>0.15 | TB-211<br>TB-211(0-2)<br>03/30/2000<br>1.00 | TB-212<br>TB-212(2-4)<br>03/30/2000<br>3.00 | TB-219<br>TB-219(3-3.3)<br>03/31/2000<br>3.15 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | 1 | NA | NA | <1.0 |
| ETPH | (mg/kg) | 2500 | 2500 | <25 | <25 | 53 | 41 |
| Arsenic | (mg/kg) | 10 | | NA | 3.0 | 6.3 | NA |
| Barium | (mg/kg) | 140000 | | NA | 31 | 31 | NA |
| Chromium | (mg/kg) | | | NA | 6.8 | 7.5 | NA |
| Lead | (mg/kg) | 1000 | | NA | 55.9 | 26.6 | NA |
| Mercury | (mg/kg) | 610 | | NA | 0.20 | 0.25 | NA |
| Selenium | (mg/kg) | 10000 | | NA | <0.5 | 1.4 | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil ASTs
(AOC 8)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust/Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-219<br>TB-219(7-7.3)<br>03/31/2000<br>7.15 | TB-220<br>TB-220(1.5-1.8)<br>03/31/2000<br>1.65 | TB-220<br>TB-220(3.5-3.8)<br>03/31/2000<br>3.65 | TB-220<br>TB-220(5-5.3)<br>03/31/2000<br>5.15 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | <1.0 | <1.0 | <1.0 | <1.0 |
| ETPH | (mg/kg) | 2500 | 2500 | 46 | 1050 | 60 | 1115 |
| Arsenic | (mg/kg) | 10 | | NA | NA | NA | NA |
| Barium | (mg/kg) | 140000 | | NA | NA | NA | NA |
| Chromium | (mg/kg) | | | NA | NA | NA | NA |
| Lead | (mg/kg) | 1000 | | NA | NA | NA | NA |
| Mercury | (mg/kg) | 610 | | NA | NA | NA | NA |
| Selenium | (mg/kg) | 10000 | | NA | NA | NA | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Oil ASTs
(AOC 8)

PERIOD: From 03/30/2000 thru 03/31/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-221<br>TB-221(5-5.3)<br>03/31/2000<br>5.15 | TB-222<br>TB-222(1.7-2.0)<br>03/31/2000<br>1.85 | TB-222<br>TB-222(5.9-6.2)<br>03/31/2000<br>6.05 |
|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | <1.0 | <1.0 | <1.0 |
| ETPH | (mg/kg) | 2500 | 2500 | 128 | 244 | 29 |
| Arsenic | (mg/kg) | 10 | | NA | NA | NA |
| Barium | (mg/kg) | 140000 | | NA | NA | NA |
| Chromium | (mg/kg) | | | NA | NA | NA |
| Lead | (mg/kg) | 1000 | | NA | NA | NA |
| Mercury | (mg/kg) | 610 | | NA | NA | NA |
| Selenium | (mg/kg) | 10000 | | NA | NA | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Capacitors/Transformers
(AOC 9)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | HA-01<br>HA-01<br>03/30/2000<br>1.65 | HA-02<br>HA-02<br>03/30/2000<br>0.95 | SS-101<br>SS-01<br>03/30/2000<br>0.15 | SS-102<br>SS-02<br>03/30/2000<br>0.15 |
|---|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | [29] | <1.0 | <1.0 | [23] |
| Arsenic | (mg/kg) | 10 | | NA | [230] | [150] | 5.4 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Capacitors/Transformers
(AOC 9)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | SS-103<br>SS-03<br>03/30/2000<br>0.15 | TB-214<br>TB-214(3-3.3)<br>03/30/2000<br>3.15 | TB-215<br>TB-215(2-2.2)<br>03/30/2000<br>2.10 |
|---|---|---|---|---|---|---|
| PCB's | (mg/kg) | 10 | | <1.0 | 2 | 4 |
| Arsenic | (mg/kg) | 10 | | [116] | NA | NA |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Coal Storage Area
(AOC 12)

PERIOD: From 03/31/2000 thru 04/03/2000 - Inclusive
SAMPLE TYPE: Soil

| | SITE | | | HA-03 | TB-230 | TB-231 | TB-232 |
|---|---|---|---|---|---|---|---|
| | SAMPLE ID | Indust./Comm. | GB Mobility | HA-(0-2) | TB-230(2-4) | TB-231(0-2) | TB-232(2-4) |
| CONSTITUENT | DATE | Criteria | Criteria | 03/31/2000 | 04/03/2000 | 04/03/2000 | 04/03/2000 |
| | DEPTH (ft) | CTDEP Jan. 1996 | CTDEP Jan. 1996 | 1.00 | 3.00 | 1.00 | 3.00 |
| Arsenic | (mg/kg) | 10 | | [16.1] | 5.0 | [11.5] | [11.5] |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Coal Storage Area
(AOC 12)

PERIOD: From 03/31/2000 thru 04/03/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE | Indust./Comm. | GB Mobility | TB-233 | TB-234 | TB-235 | TB-236 |
|---|---|---|---|---|---|---|---|
| | SAMPLE ID | Indust./Comm. | GB Mobility | TB-233(2-4) | TB-234(0-2) | TB-235(2-4) | TB-236(0-2) |
| | DATE | Criteria | Criteria | 04/03/2000 | 04/03/2000 | 04/03/2000 | 04/03/2000 |
| | DEPTH (ft) | CTDEP Jan. 1996 | CTDEP Jan. 1996 | 3.00 | 1.00 | 3.00 | 1.00 |
| Arsenic | (mg/kg) | 10 | | [32.3] | [12.4] | [22.8] | 3.6 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Coal Storage Area
(AOC 12)

PERIOD: From 03/31/2000 thru 04/03/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-237<br>TB-237(0-2)<br>04/03/2000<br>1.00 | TB-239<br>TB-239(0-2)<br>04/03/2000<br>1.00 | TB-240<br>TB-240(2-4)<br>04/03/2000<br>3.00 | TB-241<br>TB-241(1-3)<br>04/03/2000<br>2.00 |
|---|---|---|---|---|---|---|---|
| Arsenic | (mg/kg) | 10 | | 7.9 | 4.3 | 3.0 | 7.3 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Coal Storage Area
(AOC 12)

PERIOD: From 03/31/2000 thru 04/03/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE | | | TB-242 |
|---|---|---|---|---|
| | SAMPLE ID | Indust./Comm. | GB Mobility | TB-242(1-3) |
| | DATE | Criteria | Criteria | 04/03/2000 |
| | DEPTH (ft) | CTDEP Jan. 1996 | CTDEP Jan. 1996 | 2.00 |
| Arsenic | (mg/kg) | 10 | | 5.5 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Wastewater Treatment System/Station East
(AOC 13)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-200<br>TB-200(0-2)<br>03/30/2000<br>1.00 | TB-201<br>TB-201(0-2)<br>03/30/2000<br>1.00 | TB-202<br>TB-202(2-4)<br>03/30/2000<br>3.00 | TB-203<br>TB-203(0-2)<br>03/30/2000<br>1.00 |
|---|---|---|---|---|---|---|---|
| Acenaphthene | (ug/kg) | 2500000 | 84000 | <100 | <100 | 3292.0 | <100 |
| Acenaphthylene | (ug/kg) | 2500000 | 84000 | <100 | <100 | 1636.0 | 3531.0 |
| Anthracene | (ug/kg) | 2500000 | 400000 | <100 | <100 | 15425.0 | 6603.0 |
| Benzo(a)anthracene | (ug/kg) | 7800 | 1000 | <100 | <100 | [28441.0] | [30950.0] |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | 170.0 | <100 | [43270.0] | [28585.0] |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | 114.0 | <100 | [26506.0] | [24427.0] |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | <100 | <100 | 32661.0 | 18714.0 |
| Chrysene | (ug/kg) | 780000 | 960 | <100 | <100 | 28794.0 | 27318.0 |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | <100 | <100 | 64475.0 | 51323.0 |
| Fluorene | (ug/kg) | 2500000 | 56000 | <100 | <100 | 7249.0 | <100 |
| Indeno(1,2,3-cd)pyrene | (ug/kg) | 7800 | 1000 | <500 | <500 | [8147.0] | 6040.0 |
| Phenanthrene | (ug/kg) | 2500000 | 40000 | <100 | <100 | 72000.0 | 26000.0 |
| Pyrene | (ug/kg) | 2500000 | 40000 | <100 | <100 | 44532.0 | 48043.0 |
| ETPH | (mg/kg) | 2500 | 2500 | 28 | 94 | 57 | 32 |
| Arsenic | (mg/kg) | 10 | | 2.9 | 1.9 | 4.2 | 3.7 |
| Barium | (mg/kg) | 140000 | | 41 | 47 | 48 | 34 |
| Cadmium | (mg/kg) | 1000 | | <0.5 | <0.5 | <0.5 | <0.5 |
| Chromium | (mg/kg) | | | 8.0 | 7.6 | 10.2 | 11.7 |
| Lead | (mg/kg) | 1000 | | 19.3 | 33.5 | 157 | 44.3 |
| Mercury | (mg/kg) | 610 | | 0.06 | 0.03 | 0.28 | 0.07 |
| Selenium | (mg/kg) | 10000 | | <0.5 | <0.5 | 1.8 | <0.5 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Wastewater Treatment System/Station East
(AOC 13)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-200<br>TB-200(0-2)<br>03/30/2000<br>1.00 | TB-201<br>TB-201(0-2)<br>03/30/2000<br>1.00 | TB-202<br>TB-202(2-4)<br>03/30/2000<br>3.00 | TB-203<br>TB-203(0-2)<br>03/30/2000<br>1.00 |
|---|---|---|---|---|---|---|---|
| Silver | (mg/kg) | 10000 | | <0.2 | <0.2 | <0.2 | <0.2 |
| Lead (SPLP) | (mg/l) | | 0.15 | <0.005 | <0.005 | <0.005 | <0.005 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Wastewater Treatment System/Station East
(AOC 13)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1996 | TB-204<br>TB-204(2-4)<br>03/30/2000<br>3.00 | TB-205<br>TB-205(2-4)<br>03/30/2000<br>3.00 | TB-206<br>TB-206(2-4)<br>03/30/2000<br>3.00 |
|---|---|---|---|---|---|---|
| Acenaphthene | (ug/kg) | 2500000 | 84000 | <100 | <100 | <100 |
| Acenaphthylene | (ug/kg) | 2500000 | 84000 | <100 | 1311.0 | <100 |
| Anthracene | (ug/kg) | 2500000 | 400000 | <100 | 1034.0 | <100 |
| Benzo(a)anthracene | (ug/kg) | 7800 | 1000 | <100 | [10590.0] | 1316.0 |
| Benzo(a)pyrene | (ug/kg) | 1000 | 1000 | [3269.0] | [14827.0] | [3433.0] |
| 3,4-Benzofluoranthene | (ug/kg) | 7800 | 1000 | <100 | [15828.0] | 2767.0 |
| Benzo(k)fluoranthene | (ug/kg) | 78000 | 1000 | <100 | 12757.0 | 1754.0 |
| Chrysene | (ug/kg) | 780000 | 960 | <100 | 9540.0 | 1390.0 |
| Fluoranthene | (ug/kg) | 2500000 | 56000 | <100 | 10237.0 | 1498.0 |
| Fluorene | (ug/kg) | 2500000 | 56000 | <100 | <100 | <100 |
| Indeno(1,2,3-cd)pyrene | (ug/kg) | 7800 | 1000 | <500 | 7496.0 | <500 |
| Phenanthrene | (ug/kg) | 2500000 | 40000 | <100 | 3635.0 | <100 |
| Pyrene | (ug/kg) | 2500000 | 40000 | <100 | 12721.0 | 1625.0 |
| ETPH | (mg/kg) | 2500 | 2500 | 1377 | 189 | 115 |
| Arsenic | (mg/kg) | 10 | | 3.0 | 6.1 | 9.3 |
| Barium | (mg/kg) | 140000 | | 23 | 37 | 55 |
| Cadmium | (mg/kg) | 1000 | | <0.5 | <0.5 | <0.5 |
| Chromium | (mg/kg) | | | 8.8 | 8.8 | 10.8 |
| Lead | (mg/kg) | 1000 | | 44.7 | 134 | 276 |
| Mercury | (mg/kg) | 610 | | 0.14 | 0.21 | 0.46 |
| Selenium | (mg/kg) | 10000 | | 0.9 | 3.2 | 1.2 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
Wastewater Treatment System/Station East
(AOC 13)

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE<br>SAMPLE ID<br>DATE<br>DEPTH (ft) | Indust./Comm.<br>Criteria<br>CTDEP Jan. 1996 | GB Mobility<br>Criteria<br>CTDEP Jan. 1998 | TB-204<br>TB-204(2-4)<br>03/30/2000<br>3.00 | TB-205<br>TB-205(2-4)<br>03/30/2000<br>3.00 | TB-206<br>TB-206(2-4)<br>03/30/2000<br>3.00 |
|---|---|---|---|---|---|---|
| Silver | (mg/kg) | 10000 | | <0.2 | <0.2 | <0.2 |
| Lead (SPLP) | (mg/l) | | 0.15 | 0.007 | 0.012 | 0.031 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
Southwest of Plant

PERIOD: From 03/30/2000 thru 03/30/2000 - Inclusive
SAMPLE TYPE: Soil

| CONSTITUENT | SITE / SAMPLE ID / DATE / DEPTH (ft) | Indust/Comm. Criteria CTDEP Jan. 1996 | GB Mobility Criteria CTDEP Jan. 1996 | TB-213 TB-213(2-4) 03/30/2000 3.00 | TB-216 TB-216(0-2) 03/30/2000 1.00 |
|---|---|---|---|---|---|
| ETPH | (mg/kg) | 2500 | 2500 | 29 | 130 |
| Arsenic | (mg/kg) | 10 | | 2.9 | 4.4 |
| Barium | (mg/kg) | 140000 | | 32 | 41 |
| Chromium | (mg/kg) | | | 7.4 | 22.0 |
| Lead | (mg/kg) | 1000 | | 14.0 | 24.2 |
| Mercury | (mg/kg) | 610 | | 0.03 | 0.09 |
| Selenium | (mg/kg) | 10000 | | 0.9 | 1.1 |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

Date: 05/03/2000

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| BOR1 | 12/15/1999 | 6.00 | | 1.2 |
| BOR1 | 12/15/1999 | 11.00 | | 1U |
| BOR1 | 12/15/1999 | 16.00 | | 1U |
| BOR1 | 12/15/1999 | 21.00 | | 1U |
| BOR1 | 12/15/1999 | 26.00 | | 1U |
| BOR1 | 12/15/1999 | 31.00 | | 1U |
| BOR2 | 12/15/1999 | 6.00 | | 1U |
| BOR2 | 12/15/1999 | 11.00 | | 1U |
| BOR2 | 12/15/1999 | 16.00 | | 1U |
| BOR2 | 12/15/1999 | 21.00 | | 1U |
| BOR2 | 12/15/1999 | 26.00 | | 1U |
| BOR2 | 12/15/1999 | 31.00 | | 1U |
| BOR3 | 12/15/1999 | 11.00 | | 1U |
| BOR3 | 12/15/1999 | 16.00 | | 1U |
| BOR3 | 12/15/1999 | 21.00 | | 1U |
| BOR3 | 12/15/1999 | 26.00 | | 1U |
| BOR3 | 12/15/1999 | 31.00 | | 1U |
| BOR4 | 12/15/1999 | 6.00 | | 1U |
| BOR4 | 12/15/1999 | 11.00 | | 1U |
| BOR4 | 12/15/1999 | 16.00 | | 1U |
| BOR4 | 12/15/1999 | 21.00 | | 1U |
| BOR4 | 12/15/1999 | 26.00 | | 1U |
| BOR4 | 12/15/1999 | 31.00 | | 1U |
| BOR5 | 12/15/1999 | 6.00 | | 1U |
| BOR5 | 12/15/1999 | 11.00 | | 1U |
| BOR5 | 12/15/1999 | 16.00 | | 1U |
| BOR5 | 12/15/1999 | 21.00 | | 1U |
| BOR5 | 12/15/1999 | 26.00 | | 1U |
| BOR5 | 12/15/1999 | 31.00 | | 1U |
| GP-01 | 12/12/1997 | 12.00 | | 1U |
| GP-02 | 12/12/1997 | 12.00 | | 1U |
| GP-03 | 12/12/1997 | 4.00 | | 1U |
| GP-04 | 12/12/1997 | 12.00 | | 5.0 |
| GP-05 | 12/12/1997 | 12.00 | | 3.0 |
| GP-07 | 12/12/1997 | 8.00 | | 1U |
| GP-09 | 12/19/1997 | 1.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| GP-09 | 12/19/1997 | 2.00 | | 1U |
| GP-09 | 12/19/1997 | 3.00 | | 1U |
| GP-09 | 12/19/1997 | 4.00 | | 1U |
| GP-09 | 12/19/1997 | 5.00 | | 1U |
| GP-09 | 12/19/1997 | 6.00 | | 1U |
| GP-09 | 12/19/1997 | 7.00 | | 1U |
| GP-09 | 12/19/1997 | 8.00 | | 1U |
| GP-09 | 12/19/1997 | 9.00 | | 1U |
| GP-09 | 12/19/1997 | 10.00 | | 1U |
| GP-09 | 12/19/1997 | 11.00 | | 1U |
| GP-09 | 12/19/1997 | 12.00 | | 1U |
| GP-09 | 12/19/1997 | 13.00 | | 1U |
| GP-09 | 12/19/1997 | 14.00 | | 1U |
| GP-09 | 12/19/1997 | 15.00 | | 1U |
| GP-09 | 12/19/1997 | 20.00 | | 1U |
| GP-10 | 12/19/1997 | 1.00 | | 1U |
| GP-10 | 12/19/1997 | 2.00 | | 1U |
| GP-10 | 12/19/1997 | 3.00 | | 1U |
| GP-10 | 12/19/1997 | 4.00 | | 1U |
| GP-10 | 12/19/1997 | 5.00 | | 1U |
| GP-10 | 12/19/1997 | 6.00 | | 1U |
| GP-10 | 12/19/1997 | 7.00 | | 1U |
| GP-10 | 12/19/1997 | 8.00 | | 1U |
| GP-10 | 12/19/1997 | 9.00 | | 1U |
| GP-10 | 12/19/1997 | 10.00 | | 1U |
| GP-10 | 12/19/1997 | 11.00 | | 1U |
| GP-10 | 12/19/1997 | 12.00 | | 1U |
| GP-11 | 12/19/1997 | 1.00 | | 1U |
| GP-11 | 12/19/1997 | 2.00 | | 1U |
| GP-11 | 12/19/1997 | 3.00 | | 1U |
| GP-11 | 12/19/1997 | 4.00 | | 1U |
| GP-11 | 12/19/1997 | 5.00 | | 1U |
| GP-11 | 12/19/1997 | 6.00 | | 1U |
| GP-11 | 12/19/1997 | 7.00 | | 1U |
| GP-11 | 12/19/1997 | 8.00 | | 1U |
| GP-11 | 12/19/1997 | 9.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

Date: 05/03/2000

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| GP-11 | 12/19/1997 | 10.00 | | 1U |
| GP-15 | 12/19/1997 | 4.00 | | 1U |
| GP-15 | 12/19/1997 | 8.00 | | 2.7 |
| GP-15 | 12/19/1997 | 12.00 | | 1U |
| GP-15 | 12/19/1997 | 16.00 | | 1U |
| GP-15 | 12/19/1997 | 20.00 | | 1U |
| GP-15 | 12/19/1997 | 25.00 | | 1.4 |
| GP-15 | 12/19/1997 | 28.00 | | 1U |
| GP-15 | 12/19/1997 | 32.00 | | 1U |
| GP-15 | 12/19/1997 | 36.00 | | 1U |
| GP-16 | 12/29/1997 | 4.00 | | 1.7 |
| GP-16 | 12/29/1997 | 8.00 | | 3.8 |
| GP-16 | 12/29/1997 | 12.00 | | 1U |
| GP-16 | 12/29/1997 | 16.00 | | 1U |
| GP-16 | 12/29/1997 | 20.00 | | 1U |
| GP-17 | 12/29/1997 | 4.00 | | 7.3 |
| GP-17 | 12/29/1997 | 8.00 | | [24.5] |
| GP-17 | 12/29/1997 | 12.00 | | 1U |
| GP-17 | 12/29/1997 | 13.00 | | 1U |
| GP-18 | 12/15/1999 | 1.50 | | 1.7 |
| GP-18 | 12/15/1999 | 2.50 | | 1U |
| GP-18 | 12/15/1999 | 3.50 | | 4.1 |
| GP-18 | 12/15/1999 | 4.50 | | [16.7] |
| GP-18 | 12/15/1999 | 5.50 | | 6.4 |
| GP-18 | 12/15/1999 | 6.50 | | 1U |
| GP-18 | 12/15/1999 | 7.50 | | 1.9 |
| GP-19 | 12/15/1999 | 3.50 | | 1U |
| GP-19 | 12/15/1999 | 7.50 | | 3.4 |
| GP-19 | 12/15/1999 | 11.50 | | 1U |
| GP-19 | 12/15/1999 | 12.50 | | 1U |
| GP-20 | 12/15/1999 | 3.50 | | 1U |
| GP-20 | 12/15/1999 | 7.50 | | 5.0 |
| GP-20 | 12/15/1999 | 11.50 | | 1U |
| GP-20A | 04/22/1999 | 1.00 | | 1U |
| GP-20A | 04/22/1999 | 3.00 | | 1U |
| GP-20A | 04/22/1999 | 5.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| GP-20A | 04/22/1999 | 7.00 | | 8.2 |
| GP-20A | 04/22/1999 | 9.00 | | 1.1 |
| GP-20A | 04/22/1999 | 11.00 | | 1U |
| GP-22 | 12/15/1999 | 0.50 | | 1U |
| GP-22 | 12/15/1999 | 1.50 | | 1U |
| GP-22 | 12/15/1999 | 2.50 | | 1U |
| GP-22 | 12/15/1999 | 3.50 | | 1U |
| GP-22 | 12/15/1999 | 4.50 | | 1U |
| GP-22 | 12/15/1999 | 5.50 | | 1.5 |
| GP-22 | 12/15/1999 | 6.50 | | 1U |
| GP-22 | 12/15/1999 | 7.50 | | 1U |
| GP-23 | 12/15/1999 | 0.50 | | 1U |
| GP-23 | 12/15/1999 | 1.50 | | 1U |
| GP-23 | 12/15/1999 | 2.50 | | 1U |
| GP-23 | 12/15/1999 | 3.50 | | 1U |
| GP-23 | 12/15/1999 | 4.50 | | 1U |
| GP-23 | 12/15/1999 | 5.50 | | 9.3 |
| GP-23 | 12/15/1999 | 6.50 | | 3.2 |
| GP-23 | 12/15/1999 | 7.50 | | 8.4 |
| GP-23 | 12/15/1999 | 8.50 | | 6.7 |
| GP-23 | 12/15/1999 | 9.50 | | 3.9 |
| GP-24 | 12/15/1999 | 0.50 | | 1U |
| GP-24 | 12/15/1999 | 1.50 | | 1U |
| GP-24 | 12/15/1999 | 2.50 | | 2.0 |
| GP-24 | 12/15/1999 | 3.50 | | 2.3 |
| GP-24 | 12/15/1999 | 4.50 | | 1.8 |
| GP-24 | 12/15/1999 | 5.50 | | 1.0 |
| GP-24 | 12/15/1999 | 6.50 | | 1U |
| GP-24 | 12/15/1999 | 7.50 | | 7.9 |
| GP-24 | 12/15/1999 | 8.50 | | 1U |
| GP-24 | 12/15/1999 | 9.50 | | 7.5 |
| GP-24 | 12/15/1999 | 10.50 | | 1U |
| GP-24 | 12/15/1999 | 11.50 | | 1U |
| GP-24 | 12/15/1999 | 12.50 | | 1U |
| GP-24 | 12/15/1999 | 13.50 | | 1U |
| GP-24 | 12/15/1999 | 14.50 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| GP-24 | 12/15/1999 | 16.00 | | 1U |
| GP-30 | 04/22/1999 | 1.00 | | 1U |
| GP-30 | 04/22/1999 | 3.00 | | 1U |
| GP-30 | 04/22/1999 | 5.00 | | 3.8 |
| GP-30 | 04/22/1999 | 7.00 | | 5.4 |
| GP-30 | 04/22/1999 | 9.00 | | 1U |
| GP-30 | 04/22/1999 | 11.00 | | 1U |
| GP-31 | 04/22/1999 | 1.00 | | 1U |
| GP-31 | 04/22/1999 | 3.00 | | 1U |
| GP-31 | 04/22/1999 | 5.00 | | 1U |
| GP-31 | 04/22/1999 | 7.00 | | 7.1 |
| GP-31 | 04/22/1999 | 9.00 | | 1U |
| GP-31 | 04/22/1999 | 11.00 | | 1U |
| GP-32 | 04/22/1999 | 1.00 | | 1U |
| GP-32 | 04/22/1999 | 3.00 | | 1U |
| GP-32 | 04/22/1999 | 5.00 | | 1.2 |
| GP-32 | 04/22/1999 | 7.00 | | 8.7 |
| GP-32 | 04/22/1999 | 9.00 | | 2.6 |
| GP-32 | 04/22/1999 | 11.00 | | 1U |
| GP-33 | 04/22/1999 | 1.00 | | 1U |
| GP-33 | 04/22/1999 | 3.00 | | 1U |
| GP-33 | 04/22/1999 | 5.00 | | 1U |
| GP-33 | 04/22/1999 | 7.00 | | 1U |
| GP-33 | 04/22/1999 | 9.00 | | 1U |
| GP-33 | 04/22/1999 | 10.50 | | 1U |
| GP-35 | 04/22/1999 | 1.00 | | 1U |
| GP-35 | 04/22/1999 | 3.00 | | 1U |
| GP-36 | 04/22/1999 | 1.00 | | 1U |
| GP-36 | 04/22/1999 | 3.00 | | 1.5 |
| GP-38 | 04/23/1999 | 1.00 | | 1U |
| GP-38 | 04/23/1999 | 3.00 | | 1U |
| GP-38 | 04/23/1999 | 5.00 | | 2.5 |
| GP-38 | 04/23/1999 | 7.00 | | 6.3 |
| GP-39 | 04/23/1999 | 1.00 | | 1U |
| GP-39 | 04/23/1999 | 3.00 | | 1U |
| GP-39 | 04/23/1999 | 5.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

Date: 05/03/2000

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| GP-39 | 04/23/1999 | 7.00 | | 2.6 |
| GP-40 | 04/23/1999 | 1.00 | | 1U |
| GP-40 | 04/23/1999 | 3.00 | | 1U |
| GP-40 | 04/23/1999 | 5.00 | | 1U |
| GP-40 | 04/23/1999 | 7.00 | | 1U |
| GP-41 | 04/23/1999 | 1.00 | | 1U |
| GP-41 | 04/23/1999 | 3.00 | | 1U |
| GP-41 | 04/23/1999 | 5.00 | | 1U |
| GP-41 | 04/23/1999 | 7.00 | | 1U |
| GP-41 | 04/23/1999 | 9.00 | | 1U |
| GP-41 | 04/23/1999 | 11.00 | | 1U |
| GP-621 | 12/15/1999 | 0.50 | | 1U |
| GP-621 | 12/15/1999 | 1.50 | | 1U |
| GP-621 | 12/15/1999 | 2.50 | | 1U |
| GP-621 | 12/15/1999 | 3.50 | | 1U |
| GP-621 | 12/15/1999 | 4.50 | | 1U |
| GP-621 | 12/15/1999 | 5.50 | | 1U |
| GP-621 | 12/15/1999 | 6.50 | | 1U |
| GP-621 | 12/15/1999 | 7.50 | | 1U |
| GP-621 | 12/15/1999 | 8.50 | | 1U |
| GP-621 | 12/15/1999 | 9.50 | | 1U |
| GP-621 | 12/15/1999 | 10.50 | | 1U |
| GP-621 | 12/15/1999 | 11.50 | | 1U |
| MW-050 | 10/12/1999 | 1.00 | MW50 | 1U |
| MW-050 | 10/12/1999 | 3.00 | | 1U |
| MW-050 | 10/12/1999 | 5.00 | | 1.4 |
| MW-050 | 10/12/1999 | 9.00 | | 1U |
| MW-050 | 10/12/1999 | 11.00 | | 1U |
| MW-051 | 10/12/1999 | 1.00 | | 1U |
| MW-051 | 10/12/1999 | 3.00 | | 1U |
| MW-051 | 10/12/1999 | 5.00 | | 1U |
| MW-051 | 10/12/1999 | 7.00 | | 1.7 |
| MW-051 | 10/12/1999 | 9.00 | | 1U |
| MW-051 | 10/12/1999 | 11.00 | | 1U |
| MW-052 | 10/12/1999 | 5.00 | | 1U |
| MW-053 | 10/12/1999 | 1.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

Date: 05/03/2000

English Station
Summary of Soil Analytical Data
PCB Remediation Area

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| MW-053 | 10/12/1999 | 3.00 | | 1U |
| MW-053 | 10/12/1999 | 5.00 | | 1U |
| MW-053 | 10/12/1999 | 7.00 | | 2.6 |
| MW-053 | 10/12/1999 | 9.00 | | 1U |
| MW-053 | 10/12/1999 | 11.00 | | 1U |
| MWP-01 | 12/15/1999 | 1.00 | | 4.3 |
| MWP-01 | 12/15/1999 | 3.00 | | 1U |
| MWP-01 | 12/15/1999 | 5.00 | | 5.6 |
| MWP-01 | 12/15/1999 | 7.00 | | 2.9 |
| MWP-01 | 12/15/1999 | 9.00 | | 1U |
| MWP-01 | 12/15/1999 | 11.00 | | 1.1 |
| MWP-01 | 12/15/1999 | 13.00 | | 1U |
| MWP-01 | 12/15/1999 | 15.00 | | 1U |
| MWP-01 | 12/15/1999 | 20.00 | | 1U |
| MWP-01 | 12/15/1999 | 25.00 | | 1U |
| MWP-01 | 12/15/1999 | 30.00 | | 1U |
| MWP-01 | 12/15/1999 | 35.00 | | 1U |
| MWP-01 | 12/15/1999 | 40.00 | | 1U |
| MWP-01 | 12/15/1999 | 45.00 | | 1U |
| MWP-01 | 12/15/1999 | 50.00 | | 1U |
| MWP-01 | 12/15/1999 | 55.00 | | 1U |
| MWP-01 | 12/15/1999 | 65.00 | | 1U |
| MWP-02 | 12/15/1999 | 1.00 | | 2.8 |
| MWP-02 | 12/15/1999 | 3.00 | | 1.9 |
| MWP-02 | 12/15/1999 | 5.00 | | [33.2] |
| MWP-02 | 12/15/1999 | 7.00 | | [10.6] |
| MWP-02 | 12/15/1999 | 9.00 | | 1U |
| MWP-02 | 12/15/1999 | 11.00 | | 1U |
| MWP-02 | 12/15/1999 | 13.00 | | 1U |
| MWP-02 | 12/15/1999 | 15.00 | | 1U |
| MWP-02 | 12/15/1999 | 20.00 | | 1U |
| MWP-02 | 12/15/1999 | 25.00 | | 1U |
| MWP-02 | 12/15/1999 | 30.00 | | 1U |
| MWP-02 | 12/15/1999 | 35.00 | | 1U |
| MWP-02 | 12/15/1999 | 40.00 | | 1U |
| MWP-02 | 12/15/1999 | 45.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

English Station
Summary of Soil Analytical Data
PCB Remediation Area

Date: 05/03/2000

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| MWP-02 | 12/15/1999 | 50.00 | | 1U |
| MWP-02 | 12/15/1999 | 55.00 | | 1U |
| MWP-02 | 12/15/1999 | 60.00 | | 1U |
| MWP-02 | 12/15/1999 | 65.00 | | 1U |
| MWP-02 | 12/15/1999 | 70.00 | | 1U |
| MWP-03 | 12/15/1999 | 1.00 | | 1U |
| MWP-03 | 12/15/1999 | 3.00 | | 1U |
| MWP-03 | 12/15/1999 | 5.00 | | 4.6 |
| MWP-03 | 12/15/1999 | 7.00 | | [11.9] |
| MWP-03 | 12/15/1999 | 9.00 | | 1U |
| MWP-03 | 12/15/1999 | 11.00 | | 1U |
| MWP-03 | 12/15/1999 | 13.00 | | 1U |
| MWP-03 | 12/15/1999 | 15.00 | | 1U |
| MWP-03 | 12/15/1999 | 20.00 | | 1U |
| MWP-03 | 12/15/1999 | 25.00 | | 1U |
| MWP-03 | 12/15/1999 | 30.00 | | 1U |
| MWP-03 | 12/15/1999 | 35.00 | | 1U |
| MWP-03 | 12/15/1999 | 40.00 | | 1U |
| MWP-03 | 12/15/1999 | 45.00 | | 1U |
| MWP-03 | 12/15/1999 | 50.00 | | 1U |
| MWP-03 | 12/15/1999 | 55.00 | | 1U |
| MWP-03 | 12/15/1999 | 60.00 | | 1U |
| MWP-03 | 12/15/1999 | 65.00 | | 1U |
| MWP-03 | 12/15/1999 | 70.00 | | 1U |
| MWP-04 | 12/15/1999 | 1.00 | | 4.5 |
| MWP-04 | 12/15/1999 | 3.00 | | 1U |
| MWP-04 | 12/15/1999 | 5.00 | | 4.5 |
| MWP-04 | 12/15/1999 | 7.00 | | 3.4 |
| MWP-04 | 12/15/1999 | 9.00 | | 1U |
| MWP-04 | 12/15/1999 | 11.00 | | 1U |
| MWP-04 | 12/15/1999 | 13.00 | | 1U |
| MWP-04 | 12/15/1999 | 15.00 | | 1U |
| MWP-04 | 12/15/1999 | 20.00 | | 1U |
| MWP-04 | 12/15/1999 | 25.00 | | 1U |
| MWP-04 | 12/15/1999 | 30.00 | | 1U |
| MWP-04 | 12/15/1999 | 35.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

[]=Greater than Action Level NA=Not analyzed

Date: 05/03/2000

English Station
Summary of Soil Analytical Data
PCB Remediation Area

PERIOD: From 12/12/1997 thru 12/15/1999 - Inclusive
SAMPLE TYPE: Soil

| SITE | DATE | DEPTH | SAMPLE ID | PCB's (mg/kg) |
|---|---|---|---|---|
| Indust./Comm.CriteriaCTDEP Jan. 1996 | | | | 10 |
| GB MobilityCriteriaCTDEP Jan. 1996 | | | | |
| MWP-04 | 12/15/1999 | 40.00 | | 1U |
| MWP-04 | 12/15/1999 | 45.00 | | 1U |
| MWP-04 | 12/15/1999 | 50.00 | | 1U |
| MWP-04 | 12/15/1999 | 55.00 | | 1U |
| MWP-04 | 12/15/1999 | 60.00 | | 1U |
| MWP-04 | 12/15/1999 | 65.00 | | 1U |
| MWP-04 | 12/15/1999 | 70.00 | | 1U |

Only those parameters detected are shown.
RSR exceedences are bracketed.

NA=Not analyzed

Table 1
(page 1 of 3)
SITE-WIDE SOIL SAMPLE MASS ANALYSIS (TOTAL) ARSENIC CONCENTRATIONS

| Site Area | Location | Sample ID | Sample Date | Sample Depth (ft) | Arsenic Conc. (mg/kg) | Arsenic Conc. SPLP (mg/L) |
|---|---|---|---|---|---|---|
| AOC-1 | MW-003 | ES-MW3 (15-17) | 6/4/98 | 16 | 2.3 | ND<0.05 |
| AOC-1 | TB-006 | ES-TB6 (1-7) | 6/4/98 | 4 | 6.1 | ND<0.05 |
| AOC-1 | TB-007A | ES-TB7A (7-9) | 6/4/98 | 8 | 2.8 | ND<0.05 |
| AOC-1 | TB-217 | TB-217 (0-2) | 3/30/00 | 1 | 6.9 | NT |
| AOC-1 | TB-217 | TB-217 (2-4) | 3/30/00 | 3 | 7.9 | NT |
| AOC-10 | MW-12 | ES-MW12 (2-4) | 6/1/98 | 3 | ND<1.0 | ND<0.05 |
| AOC-10 | MW-13 | ES-MW13 (13-15) | 6/1/98 | 14 | ND<1.0 | ND<0.05 |
| AOC-10 | MW-14D | ES-MW14D (26-28) | 6/11/98 | 27 | 10.5 | ND<0.05 |
| AOC-10 | MW-14S | ES-MW14S (1-3) | 6/1/98 | 2 | 6.7 | ND<0.05 |
| AOC-10/13 | MW-20 | ES-MW20 (11-13) | 5/27/98 | 12 | 4.3 | NT |
| AOC-10/13 | TB-018A | ES-TB18A (16-18) | 5/28/98 | 17 | 10.7 | ND<0.05 |
| AOC-12 | MW-004D | ES-MW4D (36-40) | 6/10/98 | 38 | ND<1.0 | ND<0.05 |
| AOC-12 | MW-004S | ES-MW4S (11-13) | 5/27/98 | 12 | 39.4 | ND<0.05 |
| AOC-12 | MW-005 | ES-MW5 (2-4) | 5/26/98 | 3 | 47.2 | ND<0.05 |
| AOC-12 | MW-006 | ES-MW6 (5-9) | 6/9/98 | 7 | 68.6 | 0.06 |
| AOC-12 | MW-007 | ES-MW7 (7-9) | 6/4/98 | 8 | 14.7 | ND<0.05 |
| AOC-12 | MW-009A | ES-MW9A (0-2) | 5/26/98 | 1 | 18.3 | ND<0.05 |
| AOC-12 | MW-010 | ES-MW10 (9-11) | 6/9/98 | 10 | 3.6 | ND<0.05 |
| AOC-12 | MW-22 | ES-MW22 (7-9) | 6/9/98 | 8 | 23.0 | ND<0.05 (1) |
| AOC-12 | SED-01 | ES-SED1 (1) | 6/12/98 | 1 | 16.3 | ND<0.05 |
| AOC-12 | TB-005 | ES-TB5 (4-6) | 6/4/98 | 5 | 4.9 | ND<0.05 |
| AOC-12 | TB-009 | ES-TB9 (3-7) | 6/4/98 | 5 | 93.0 | ND<0.05 |
| AOC-12 | TB-010 | ES-TB010 (11-13) | 6/4/98 | 12 | 13.8 | ND<0.05 |
| AOC-12 | TB-104 | ES-TB-104 (2-4) | 6/30/98 | 3 | 10.1 | NT |
| AOC-12 | TB-104 | TB-104 (4-6) | 6/30/98 | 5 | 7.2 | NT |
| AOC-12 | TB-106 | TB-106 (3-5) | 6/30/98 | 4 | 3.3 | NT |
| AOC-12 | TB-107 | TB-107 (2-4) | 7/1/98 | 3 | 34.4 | NT |
| AOC-12 | TB-107 | TB-107 (6-8) | 7/1/98 | 7 | 11.8 | NT |
| AOC-12 | TB-230 | TB-230 (2-4) | 4/3/00 | 3 | 5.0 | NT |
| AOC-12 | TB-231 | TB-231 (0-2) | 4/3/00 | 1 | 11.5 | NT |
| AOC-12 | TB-232 | TB-232 (2-4) | 4/3/00 | 3 | 11.5 | NT |
| AOC-12 | TB-233 | TB-233 (2-4) | 4/3/00 | 3 | 32.3 | NT |
| AOC-12 | TB-234 | TB-234 (0-2) | 4/3/00 | 1 | 12.4 | NT |
| AOC-12 | TB-235 | TB-235 (2-4) | 4/3/00 | 3 | 22.8 | NT |
| AOC-12 | HA-03 | HA-3 (0-2) | 3/31/00 | 1 | 16.1 | NT |
| AOC-12 | TB-236 | TB-236 (0-2) | 4/3/00 | 1 | 3.6 | NT |
| AOC-12 | TB-237 | TB-237 (0-2) | 4/3/00 | 1 | 7.9 | NT |
| AOC-12 | TB-239 | TB-239 (0-2) | 4/3/00 | 1 | 4.3 | NT |
| AOC-12 | TB-240 | TB-240 (2-4) | 4/3/00 | 3 | 3.0 | NT |

**Table 1**
(page 2 of 3)
**SITE-WIDE SOIL SAMPLE MASS ANALYSIS (TOTAL) ARSENIC CONCENTRATIONS**

| Site Area | Location | Sample ID | Sample Date | Sample Depth (ft) | Arsenic Conc. (mg/kg) | Arsenic Conc. SPLP (mg/L) |
|---|---|---|---|---|---|---|
| AOC-12 | TB-241 | TB-241 (1-3) | 4/3/00 | 2 | 7.3 | NT |
| AOC-12 | TB-242 | TB-242 (1-3) | 4/3/00 | 2 | 5.5 | NT |
| AOC-12/-3 | TB-008A | ES-TB8A (1-3) | 6/4/98 | 2 | 23.1 | ND<0.05 |
| AOC-12/-3 | TB-008B | ES-TB8B (15-17) | 6/4/98 | 16 | 6.6 | ND<0.05 |
| AOC-13 | TB-200 | TB-200 (0-2) | 3/30/00 | 1 | 2.9 | ND<0.05 |
| AOC-13 | TB-201 | TB-201 (0-2) | 3/30/00 | 1 | 1.9 | ND<0.05 |
| AOC-13 | TB-202 | TB-202 (2-4) | 3/30/00 | 3 | 4.2 | ND<0.05 |
| AOC-13 | TB-203 | TB-203 (0-2) | 3/30/00 | 1 | 3.7 | ND<0.05 |
| AOC-13 | TB-204 | TB-204 (2-4) | 3/30/00 | 3 | 3.0 | ND<0.05 |
| AOC-13 | TB-205 | TB-205 (2-4) | 3/30/00 | 3 | 6.1 | ND<0.05 |
| AOC-13 | TB-206 | TB-206 (2-4) | 3/30/00 | 3 | 9.3 | ND<0.05[1] |
| AOC-2 | MW-001 | ES-MW1 (5-7) | 6/2/98 | 6 | 1.4 | ND<0.05 |
| AOC-2 | MW-002 | ES-MW2 (13-17) | 6/2/98 | 15 | 1.5 | ND<0.05 |
| AOC-2 | TB-001 | ES-TB1 (7-8) | 6/2/98 | 7.5 | ND<1.0 | ND<0.05 |
| AOC-7 | TB-207 | TB-207 (0-2) | 3/30/00 | 1 | 3.9 | ND<0.05 |
| AOC-7 | TB-208 | TB-208 (0-2) | 3/30/00 | 1 | 2.8 | ND<0.05 |
| AOC-7 | TB-209 | TB-209 (2-4) | 3/30/00 | 3 | 5.2 | ND<0.05 |
| AOC-7 | TB-210 | TB-210 (0-2) | 3/30/00 | 1 | 2.2 | ND<0.05 |
| AOC-7/-13 | AST-01 | ES AST1 (2) | 6/11/98 | 2 | 1.5 | NT |
| AOC-7/-13 | MW-018 | ES-MW18 (14-16) | 5/28/98 | 15 | 2.8 | ND<0.05 |
| AOC-7/-13 | MW-021 | ES-MW21 (7-9) | 5/28/98 | 8 | 2.1 | ND<0.05 |
| AOC-7/-13 | MW-021 | ES-MW21 (11-13) | 5/28/98 | 12 | 1.2 | ND<0.05 |
| AOC-7/-13 | SED-02 | ES-SED2 (0.5) | 6/12/98 | 0.50 | 5.3 | ND<0.05 |
| AOC-7/-13 | TB-18 | ES-TB18 (12-14) | 5/28/98 | 13 | 4.5 [2] | ND<0.05 |
| AOC-8 | MW-017D | ES-MW17D (26-28) | 6/10/98 | 27 | 8.3 | ND<0.05 |
| AOC-8 | MW-017S | ES-MW17 (4-6) | 5/29/98 | 5 | 2.7 | ND<0.05 |
| AOC-8 | MW-16 | ES-MW16 (6-8) | 5/29/98 | 7 | 4.6 | ND<0.05 |
| AOC-8 | SS-001 | ES-SS1D (0.5) | 6/19/98 | 0.50 | 4.0 | ND<0.05 |
| AOC-8 | SS-001 | ES-SS1S (0) | 6/19/98 | 0 | ND<1.0 | ND<0.05 |
| AOC-8 | TB-021 | ES-TB21 (0-2) | 5/29/98 | 1 | 2.4 | ND<0.05 |
| AOC-8 | TB-024 | ES-TB24 (6-8) | 5/29/98 | 7 | ND<1.0 | ND<0.05 |
| AOC-8 | TB-025 | ES-TB25 (2-4) | 5/29/98 | 3 | 1.9 | ND<0.05 |
| AOC-8 | TB-211 | TB-211 (0-2) | 3/30/00 | 1 | 3.0 | ND<0.05 |
| AOC-8 | TB-212 | TB-212 (2-4) | 3/30/00 | 3 | 6.3 | ND<0.05 |
| AOC-9 | HA-02 | HA-02 | 3/30/00 | 0.95 | 230 | ND<0.05 |
| AOC-9 | SS-101 | SS-01 | 3/30/00 | 0.15 | 150 | ND<0.05 |
| AOC-9 | SS-102 | SS-02 | 3/30/00 | 0.15 | 5.4 | ND<0.05 |

**Table 1**
(page 3 of 3)
**SITE-WIDE SOIL SAMPLE MASS ANALYSIS (TOTAL) ARSENIC CONCENTRATIONS**

| Site Area | Location | Sample ID | Sample Date | Sample Depth (ft) | Arsenic Conc. (mg/kg) | Arsenic Conc. SPLP (mg/L) |
|---|---|---|---|---|---|---|
| AOC-9 | SS-103 | SS-03 | 3/30/00 | 0.15 | 116 | ND<0.05 |
| SW of Plant | TB-213 | TB-213 (2-4) | 3/30/00 | 3 | 2.9 | ND<0.05 |
| SW of Plant | TB-216 | TB-216 (0-2) | 3/30/00 | 1 | 4.4 | ND<0.05 |

Notes:

mg/kg = Milligrams per kilogram.
NT = Not tested.
ND = Not detected.
< = Less than minimum detection limit of the analytical method used.
AOC = Area of Concern.
SPLP = Synthetic Precipitation Leaching Procedure.
(1) = SPLP cadmium was detected at a concentration of 0.052 milligrams per liter (mg/L), which exceeds the GBPMC for cadmium of 0.05 mg/L. However, the GBPMC do not apply to this sample because it was collected from below the water table.
(2) = Mass analysis (total) lead was detected at a concentration of 2,160 mg/kg, which exceeds the IDEC for lead of 1,000 mg/kg.

Table 2
(page 1 of 2)
SOIL SAMPLE MASS ANALYSIS (TOTAL) ARSENIC CONCENTRATIONS IN/AROUND FORMER COAL STORAGE AREA

| Site Area | Location | Sample ID | Sample Date | Sample Depth (ft) | Arsenic Conc. (mg/kg) | Arsenic Conc. SPLP (mg/L) |
|---|---|---|---|---|---|---|
| AOC-1 | MW-003 | ES-MW3 (15-17) | 6/4/98 | 16 | 2.3 | ND<0.05 |
| AOC-1 | TB-006 | ES-TB6 (1-7) | 6/4/98 | 4 | 6.1 | ND<0.05 |
| AOC-1 | TB-007A | ES-TB7A (7-9) | 6/4/98 | 8 | 2.8 | ND<0.05 |
| AOC-1 | TB-217 | TB-217 (0-2) | 3/30/00 | 1 | 6.9 | NT |
| AOC-1 | TB-217 | TB-217 (2-4) | 3/30/00 | 3 | 7.9 | NT |
| AOC-12 | MW-004D | ES-MW4D (36-40) | 6/10/98 | 38 | ND<1.0 | ND<0.05 |
| AOC-12 | MW-004S | ES-MW4S (11-13) | 5/27/98 | 12 | 39.4 | ND<0.05 |
| AOC-12 | MW-005 | ES-MW5 (2-4) | 5/26/98 | 3 | 47.2 | ND<0.05 |
| AOC-12 | MW-006 | ES-MW6 (5-9) | 6/9/98 | 7 | 68.6 | 0.06 |
| AOC-12 | MW-007 | ES-MW7 (7-9) | 6/4/98 | 8 | 14.7 | ND<0.05 |
| AOC-12 | MW-009A | ES-MW9A (0-2) | 5/26/98 | 1 | 18.3 | ND<0.05 |
| AOC-12 | MW-010 | ES-MW10 (9-11) | 6/9/98 | 10 | 3.6 | ND<0.05 |
| AOC-12 | MW-22 | ES-MW22 (7-9) | 6/9/98 | 8 | 23.0 | ND<0.05 [1] |
| AOC-12 | SED-01 | ES-SED1 (1) | 6/12/98 | 10 | 16.3 | ND<0.05 |
| AOC-12 | TB-005 | ES-TB5 (4-6) | 6/4/98 | 5 | 4.9 | ND<0.05 |
| AOC-12 | TB-009 | ES-TB9 (3-7) | 6/4/98 | 5 | 93.0 | ND<0.05 |
| AOC-12 | TB-010 | ES-TB010 (11-13) | 6/4/98 | 12 | 13.8 | ND<0.05 |
| AOC-12 | TB-104 | ES-TB-104 (2-4) | 6/30/98 | 3 | 10.1 | NT |
| AOC-12 | TB-104 | TB-104 (4-6) | 6/30/98 | 5 | 7.2 | NT |
| AOC-12 | TB-106 | TB-106 (3-5) | 6/30/98 | 4 | 3.3 | NT |
| AOC-12 | TB-107 | TB-107 (2-4) | 7/1/98 | 3 | 34.4 | NT |
| AOC-12 | TB-107 | TB-107 (6-8) | 7/1/98 | 7 | 11.8 | NT |
| AOC-12 | TB-230 | TB-230 (2-4) | 4/3/00 | 3 | 5.0 | NT |
| AOC-12 | TB-231 | TB-231 (0-2) | 4/3/00 | 1 | 11.5 | NT |
| AOC-12 | TB-232 | TB-232 (2-4) | 4/3/00 | 3 | 11.5 | NT |
| AOC-12 | TB-233 | TB-233 (2-4) | 4/3/00 | 3 | 32.3 | NT |
| AOC-12 | TB-234 | TB-234 (0-2) | 4/3/00 | 1 | 12.4 | NT |
| AOC-12 | TB-235 | TB-235 (2-4) | 4/3/00 | 3 | 22.8 | NT |
| AOC-12 | HA-03 | HA-3 (0-2) | 3/31/00 | 1 | 16.1 | NT |
| AOC-12 | TB-236 | TB-236 (0-2) | 4/3/00 | 1 | 3.6 | NT |
| AOC-12 | TB-237 | TB-237 (0-2) | 4/3/00 | 1 | 7.9 | NT |
| AOC-12 | TB-239 | TB-239 (0-2) | 4/3/00 | 1 | 4.3 | NT |
| AOC-12 | TB-240 | TB-240 (2-4) | 4/3/00 | 3 | 3.0 | NT |
| AOC-12 | TB-241 | TB-241 (1-3) | 4/3/00 | 2 | 7.3 | NT |
| AOC-12 | TB-242 | TB-242 (1-3) | 4/3/00 | 2 | 5.5 | NT |
| AOC-12/-3 | TB-008A | ES-TB8A (1-3) | 6/4/98 | 2 | 23.1 | ND<0.05 |
| AOC-12/-3 | TB-008B | ES-TB8B (15-17) | 6/4/98 | 16 | 6.6 | ND<0.05 |

**Table 2**
(page 2 of 2)
**SOIL SAMPLE MASS ANALYSIS (TOTAL) ARSENIC CONCENTRATIONS IN/AROUND FORMER COAL STORAGE AREA**

| Site Area | Location | Sample ID | Sample Date | Sample Depth (ft) | Arsenic Conc. (mg/kg) | Arsenic Conc. SPLP (mg/L) |
|---|---|---|---|---|---|---|
| AOC-9 | HA-02 | HA-02 | 3/30/00 | 0.95 | 230 | ND<0.05 |
| AOC-9 | SS-101 | SS-01 | 3/30/98 | 0.15 | 150 | ND<0.05 |
| AOC-9 | SS-102 | SS-02 | 3/30/98 | 0.15 | 5.4 | ND<0.05 |
| AOC-9 | SS-103 | SS-03 | 3/30/98 | 0.15 | 116 | ND<0.05 |

Notes:
mg/kg = Milligrams per kilogram.
NT = Not tested.
ND = Not detected.
< = Less than minimum detection limit of the analytical method used.
AOC = Area of Concern.
SPLP = Synthetic Precipitation Leaching Procedure.
(1) = SPLP cadmium was detected at a concentration of 0.052 milligrams per liter (mg/L), which exceeds the GBPMC for cadmium of 0.05 mg/L. However, the GBPMC do not apply to this sample because it was collected from below the water table.

# Table 1

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR PCB AREA 1: STATION B

### Table 1.1 (page 1 of 2)

**Overhead Crane (page 1 of 2)**

| | |
|---|---|
| **AOC #:** | 1 |
| **Cleanup Area Description:** | Overhead crane: motor and non-porous steel surface |
| **Location Reference:** | Figure 4.1 |
| **Sample Matrix:** | Motor oil / hexane wipe of steel surface |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Micrograms per 100 square centimeters (µg/100 sq. cm) |
| **Laboratory Results in:** | Appendix C |

| Characterization Samples | | | Verification Samples | | | Cleanup Criterion |
|---|---|---|---|---|---|---|
| Sample ID | Sampling Date (Analysis Date) | Sample Result | Sample ID | Sampling Date (Analysis Date) | Sample Result | |
| MOTOR OIL | | | MOTOR OIL | | | MOTOR OIL |
| NEM [1] | 7/18/01 (7/25/01) | 6.6 [1] | RS-CS 1 [1] | 3/21/02 (3/28/02) | ND<2.0 [1] | 2.0 |
| SEM [1] | 7/18/01 (7/25/01) | 6.6 [1] | | | | 2.0 |
| 11-16-MISC-113 [1,2] | 11/18/99 (11/29/99) | 4.0 [1] | | | | 2.0 |
| HEXANE WIPE OF STEEL SURFACE | | | HEXANE WIPE OF STEEL SURFACE | | | HEXANE WIPE |
| CR-CS 1 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 2 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 3 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 4 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 5 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 6 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 7 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 8 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 9 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 10 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 11 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 12 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 13 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 14 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 15 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 16 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 17 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 18 | 3/21/02 (4/4/02) | ND<5.0 | CR-CS 18B | 4/19/02 (4/23/02) | ND<5.0 | 10.0 |
| CR-CS 19 | 3/21/02 (3/26/02) | ***25*** | CR-CS 19B | 4/19/02 (4/23/02) | ND<5.0 | 10.0 |
| CR-CS 20 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 21 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 22 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 23 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 24 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 25 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 26 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 27 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 28 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 29 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 30 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 31 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |

## Table 1.1 (page 2 of 2)

### Overhead Crane (page 2 of 2)

| | |
|---|---|
| **AOC #:** | 1 |
| **Cleanup Area Description:** | Overhead crane: motor and non-porous steel surface |
| **Location Reference:** | Figure 4.1 |
| **Sample Matrix:** | Motor oil / hexane wipe of steel surface |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Micrograms per 100 square centimeters (µg/100 sq. cm) |
| **Laboratory Results in:** | Appendix C |

| Characterization Samples | | | Verification Samples | | | |
|---|---|---|---|---|---|---|
| Sample ID | Sampling Date (Analysis Date) | Sample Result | Sample ID | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
| HEXANE WIPE OF STEEL SURFACE | | | HEXANE WIPE OF STEEL SURFACE | | | HEXANE WIPE |
| CR-CS 32 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 33 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 34 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 35 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 36 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 37 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 38 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 39 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 40 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 41 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 42 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 43 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 44 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| CR-CS 45 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 46 | 3/21/02 (4/4/02) | ND<5.0 | | | | 10.0 |
| CR-CS 47 | 3/21/02 (3/26/02) | ND<5.0 | | | | 10.0 |
| Field Blank 1 | 3/21/02 (3/26/02) | ND<5.0 | | | | NA |
| Field Blank 2 | 3/21/02 (4/12/02) | ND<5.0 | | | | NA |
| Field Blank 3 | 3/21/02 (4/12/02) | ND<5.0 | | | | NA |

Notes for Table 1.1:
(1) = Sample of oil from a motor on the crane. Result reported as milligrams per kilogram (mg/kg), wet weight.
(2) = Result reported by GEI Consultants, Inc., who did not indicate that the result is reported as wet weight.
NA = Not applicable.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Interior Areas—porous surfaces (page 1 of 2)

| | |
|---|---|
| **AOC #:** | 1 |
| **Cleanup Area Description:** | Interior areas: porous concrete and wood |
| **Location Reference:** | Figure 4.1 (Not all GEI sample locations are shown.) |
| **Sample Matrix:** | Concrete / wood |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix C |

| Characterization Samples | | | Verification Samples [1] | | | |
|---|---|---|---|---|---|---|
| Sample ID | Sampling Date (Analysis Date) | Sample Result | Sample ID | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
| ANNEX III CONCRETE FLOOR | | | ANNEX III CONCRETE FLOOR | | | CONCRETE |
| A-1 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| A-2 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| A-3 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| A-4 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| B-1 | 7/18/01 (7/20/01) | ***17.4*** | J-1 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| B-2 | 7/18/01 (7/20/01) | ***45*** | J-2 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| B-3 | 7/18/01 (7/20/01) | ***2.4*** | J-3 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| B-4 | 7/18/01 (7/20/01) | ND<0.50 | J-4 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| C-1 | 7/18/01 (7/20/01) | ***1.3*** | I-1 | 5/9/02 (5/13/02) | 0.50 | 1.0 |
| C-2 | 7/18/01 (7/20/01) | ***1.5*** | I-2 | 5/9/02 (5/13/02) | ***1.6*** | 1.0 |
| C-3 | 7/18/01 (7/20/01) | 0.98 | I-3 | 5/9/02 (5/13/02) | ***1.1*** | 1.0 |
| | | | I-3a [2] | 5/9/02 (5/13/02) | 0.65 | 1.0 |
| C-4 | 7/18/01 (7/20/01) | ND<0.50 | I-4 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| D-1 | 7/18/01 (7/20/01) | 0.94 | H-1 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| D-2 | 7/18/01 (7/20/01) | 0.77 | H-2 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| D-3 | 7/18/01 (7/20/01) | ND<0.50 | H-3 | 5/9/02 (5/13/02) | ND<0.50 | 1.0 |
| D-4 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| E-1 | 7/18/01 (7/20/01) | 0.69 | | | | 1.0 |
| E-2 | 7/18/01 (7/20/01) | 0.98 | | | | 1.0 |
| E-3 | 7/18/01 (7/20/01) | 0.51 | | | | 1.0 |
| E-4 | 7/18/01 (7/20/01) | ND<1.0 | | | | 1.0 |
| SE-1 | 7/18/01 (7/20/01) | 0.80 | | | | 1.0 |
| F-2 | 7/18/01 (7/20/01) | ND<0.50 | | | | 1.0 |
| F-3 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| F-4 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| SF-1 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| SF-3 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| G-2 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| G-3 | 7/18/01 (7/20/01) | ND<1.0 [3] | | | | 1.0 |
| | | | Field blank | 5/9/02 (5/13/02) | ND<0.50 [4] | NA |
| CS-5 [5] | 6/11/98 (6/23/98) | ***15*** | | | | 1.0 |
| 11-16-MISC-114 [5] | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-115 [5] | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-116 [5] | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |

## Interior Areas—porous surfaces (page 2 of 2)

| | |
|---|---|
| **AOC #:** | 1 |
| **Cleanup Area Description:** | Interior areas: porous concrete and wood |
| **Location Reference:** | Figure 4.1 (Not all GEI sample locations are shown.) |
| **Sample Matrix:** | Concrete core / wood chips |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix C |

| Characterization Samples | | | Verification Samples | | | Cleanup Criterion |
|---|---|---|---|---|---|---|
| Sample ID | Sampling Date (Analysis Date) | Sample Result | Sample ID | Sampling Date (Analysis Date) | Sample Result | |
| FIRST FLOOR OIL-STAINED CONCRETE FLOOR | | | FIRST FLOOR OIL-STAINED CONCRETE FLOOR | | | CONCRETE |
| 11-16-MISC-121 (5) | 11/19/99 (12/1/99) | ND<1.0 | | | | 1.0 |
| FIRST FLOOR OIL-STAINED WOOD CHIPS | | | FIRST FLOOR OIL-STAINED WOOD CHIPS | | | WOOD |
| 11-16-MISC-123 (5) | 11/19/99 (12/1/99) | ND<1.0 | | | | 1.0 |
| BASEMENT FLOOR CONCRETE PADS | | | BASEMENT FLOOR CONCRETE PADS | | | CONCRETE |
| 11-16-MISC-117 (5) | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-118 (5) | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-119 (5) | 11/18/99 (11/29/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-120 (5) | 11/18/99 (11/29/99) | 1.0 | | | | 1.0 |
| 11-16-MISC-122 (5) | 11/19/99 (12/1/99) | ND<1.0 | | | | 1.0 |
| SECOND FLOOR WOOD CHIPS | | | SECOND FLOOR WOOD CHIPS | | | WOOD |
| 11-16-MISC-124 (5) | 11/19/99 (12/1/99) | ND<1.0 | | | | 1.0 |
| 11-16-MISC-125 (5) | 11/19/99 (12/1/99) | ND<1.0 | | | | 1.0 |

Notes for Table 1.2:
(1) = Sample locations selected using a 1.5-meter grid.
(2) = Duplicate sample.
(3) = Minimum detection limit (MDL) affected by matrix interference.
(4) = Units are micrograms per liter (µg/L).
(5) = Result reported by GEI Consultants, Inc., who did not indicate that the results are reported as dry weight.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Former Earthen Floor in Basement (page 1 of 1)

| | |
|---|---|
| **AOC #:** | 1 |
| **Cleanup Area Description:** | Former earthen floor in basement: surface soil |
| **Location Reference:** | Figure 4.2 |
| **Sample Matrix:** | Soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix C |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| SURFACE SOIL | | | | SOIL |
| SS-N | 0.0–1.0 | 5/2/01 (5/18/01) | ND<0.50 | 1.0 |
| SS-O | 0.0–0.5 | 5/2/01 (5/4/01) | ND<0.50 | 1.0 |
| SS-P | 0.0–0.5 | 5/2/01 (5/4/01) | ND<0.50 | 1.0 |
| SS-Q | 0.0–0.5 | 5/2/01 (5/4/01) | ND<0.50 | 1.0 |
| SS-R | 0.0–0.5 | 5/2/01 (5/18/01) | ND<0.50 | 1.0 |
| SS-S | 0.0–0.5 | 5/2/01 (5/4/01) | ND<0.50 | 1.0 |
| SS-T | 0.0–0.5 | 5/2/01 (5/18/01) | ND<0.50 | 1.0 |

# Table 2

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR PCB AREA 2: FORMER COAL YARD AREA

### Table 2.1 (page 1 of 1)

**Former Coal Yard—hand auger (page 1 of 1)**

| | |
|---|---|
| **AOC #:** | 12 |
| **Cleanup Area Description:** | Former coal yard: surface soil and catch basin sediment |
| **Location Reference:** | Figure 5 |
| **Sample Matrix:** | Soil / catch basin sediment |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix D (also Appendices E and H) |

| Characterization Samples | | | | Cleanup Criterion |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | |
| **SURFACE SOIL** | | | | **SOIL** |
| SS-D1 | 0.0–1.0 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| SS-D2 | 0.0–0.5 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| SS-X | 0.0–0.6 | 5/14/01 (5/22/01) | ND<0.50 | 10.0 |
| SS-Y | 0.0–0.6 | 5/14/01 (5/22/01) | ND<0.50 | 10.0 |
| SS-Z | 0.0–0.6 | 5/14/01 (5/22/01) | ND<0.50 | 10.0 |
| SS-CC | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-CC | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-DD | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-DD | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-EE | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-EE | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-FF (1) | 0.0–0.3 | 4/3/02 (4/6/02) | 0.80 | 10.0 |
| SS-GG | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-GG | 1.0–1.5 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-HH | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-II | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-JJ | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-KK (1) | 0.0–0.3 | 4/3/02 (4/6/02) | 0.83 | 10.0 |
| SS-LL | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-MM | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-NN | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| SS-OO | 0.0–0.3 | 4/3/02 (4/11/02) | ND<0.50 | 10.0 |
| **CATCH BASIN SEDIMENT** | | | | **SEDIMENT** |
| CB-1 | NA | 5/10/01 (5/15/01) | ND<0.50 | 10.0 |
| CB-2 | NA | 5/10/01 (5/15/01) | 3.8 | 10.0 |
| CB-3 | NA | 5/10/01 (5/15/01) | ND<0.50 | 10.0 |

Notes for Table 2.1:
(1) = Sample also tested for leachable PCBs using the Synthetic Precipitation Leachate Procedure (SPLP). SPLP PCBs were not detected.
***Bold*** Indicates that detected concentration exceeds associated cleanup criterion.

## Former Coal Yard—test boring (page 1 of 3)

| | |
|---|---|
| **AOC #:** | 12 |
| **Cleanup Area Description:** | Former coal yard: test boring asphalt and soil |
| **Location Reference:** | Figure 5 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix D (also Appendices E and H) |

| Characterization Samples | | | | |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | **Cleanup Criterion** |
| **ASPHALT [1]** | | | | **ASPHALT** |
| TB-CCCC | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-DDDD | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-EEEE | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-JJJJ | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-KKKK | 0.0–0.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-MMMM | 0.0–0.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-NNNN | 0.0–0.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-OOOO | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-PPPP | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-RRRR | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-SSSS | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-UUUU | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-WWWW | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-YYYY | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-DDDDD | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| **SOIL** | | | | **SOIL** |
| TB-D/MW-C | 2–4 | 5/11/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-F | 0–2 | 5/11/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-R/MW-F | 5–7 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-I | 2–4 | 5/14/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-C/MW-BS | 2–4 | 5/10/01 (5/15/01) | ND<0.50 | 10.0 |
| TB-ZZZ | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-ZZZ | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-ZZZ | 2.3–4.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-ZZZ | 4.3–6.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-ZZZ | 10–12 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-ZZZ | 15–16 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-CCCC | 2.5–2.8 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-CCCC | 2.8–3.8 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-CCCC | 4.5–6.0 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-CCCC | 10–12 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-DDDD | 1.3–1.6 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-DDDD | 1.6–2.6 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-DDDD | 3.3–4.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-DDDD | 15–17 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-EEEE | 1.5–1.8 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-EEEE | 1.8–2.8 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-EEEE | 3.8–5.8 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-EEEE | 10–12 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-GGGG | 0.0–0.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-GGGG | 1–2 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-GGGG | 2.3–4.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |

## Former Coal Yard—test boring (page 2 of 3)

| | |
|---|---|
| **AOC #:** | 12 |
| **Cleanup Area Description:** | Former coal yard: test boring asphalt and soil |
| **Location Reference:** | Figure 5 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix D (also Appendices E and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| SOIL | | | | SOIL |
| TB-HHHH | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-HHHH | 1.3–2.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-HHHH | 2.3–4.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-HHHH | 5–6 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-JJJJ | 1.5–1.8 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-JJJJ | 1.8–2.8 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-JJJJ | 3.5–5.0 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-JJJJ | 5.0–5.5 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-KKKK | 1.0–1.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-KKKK | 1.3–2.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-KKKK | 5–6 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-KKKK [2] | 5–6 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-LLLL | 0.0–0.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-LLLL | 0.3–0.6 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-LLLL | 0.6–1.6 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-LLLL | 3.3–4.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-LLLL | 4.3–6.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-MMMM | 0.5–0.8 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-MMMM | 0.8–1.8 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-MMMM | 4.5–6.5 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-NNNN | 1.0–1.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-NNNN | 1.3–2.3 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-NNNN | 4–5 | 4/4/02 (4/9/02) | ND<0.50 | 10.0 |
| TB-OOOO | 2.0–2.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-OOOO | 4–5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-PPPP | 0.3–0.6 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-PPPP | 0.9–1.0 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-PPPP | 2.3–4.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-QQQQ | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-QQQQ | 0.3–2.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-QQQQ | 2.3–4.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-RRRR | 1.0–1.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-RRRR | 3.3–3.9 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-RRRR | 3.9–4.0 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-SSSS | 2.2–2.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-SSSS | 2.5–4.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-TTTT | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-TTTT | 1.0–1.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-TTTT | 2.3–4.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-UUUU | 1.2–1.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-UUUU | 5–7 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |

## Former Coal Yard—test boring (page 3 of 3)

| | |
|---|---|
| **AOC #:** | 12 |
| **Cleanup Area Description:** | Former coal yard: test boring asphalt and soil |
| **Location Reference:** | Figure 5 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix D (also Appendices E and H) |

| Characterization Samples | | | | Cleanup Criterion |
|---|---|---|---|---|
| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | |
| SOIL | | | | SOIL |
| TB-VVVV | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-VVVV | 0.5–2.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-VVVV | 2.5–4.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-WWWW | 2.2–2.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-WWWW | 2.5–4.5 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-XXXX | 0.0–0.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-XXXX | 2.3–4.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-XXXX | 4.3–6.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-YYYY | 2.0–2.3 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-YYYY | 2.5–3.0 | 4/5/02 (4/11/02) | ND<0.50 | 10.0 |
| TB-YYYY | 3–5 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-YYYY | 5–7 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-ZZZZ | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-ZZZZ | 0.3–2.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-ZZZZ | 2.3–4.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-DDDDD | 0.5–0.8 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-EEEEE | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-EEEEE | 0.3–2.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-EEEEE | 2.3–4.3 | 4/5/02 (4/10/02) | ND<0.50 | 10.0 |
| TB-5 (3) | 4–6 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| TB-8A (3) | 1–3 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| TB-8B (3) | 15–17 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| TB-8B (3) | 9–11 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| TB-9 (3) | 3–7 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| TB-10 (3) | 11–13 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| MW-7 (3) | 7–9 | 6/4/98 (6/12/98) | ND<1.0 | 10.0 |
| MW-22 (3) | 7–9 | 6/9/98 (6/19/98) | ND<1.0 | 10.0 |
| MW-6 (3) | 5–9 | 6/9/98 (6/19/98) | ND<1.0 | 10.0 |

Notes for Table 2.2:
(1) = Sample may include some base material (e.g., cobbles or gravel).
(2) = Duplicate sample.
(3) = Result reported by GEI Consultants, Inc.

## Table 3

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR PCB AREA 3: ELECTRICAL INFRASTRUCTURE AND EXCAVATION AREA

### Table 3.1 (page 1 of 1)

### Former Transformer Area (page 1 of 1)

| | |
|---|---|
| **AOC #:** | 9 |
| **Cleanup Area Description:** | Former transformer area: non-porous steel grate, porous concrete pad, and sump |
| **Location Reference:** | Figures 6.1 and 6.5 |
| **Sample Matrix:** | Hexane wipe of steel surface / concrete / sediment |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix E (also Appendices D, F, and H) |

| Characterization Samples | | | |
|---|---|---|---|
| **Sample ID** | **Sampling Date (Analysis Date)** | **Sample Result** | **Cleanup Criterion** |
| **HEXANE WIPE OF STEEL SURFACE** | | | **HEXANE WIPE** |
| TXFP-1 1 | 02/05/02 (2/11/02) | ND<5.0 (1) | 10.0 |
| TXFP-1 2 | 02/05/02 (2/11/02) | ND<5.0 (1) | 10.0 |
| TXFP-1 3 | 02/05/02 (2/11/02) | ND<5.0 (1) | 10.0 |
| TXFP-1 4 | 02/05/02 (2/11/02) | ND<5.0 (1) | 10.0 |
| **CONCRETE PAD** | | | **CONCRETE** |
| TXFP-1 A-1 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 A-2 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 A-3 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 A-4 | 02/05/02 (2/7/02) | ***1.5*** | 1.0 |
| TXFP-1 A-5 | 02/05/02 (2/7/02) | ***1.2*** | 1.0 |
| TXFP-1 B-1 | 02/05/02 (2/7/02) | 0.83 | 1.0 |
| TXFP-1 B-2 | 02/05/02 (2/7/02) | 0.69 | 1.0 |
| TXFP-1 B-3 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 B-4 | 02/05/02 (2/7/02) | 0.61 | 1.0 |
| TXFP-1 B-5 | 02/05/02 (2/7/02) | 0.58 | 1.0 |
| TXFP-1 C-1 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 C-2 | 02/05/02 (2/7/02) | 0.85 | 1.0 |
| TXFP-1 C-3 | 02/05/02 (2/7/02) | ***1.4*** | 1.0 |
| TXFP-1 C-4 | 02/05/02 (2/7/02) | ***2.2*** | 1.0 |
| TXFP-1 C-5 | 02/05/02 (2/7/02) | ***1.1*** | 1.0 |
| TXFP-1 D-1 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 D-2 | 02/05/02 (2/7/02) | ***4.0*** | 1.0 |
| TXFP-1 D-3 | 02/05/02 (2/7/02) | ***2.2*** | 1.0 |
| TXFP-1 D-4 | 02/05/02 (2/7/02) | ***2.1*** | 1.0 |
| TXFP-1 E-1 | 02/05/02 (2/7/02) | ***1.1*** | 1.0 |
| TXFP-1 E-2 | 02/05/02 (2/7/02) | ***1.1*** | 1.0 |
| TXFP-1 E-3 | 02/05/02 (2/7/02) | ***1.9*** | 1.0 |
| TXFP-1 E-4 | 02/05/02 (2/7/02) | ***1.8*** | 1.0 |
| TXFP-1 E-5 | 02/05/02 (2/7/02) | 0.92 | 1.0 |
| TXFP-1 F-1 | 02/05/02 (2/7/02) | ***1.1*** | 1.0 |
| TXFP-1 F-2 | 02/05/02 (2/7/02) | 0.71 | 1.0 |
| TXFP-1 F-3 | 02/05/02 (2/7/02) | 0.69 | 1.0 |
| TXFP-1 F-4 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| TXFP-1 F-5 | 02/05/02 (2/7/02) | ND<0.50 | 1.0 |
| **SEDIMENT SUMP** | | | **SEDIMENT** |
| PCB-6(2) | 6/11/98 (6/23/98) | 4 | 10.0 |

Notes for Table 3.1:

(1) = Result reported as micrograms per 100 square centimeters (µg/100 sq. cm), dry weight.

(2) = Result reported by GEI Consultants, Inc.

***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Capacitor Release Area—porous surfaces (page 1 of 2)

| | |
|---|---|
| **AOC #:** | 6 |
| **Cleanup Area Description:** | Capacitor release area: porous asphalt berm and concrete pads |
| **Location Reference:** | Figures 6.1, 6.2 and 6.3 |
| **Sample Matrix:** | Asphalt / concrete |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix E (also Appendices D, F, and H) |

**Characterization Samples**

| Sample ID | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|
| **Capacitor Bank No. 1:** | | | **Bank 1:** |
| **ASPHALT BERM** | | | **ASPHALT** |
| A-1 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| A-2 Cap 1 | 1/30/02 (2/4/02) | 0.73 | 1.0 |
| A-3 Cap 1 | 1/30/02 (2/4/02) | 0.54 | 1.0 |
| A-4 Cap 1 | 1/30/02 (2/4/02) | ***1.7*** | 1.0 |
| A-5 Cap 1 | 1/30/02 (2/4/02) | ***17*** | 1.0 |
| A-6 Cap 1 | 1/30/02 (2/4/02) | ***55*** | 1.0 |
| A-7 Cap 1 | 1/30/02 (2/4/02) | ***4.1*** | 1.0 |
| D-1 Cap 1 | 1/30/02 (2/4/02) | ***1.8*** | 1.0 |
| D-2 Cap 1 | 1/30/02 (2/4/02) | 0.52 | 1.0 |
| D-3 Cap 1 | 1/30/02 (2/4/02) | ***4.3*** | 1.0 |
| D-4 Cap 1 | 1/30/02 (2/4/02) | ***4.9*** | 1.0 |
| D-5 Cap 1 | 1/30/02 (2/4/02) | ***8.2*** | 1.0 |
| D-6 Cap 1 | 1/30/02 (2/4/02) | ***7.7*** | 1.0 |
| D-7 Cap 1 | 1/30/02 (2/4/02) | ***10*** | 1.0 |
| D-8 Cap 1 | 1/30/02 (2/4/02) | ***4.1*** | 1.0 |
| **CONCRETE PAD** | | | **CONCRETE** |
| B-1 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| B-2 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| B-3 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| B-4 Cap 1 | 1/30/02 (2/4/02) | ***1.2*** | 1.0 |
| B-5 Cap 1 | 1/30/02 (2/4/02) | 0.92 | 1.0 |
| B-6 Cap 1 | 1/30/02 (2/4/02) | ***240*** | 1.0 |
| B-7 Cap 1 | 1/30/02 (2/4/02) | ***40*** | 1.0 |
| B-8 Cap 1 | 1/30/02 (2/4/02) | ***3.5*** | 1.0 |
| C-1 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| C-2 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| C-3 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| C-4 Cap 1 | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| C-5 Cap 1 | 1/30/02 (2/4/02) | ***12.2*** | 1.0 |
| C-6 Cap 1 | 1/30/02 (2/4/02) | ***94*** | 1.0 |
| C-7 Cap 1 | 1/30/02 (2/4/02) | ***25*** | 1.0 |
| C-8 Cap 1 | 1/30/02 (2/4/02) | ***1.8*** | 1.0 |
| CS-1 [1] | 6/11/98 (6/23/98) | ***3*** | 1.0 |
| CS-2 [1] | 6/11/98 (6/23/98) | ***10*** | 1.0 |

## Capacitor Release Area—porous surfaces (page 2 of 2)

| | |
|---|---|
| **AOC #:** | 6 |
| **Cleanup Area Description:** | Capacitor release area: porous asphalt berm and concrete pads |
| **Location Reference:** | Figures 6.1, 6.2 and 6.3 |
| **Sample Matrix:** | Asphalt / concrete |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix E (also Appendices D, F, and H) |

**Characterization Samples**

| Sample ID | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|
| Capacitor Bank No. 2: | | | Bank 2: |
| CONCRETE PAD | | | CONCRETE |
| Cap 2-A | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 2-B | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 2-C | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 2-D | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| CS-3 (1) | 6/11/98 (6/23/98) | ND<0.50 | 1.0 |
| Capacitor Bank No. 3: | | | Bank 3: |
| CONCRETE PAD | | | CONCRETE |
| Cap 3-A | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 3-B | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 3-C | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| Cap 3-D | 1/30/02 (2/4/02) | ND<0.50 | 1.0 |
| CS-4 (1) | 6/11/98 (6/23/98) | ND<0.50 | 1.0 |

Notes for Table 3.2:
(1) = Result reported by GEI Consultants, Inc.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Capacitor Release Area—Capacitor Bank No.1 (page 1 of 1)

| | |
|---|---|
| **AOC #:** | 5 |
| **Cleanup Area Description:** | Capacitor release area, Capacitor Bank No. 1: surface soil |
| **Location Reference:** | Figures 6.1, 6.4a and 6.4b |
| **Sample Matrix:** | Soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix E (also Appendices D, F, and H) |

**Pre- and Post-Excavation Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result |
|---|---|---|---|
| AOC-6 CS1 | 0.3–0.6 | 1/30/02 (2/4/02) | 10 |
| SS-E | 0.5–1.0 | 5/2/01 (5/4/01) | ND<0.50 |
| SS-02 (2) | 0.0–0.3 | 3/30/00 (4/4/00) | ***23*** |
| AOC-6 CS2 | 2.0–2.5 | 1/30/02 (2/4/02) | 1.3 |
| AOC-6 CS3 | 0.3–0.6 | 1/30/02 (2/4/02) | 5.5 |
| HA-2 (2) | 0.7–1.0 | 3/30/00 (4/4/00) | ND<1.0 |
| PCB-17 (2) | 0.5 | 6/11/98 (6/23/98) | 2 |
| AOC-6 CS4 | 0.0–0.3 | 1/30/02 (2/4/02) | ND<0.50 |
| SS-G | 0.5–1.0 | 5/2/01 (5/4/01) | ND<0.50 |
| SS-03 (2) | 0.0–0.3 | 3/30/00 (4/4/00) | ND<1.0 |
| SS-F | 0.3–1.0 | 5/2/01 (5/4/01) | ND<0.50 |
| SS-01 (2) | 0.0–0.3 | 3/30/00 (4/4/00) | ND<1.0 |
| AOC-6 CS5 | 0–2 | 1/30/02 (2/4/02) | ND<0.50 |
| SS-H | 0.2–0.8 | 5/2/01 (5/4/01) | 0.63 |
| AOC-6 CS6 | 0–2 | 1/30/02 (2/4/02) | ND<0.50 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Verification Samples (1)**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| AOC-6 CS14 | 1.3–1.6 | 5/8/02 (5/10/02) | 4.4 | 10.0 |
| | | | | 10.0 |
| | | | | 10.0 |
| AOC-6 CS13a | 1.3–1.6 | 5/8/02 (5/10/02) | ND<0.50 | 10.0 |
| AOC-6 CS13 | 1.3–1.6 | 5/8/02 (5/10/02) | 4.8 | 10.0 |
| | | | | 10.0 |
| | | | | 10.0 |
| AOC-6 CS8 | 0.0–0.3 | 5/8/02 (5/10/02) | 2.0 | 10.0 |
| | | | | 10.0 |
| | | | | 10.0 |
| AOC-6 CS16 | 2.3–2.6 | 5/8/02 (5/10/02) | 1.1 | 10.0 |
| | | | | 10.0 |
| AOC-6 CS10 | 0.0–0.3 | 5/8/02 (5/10/02) | ND<0.50 | 10.0 |
| | | | | 10.0 |
| | | | | 10.0 |
| AOC-6 CS7 | 0.0–0.3 | 5/8/02 (5/10/02) | ND<0.50 | 10.0 |
| AOC-6 CS9 | 0.0–0.3 | 5/8/02 (5/10/02) | ND<0.50 | 10.0 |
| AOC-6 CS11 | 1.0–1.3 | 5/8/02 (5/10/02) | 0.68 | 10.0 |
| AOC-6 CS12 | 1.3–1.6 | 5/8/02 (5/10/02) | 1.4 | 10.0 |
| AOC-6 CS15 | 2.0–2.3 | 5/8/02 (5/10/02) | 1.6 | 10.0 |
| AOC-6 CS17 | 2.3–2.6 | 5/8/02 (5/10/02) | 2.2 | 10.0 |

Notes for Table 3.3:
(1) = Sample locations selected using a 10-meter grid.
(2) = Result reported by GEI Consultants, Inc.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Capacitor Release and PCB Remediation Areas—hand auger (page 1 of 1)

| | |
|---|---|
| **AOC #:** | 5 and 6 |
| **Cleanup Area Description:** | Capacitor release and PCB remediation areas: surface soil and sump sediment |
| **Location Reference:** | Figure 6.1 |
| **Sample Matrix:** | Soil / sump sediment |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix E (also Appendices D, F, and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| SURFACE SOIL | | | | SOIL |
| SS-AA | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-AA (1) | 0.3–1.3 | 4/3/02 (4/8/02) | 0.83 | 10.0 |
| SS-BB | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-BB | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-PP | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-PP | 1.0–1.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| SS-I | 0.2–0.8 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| SS-J | 0.2–0.8 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| SS-K | 0.2–0.8 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| PCB-11 (2) | 1 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-12 (2) | 1 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-13 (2) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-14 (2) | 1 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-15 (2) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-16 (2) | 1 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-18 (2) | 1 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-18A (2) | 2 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-19 (2) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-19A (2) | 2.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| SUMP SEDIMENT | | | | SUMP |
| PCB-5 (2) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |

Notes for Table 3.4:
(1) = Sample also tested for leachable PCBs using the Synthetic Precipitation Leachate Procedure (SPLP). SPLP PCBs were not detected.
(2) = Result reported by GEI Consultants, Inc.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

Table 3.5 (page 1 of 2)

## Capacitor Release and PCB Remediation Areas—test boring (page 1 of 2)

| | |
|---|---|
| **AOC #:** | 5 and 6 |
| **Cleanup Area Description:** | Capacitor release and PCB remediation areas: test boring soil |
| **Location Reference:** | Figure 6.1 |
| **Sample Matrix:** | Soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix E (also Appendices D, F, and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| TB-S | 0–1 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-S | 2.0–3.3 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-S | 5–7 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-S | 10–12 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-T | 0–2 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-T | 2–4 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-T | 5–7 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-T | 10–12 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-BBB [1] | 1–3 | 2/13/02 (2/15/02) | ***15*** | 10.0 |
| TB-BBB [2] | 5–7 | 2/13/02 (2/15/02) | ***15*** | 10.0 |
| TB-BBB | 10–13 | 2/13/02 (2/15/02) | ND<0.50 | 10.0 |
| TB-XXX/MW-L [3] | 0.0–0.3 | 4/2/02 (4/5/02) | 1.5 | 10.0 |
| TB-XXX/MW-L [3] | 0.3–1.3 | 4/2/02 (4/5/02) | 1.2 | 10.0 |
| TB-XXX/MW-L | 2.3–4.3 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-XXX/MW-L | 4.3–6.3 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-XXX/MW-L | 10–12 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-XXX/MW-L | 15–16 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-XXX/MW-L | 16–17 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-YYY | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-YYY [3] | 0.3–1.3 | 4/3/02 (4/8/02) | 9.4 | 10.0 |
| TB-YYY [4] | 2.3–3.3 | 4/3/02 (4/8/02) | 3.1 | 10.0 |
| TB-YYY | 3.3–4.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-YYY | 5.3–6.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-YYY | 11–12 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-YYY | 15–17 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-AAAA | 0.0–0.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-AAAA | 0.3–1.3 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-AAAA | 2.5–3.0 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-AAAA | 4–6 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-AAAA | 15–17 | 4/3/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-BBBB | 0.0–0.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-BBBB | 0.3–1.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-BBBB | 2.3–4.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-BBBB | 4.3–6.3 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-BBBB | 10–12 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-BBBB | 15–17 | 4/3/02 (4/6/02) | ND<0.50 | 10.0 |
| TB-IIII | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |
| TB-IIII [4] | 0.3–1.3 | 4/4/02 (4/8/02) | 1.9 | 10.0 |
| TB-IIII | 4.3–6.3 | 4/4/02 (4/8/02) | ND<0.50 | 10.0 |

## Table 3.5 (page 2 of 2)
## Capacitor Release and PCB Remediation Areas—test boring (page 2 of 2)

| | |
|---|---|
| **AOC #:** | 5 and 6 |
| **Cleanup Area Description:** | Capacitor release and PCB remediation areas: test boring soil |
| **Location Reference:** | Figure 6.1 |
| **Sample Matrix:** | Soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix E (also Appendices D, F, and H) |

Notes for Table 3.5:
(1) = Not enough residual sample to test for leachable PCBs.
(2) = Samples collected at 3–5 feet and 5–7 feet below grade were also tested for leachable PCBs using the Synthetic Precipitation Leachate Procedure (SPLP). Leachable PCBs were detected at concentrations of 0.74 and 0.72 micrograms per liter (µg/L), respectively.
(3) = Not enough residual sample to analyze for leachable PCBs. Additional sample was collected for leachable (SPLP) PCB testing on May 8, 2002. SPLP PCBs were not detected.
(4) = Sample also tested for leachable PCBs using SPLP. SPLP PCBs were not detected.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Table 4

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR PCB AREA 4: SOUTHWEST CORNER

### Table 4.1 (page 1 of 1)

**Transformer and Capacitor Areas—concrete core and hand auger (page 1 of 1)**

| | |
|---|---|
| **AOC #:** | 9 |
| **Cleanup Area Description:** | Transformer and capacitor areas: porous concrete pad and surface soil |
| **Location Reference:** | Figure 7 |
| **Sample Matrix:** | Concrete / soil |
| **Analysis:** | US EPA 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix F (also Appendix H) |

| Characterization Samples | | | | |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | **Cleanup Criterion** |
| **Former West Transformers:** | | | | **West Trans.:** |
| **CONCRETE PAD** | | | | **CONCRETE** |
| TXFP-2 1 | 0 | 02/06/02 (2/11/02) | ***8.1*** | 1.0 |
| TXFP-2 2 | 0 | 02/06/02 (2/11/02) | ND<0.50 | 1.0 |
| **SURFACE SOIL** | | | | **SOIL** |
| PCB-3 (1) | 0.0–0.3 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-4 (1) | 0.0–0.3 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-7 (1) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-8 (1) | 0.8 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-9 (1) | 0.8 | 6/11/98 (6/23/98) | 1 | 10.0 |
| PCB-10 (1) | 0.5 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| PCB-33 (1) | 0.0–0.3 | 7/7/98 (7/10/98) | ND<1.0 | 10.0 |
| PCB-34 (1) | 0.0–0.3 | 7/7/98 (7/10/98) | ND<1.0 | 10.0 |
| PCB-35 (1) | 0.0–0.3 | 7/7/98 (7/10/98) | ND<1.0 | 10.0 |
| **Southwest Transformer:** | | | | **SW Trans.:** |
| **SURFACE SOIL** | | | | **SOIL** |
| HA-1 (1) | 1 | 3/30/00 (4/4/00) | ***29*** | 10.0 |
| PCB-1 (1) | 1 | 6/11/98 (6/23/98) | ***440*** | 10.0 |
| PCB-31 (1) | 0.0–0.3 | 7/7/98 (7/10/98) | ***94*** | 10.0 |
| PCB-32 (1) | 0.0–0.3 | 7/7/98 (7/10/98) | ***53*** | 10.0 |
| **Former Capacitor Bank No. 4:** | | | | **Cap. Bank 4:** |
| **CONCRETE PAD** | | | | **CONCRETE** |
| CS-6 (1) | 0 | 6/19/98 (NA) | ND<1.0 | 1.0 |
| **SURFACE SOIL** | | | | **SOIL** |
| PCB-2 (1) | 1.5 | 6/11/98 (6/23/98) | ***2,300*** | 10.0 |
| PCB-20 (1) | 0.7 | 6/18/98 (NA) | ND<1.0 | 10.0 |
| PCB-21 (1) | 0.5 | 6/18/98 (NA) | ND<1.0 | 10.0 |

Notes for Table 4.1:
(1) = Result reported by GEI Consultants, Inc.
NA = Not available.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Transformer and Capacitor Areas—test boring (page 1 of 1)

| | |
|---|---|
| **AOC #:** | 9 |
| **Cleanup Area Description:** | Transformer and capacitor areas: test boring soil |
| **Location Reference:** | Figure 7 |
| **Sample Matrix:** | Soil |
| **Analysis:** | Milligrams per kilogram (mg/kg), dry weight |
| **Units:** | US EPA 8082 |
| **Laboratory Results In:** | Appendix F (also Appendix H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| TB-CCC | 0–2 | 2/13/02 (2/15/02) | ND<0.50 | 10.0 |
| TB-CCC | 2.0–2.5 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-CCC | 5–7 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-CCC | 10–13 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-DDD | 0–2 | 2/13/02 (2/15/02) | ND<0.50 | 10.0 |
| TB-FFF | 0–2 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-FFF | 2–4 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-FFF | 5–7 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-FFF | 10–12 | 2/13/02 (2/15/02) | ND<0.50 | 10.0 |
| TB-214 (1) | 3.0–3.3 | 3/30/00 (4/4/00) | 2 | 10.0 |
| TB-215 (1) | 2.0–2.2 | 3/30/00 (4/4/00) | 4 | 10.0 |
| TB-115 (1) | 5–7 | 7/1/98 (7/9/98) | ND<1.0 | 10.0 |
| TB-116 (1) | 5–7 | 7/1/98 (7/9/98) | ND<1.0 | 10.0 |
| MW-14D (1) | 26–28 | 6/11/98 (6/23/98) | ND<1.0 | 10.0 |
| MW-14S (1) | 1–3 | 6/1/98 (NA) | ND<1.0 | 10.0 |
| MW-13 (1) | 13–15 | 6/1/98 (6/10/98) | ND<1.0 | 10.0 |

Notes for Table 4.2:
(1) = Result reported by GEI Consultants, Inc.
NA = Not available.

## Table 5

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR PCB AREA 5: SOUTHEAST CORNER

### Table 5.1 (page 1 of 1)

**Former Oil/Waste Oil Storage and Waste Water Treatment Facility Areas—sediment and hand auger (page 1 of 1)**

| | |
|---|---|
| **AOC #:** | 7, 8, and 13 |
| **Cleanup Area Description:** | Former oil/waste oil storage and waste water treatment facility areas: surface soil and catch basin sediment |
| **Location Reference:** | Figure 8 |
| **Sample Matrix:** | Soil / catch basin sediment |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix H |

| Characterization Samples | | | | |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | **Cleanup Criterion** |
| **SURFACE SOIL** | | | | **SOIL** |
| SS-04 (1) | 0.0–0.3 | 3/31/00 (4/5/00) | 3 | 10.0 |
| SS-05 (1) | 0.0–0.3 | 3/31/00 (4/5/00) | 2 | 10.0 |
| SS-06 (1) | 0.0–0.3 | 3/31/00 (4/5/00) | 1 | 10.0 |
| SS-07 (1) | 0.0–0.3 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| SS-08 (1) | 0.0–0.3 | 3/31/00 (4/5/00) | 1 | 10.0 |
| AST-1 (1) | 1–2 | 6/11/98 (6/23/98) | 2 | 10.0 |
| SS-1D (1) | 0.5 | 6/19/98 (6/30/98) | ***14*** | 10.0 |
| SS-1S (1) | 0.0 | 6/19/98 (6/30/98) | 1 | 10.0 |
| **CATCH BASIN SEDIMENT** | | | | **SEDIMENT** |
| SED-2 (1) | 0.5 | 6/12/98 (6/23/98) | 1 | 1.0 |

Notes for Table 5.1:
(1) = Result reported by GEI Consultants, Inc.
NA = Not available.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Former Oil/Waste Oil Storage and Waste Water Treatment Facility Areas—test boring (pg. 1 of 1)

| | |
|---|---|
| **AOC #:** | 7, 8, and 13 |
| **Cleanup Area Description:** | Former oil/waste oil storage and waste water treatment facility areas: test boring soil |
| **Location Reference:** | Figure 8 |
| **Sample Matrix:** | Soil |
| **Analysis:** | US EPA 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix H |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| MW-16 (1) | 6–8 | 5/29/98 (6/9/98) | ND<1.0 | 10.0 |
| MW-17D (1) | 26–28 | 6/10/98 (6/18/98) | ND<1.0 | 10.0 |
| MW-17S (1) | 4–6 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |
| MW-18 (1) | 14–16 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |
| MW-21 (1) | 15–17 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |
| TB-21 (1) | 0–2 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |
| TB-219 (1) | 3.0–3.3 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-219 (1) | 7.0–7.3 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-220 (1) | 1.5–1.8 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-220 (1) | 3.5–3.8 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-220 (1) | 5.0–5.3 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-221 (1) | 5.0–5.3 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-222 (1) | 1.7–2.0 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-222 (1) | 5.9–6.2 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-223 (1) | 3.5–3.8 | 3/31/00 (4/5/00) | ND<1.0 | 10.0 |
| TB-224 (1) | 1.0–1.3 | 3/31/00 (4/5/00) | 5 | 10.0 |
| TB-224 (1) | 2–3 | 3/31/00 (4/5/00) | 7 | 10.0 |
| TB-225 (1) | 3.7–4.0 | 3/31/00 (4/5/00) | 4 | 10.0 |
| TB-225 (1) | 1.7–2.0 | 3/31/00 (4/5/00) | ***14*** | 10.0 |
| TB-24 (1) | 6–8 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |

Notes for Table 5.2:
(1) = Result reported by GEI Consultants, Inc.
***Bold*** indicates that detected concentration exceeds associated cleanup criterion.

## Table 6

## SUMMARY OF SITE CHARACTERIZATION RESULTS FOR NON-PCB AREAS: BALANCE OF SITE

### Table 6.1 (page 1 of 1)

**Site-Wide—sediment and hand auger**

| | |
|---|---|
| **AOC #:** | 2, 11, and 12 |
| **Cleanup Area Description:** | Site-Wide: asphalt, surface soil and catch basin sediment |
| **Location Reference:** | Figure 9 |
| **Sample Matrix:** | Asphalt / soil / catch basin sediment |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix G (also Appendices D, E, F, and H) |

| Characterization Samples | | | | |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | **Cleanup Criterion** |
| **ASPHALT** | | | | **ASPHALT** |
| SS-M1 | 0.0–0.2 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| AOC-2 CS6 | 0.0–0.25 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| **SURFACE SOIL** | | | | **SOIL** |
| SS-L | 0.2–0.8 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| SS-M2 | 0.2–0.8 | 5/2/01 (5/4/01) | ND<0.50 | 10.0 |
| AOC-2 CS2 | 0–2 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| AOC-2 CS2 | 2–4 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| AOC-2 CS2 | 5–7 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| AOC-2 CS6 | 0.25–2.0 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| AOC-2 CS6 | 2–4 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| AOC-2 CS6 | 5–7 | 3/12/02 (3/14/02) | ND<0.50 | 1.0 |
| **CATCH BASIN SEDIMENT** | | | | **SEDIMENT** |
| CB-4 | NA | 7/25/01 (7/30/01) | ND<0.50 | 10.0 |
| SED-1 (1) | 1 | 6/12/98 (6/23/98) | ND<1.0 | 10.0 |

Notes for Table 6.1:
(1) = Result reported by GEI Consultants, Inc.
NA = Not applicable.

## Site-Wide—test boring (page 1 of 4)

| | |
|---|---|
| **AOC #:** | 1, 2, 11, and 12 |
| **Cleanup Area Description:** | Site-Wide: asphalt and test boring soil |
| **Location Reference:** | Figure 9 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix G (also Appendices D, E, F, and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| ASPHALT [1] | | | | ASPHALT |
| TB-HHH | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-III | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-JJJ | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-KKK | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-LLL | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-MMM | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-NNN | 0.0–0.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-OOO | 0.0–0.3 | 4/1/02(4/2/02) | ND<0.50 | 10.0 |
| TB-PPP | 0.0–0.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-QQQ | 0.0–0.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-RRR | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-SSS | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-TTT | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-UUU | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-VVV | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-WWW | 0.0–0.3 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-FFFF | 0.0–0.3 | 4/4/02 (4/8/02) | ND<0.50 | 1.0 |
| TB-AAAAA | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-BBBBB | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-CCCCC | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-FFFFF | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-GGGGG | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-HHHHH | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-IIIII | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-JJJJJ | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-KKKKK | 0.0–0.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| SOIL | | | | SOIL |
| TB-L | 2–4 | 5/14/01 (5/18/01) | ND<0.50 | 1.0 |
| TB-J | 2–4 | 5/14/01 (5/18/01) | ND<0.50 | 1.0 |
| TB-JJ | 2–4 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-KK | 2–4 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-OO | 0–2 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-RR | 2–4 | 4/1/02 (4/3/02) | ND<0.50 | 1.0 |
| TB-VV | 5.0–5.5 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-HHH | 1.3–2.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-HHH | 2.3–4.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-HHH | 4.3–6.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-III | 1–3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-III | 3.5–4.5 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-III | 5–7 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-III | 10–12 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-JJJ | 1–3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-JJJ | 5–7 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |

## Site-Wide—test boring (page 2 of 4)

| | |
|---|---|
| **AOC #:** | 1, 2, 11, and 12 |
| **Cleanup Area Description:** | Site-Wide: asphalt and test boring soil |
| **Location Reference:** | Figure 9 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix G (also Appendices D, E, F, and H) |

| Characterization Samples | | | | Cleanup Criterion |
|---|---|---|---|---|
| **Sample ID** | **Depth (feet)** | **Sampling Date (Analysis Date)** | **Sample Result** | |
| | | SOIL | | SOIL |
| TB-KKK | 1–3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-KKK | 3–5 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-KKK | 5–7 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-LLL | 1–3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-LLL | 5–7 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-MMM | 0.3–1.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-MMM | 2–4 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-NNN | 0.3–2.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-NNN | 2.3–4.3 | 4/1/02 (4/2/02) | ND<0.50 | 10.0 |
| TB-NNN | 4.3–6.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-OOO | 0.3–1.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-OOO | 3.0–3.5 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-OOO | 4–6 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-PPP | 0.3–2.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-PPP | 2.5–3.0 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-PPP | 3.5–4.0 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-PPP | 4.3–6.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-QQQ | 0.3–2.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-QQQ | 2.3–4.3 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-QQQ | 4.3–5.0 | 4/1/02 (4/3/02) | ND<0.50 | 10.0 |
| TB-RRR | 0.3–0.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-RRR | 0.6–2.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-RRR | 4.6–6.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-SSS | 0.3–0.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-SSS | 2.6–4.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-SSS | 6.6–8.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-TTT | 0.3–0.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-TTT | 0.6–2.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-TTT | 4.6–6.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-UUU | 0.3–0.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-UUU | 4.6–6.6 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-UUU | 15–17 | 4/2/02 (4/5/02) | ND<0.50 | 1.0 |
| TB-VVV | 0.3–0.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-VVV | 2.0–2.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-VVV | 2.6–4.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-VVV | 4.6–6.6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-WWW | 0.3–2.0 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-WWW | 2–4 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-WWW | 4–6 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-WWW | 20–22 | 4/2/02 (4/5/02) | ND<0.50 | 10.0 |
| TB-FFFF | 0.5–0.8 | 4/4/02 (4/8/02) | ND<0.50 | 1.0 |
| TB-FFFF | 2.5–3.5 | 4/4/02 (4/8/02) | ND<0.50 | 1.0 |
| TB-FFFF | 3.5–4.5 | 4/4/02 (4/8/02) | ND<0.50 | 1.0 |

## Site-Wide—test boring (page 3 of 4)

| | |
|---|---|
| **AOC #:** | 1, 2, 11, and 12 |
| **Cleanup Area Description:** | Site-Wide: asphalt and test boring soil |
| **Location Reference:** | Figure 9 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results in:** | Appendix G (also Appendices D, E, F, and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| | | SOIL | | SOIL |
| TB-AAAAA | 0.5–2.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-BBBBB | 0.5–2.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-BBBBB | 2.5–4.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-BBBBB | 4.5–5.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-CCCCC | 2–4 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-CCCCC | 4–5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-FFFFF | 0.5–0.8 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-GGGGG | 0.5–1.2 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-HHHHH | 0.5–2.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-HHHHH | 2.5–4.5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-JJJJJ | 0.3–2.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-JJJJJ | 2.3–4.3 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-KKKKK | 1–2 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-KKKKK | 4–5 | 4/5/02 (4/10/02) | ND<0.50 | 1.0 |
| TB-AAA | 2–4 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-AAA | 5–7 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-AAA | 10–12 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-AAA | 0–2 | 2/13/02 (2/26/02) | ND<0.50 | 10.0 |
| TB-II | 5–7 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-JJ | 2–4 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-KK | 0–2 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-MM | 2–4 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-QQ | 0–2 | 2/8/02 (2/14/02) | ND<0.50 | 1.0 |
| TB-QQ | 10–12 | 2/8/02 (2/14/02) | ND<0.50 | 1.0 |
| TB-UU | 2–4 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-VV | 2–4 | 2/8/02 (2/14/02) | ND<0.50 | 10.0 |
| TB-VV | 4–6 | 2/8/02 (2/21/02) | ND<0.50 | 10.0 |
| TB-U/MW-G | 1–3 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-W/MW-H | 2–4 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |
| TB-Z/MW-I | 2–4 | 5/15/01 (5/18/01) | ND<0.50 | 10.0 |

## Site-Wide—test boring (page 4 of 4)

| | |
|---|---|
| **AOC #:** | 1, 2, 11, and 12 |
| **Cleanup Area Description:** | Site-Wide: asphalt and test boring soil |
| **Location Reference:** | Figure 9 |
| **Sample Matrix:** | Asphalt / soil |
| **Analysis:** | US EPA Method 8082 |
| **Units:** | Milligrams per kilogram (mg/kg), dry weight |
| **Laboratory Results In:** | Appendix G (also Appendices D, E, F, and H) |

**Characterization Samples**

| Sample ID | Depth (feet) | Sampling Date (Analysis Date) | Sample Result | Cleanup Criterion |
|---|---|---|---|---|
| | | SOIL | | SOIL |
| TB-200 (2) | 5–7 | 7/2/98 (7/9/98) | ND<1.0 | 10.0 |
| MW-4D (2) | 36–40 | 6/10/98 (6/18/98) | ND<1.0 | 1.0 |
| MW-10 (2) | 9–11 | 6/9/98 (6/19/98) | ND<1.0 | 10.0 |
| MW-3 (2) | 15–17 | 6/4/98 (6/12/98) | ND<1.0 | 1.0 |
| TB-6 (2) | 1–7 | 6/4/98 (6/12/98) | ND<1.0 | 1.0 |
| TB-7 (2) | 5 | 6/4/98 (6/12/98) | ND<1.0 | 1.0 |
| TB-7A (2) | 7–9 | 6/4/98 (6/12/98) | ND<1.0 | 1.0 |
| MW-2 (2) | 13–17 | 6/2/98 (6/10/98) | ND<1.0 | 1.0 |
| TB-1 (2) | 7–8 | 6/2/98 (6/10/98) | ND<1.0 | 1.0 |
| MW-12 (2) | 2–4 | 6/1/98 (6/10/98) | ND<1.0 | 10.0 |
| TB-25 (2) | 2–4 | 5/29/98 (6/6/98) | ND<1.0 | 10.0 |
| TB-18 (2) | 12–14 | 5/28/98 (6/6/98) | ND<1.0 | 10.0 |
| TB-18A (2) | 16–18 | 5/28/98 (6/6/98) | ND<1.0 | 10.0 |
| MW-20 (2) | 11–13 | 5/27/98 (6/7/98) | ND<1.0 | 10.0 |
| MW-5 (2) | 2–4 | 5/26/98 (6/7/98) | ND<1.0 | 10.0 |
| MW-9A (2) | 0–2 | 5/26/98 (6/7/98) | ND<1.0 | 10.0 |

Notes for Table 6.2:
(1) = Sample may include some base material (e.g., cobbles or gravel).
(2) = Result reported by GEI Consultants, Inc.

# Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-A | SS-B | SS-C | SS-D1 | SS-D2 | SS-E | SS-F |
| Depth Below Grade (ft.) | | | | (0-1) | (0-1) | (0-1) | (0-1) | (0-0.5) | (0.5-1) | (0.3-1) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | 0.87 | ND<0.20 | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | 0.79 | ND<0.20 | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | 1.7 | ND<0.20 | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | 0.72 | ND<0.20 | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | 0.64 | ND<0.20 | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | 0.87 | ND<0.20 | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | 1.5 | ND<0.20 | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | 0.70 | ND<0.20 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | ND<0.20 | ND<0.20 | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | 0.88 | ND<0.20 | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | 1.3 | ND<0.20 | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | 99 | ND<50 | ND<50 | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | ND<2.0 | ND<2.0 | 7.4 | 14 | ND<2.0 | 51 | 930 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | 30 | 25 | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | ND<1.0 | ND<1.0 | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | 11 | 8 | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | 64 | 31 | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | 0.72 | ND<0.20 | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT |

3

# Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-A | SS-B | SS-C | SS-D1 | SS-D2 | SS-E | SS-F |
| **Depth Below Grade (ft.)** | | | | (0-1) | (0-1) | (0-1) | (0-1) | (0-0.5) | (0.5-1) | (0.3-1) |
| | | | | | | | | | | |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | ND<1.0 | ND<1.0 | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| | | | | | | | | | | |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 |
| Barium | NA | NA | 10 | NT | NT | NT | 0.56 | 0.73 | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | ND<0.013 | 0.034 | NT | NT |
| | | | | | | | | | | |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1248 | 1 | 10 | NA | NT | NT | NT | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |

Notes:
mg/kg = milligrams per kilogram.
ppm = parts per million (comparable to mg/kg).
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
NA = Not applicable.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure (SPLP). Units are milligrams per liter (mg/L).
• = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## [redacted]e 3

## Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-G | SS-H | SS-I | SS-J | SS-K | SS-L | SS-M1 |
| **Depth Below Grade (ft.)** | | | | (0.5-1) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.0-0.2) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | ND<0.20 | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | ND<0.20 | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | 0.37 | NT | ND<0.20 | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | 1.7 | NT | 0.94 | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | 1.5 | NT | 0.65 | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | 2.7 | NT | 1.3 | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | 0.99 | NT | 0.50 | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | 1.1 | NT | 0.52 | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | 1.7 | NT | 0.90 | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | 0.22 | NT | ND<0.20 | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | 3.3 | NT | 1.1 | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | ND<0.20 | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | 0.87 | NT | 0.40 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | 0.41 | NT | ND<0.20 | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | 2.4 | NT | 0.80 | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | 2.7 | NT | 1.1 | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH)** | 500 | 2,500 | 2,500 | 140 | NT | 140 | NT | 220 | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 85 | 110 | 100 | 86 | 69 | 30 | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT |

# Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-G | SS-H | SS-I | SS-J | SS-K | SS-L | SS-M1 |
| **Depth Below Grade (ft.)** | | | | (0.5-1) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.2-0.8) | (0.0-0.2) |
| | | | | | | | | | | |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| | | | | | | | | | | |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT | NT |
| | | | | | | | | | | |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | 0.63 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |

Notes:
mg/kg = milligrams per kilogram.
ppm = parts per million (comparable to mg/kg).
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
NA = Not applicable.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure (SPLP). Units are milligrams per liter (mg/L).
• = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

# Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-M2 | SS-U | SS-V | SS-W | SS-W | SS-X | SS-Y | SS-Z |
| **Depth Below Grade (ft.)** | | | | (0.2-0.8) | (0-2) | (0-1.5) | (0-2) | (2-3) | (0-0.6) | (0-0.6) | (0-0.6) |
| | | | | | | | | | | | |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.93 | 0.21 | ND<0.20 |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | 0.68 | 0.22 | ND<0.20 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 1.1 | 0.85 | ND<0.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | 0.49 | 0.31 | ND<0.20 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | 0.45 | 0.21 | ND<0.20 |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | 1.1 | 1.2 | ND<0.20 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | 1.6 | 0.74 | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.41 | 0.28 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | 0.78 | 0.94 | ND<0.20 |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | 1.8 | 0.42 | ND<0.20 |
| | | | | | | | | | | | |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | NT | NT | 270 | 240 | 700 |
| | | | | | | | | | | | |
| **Total Metals** | | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | ND<2.0 | 37 | 18 | 20 | 26 | 30 | 37 | ND<2.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | 40 | 28 | 38 |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | 1.3 | 2.1 | 1.6 |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | 13 | 28 | 19 |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | 170 | 29 | 100 |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | 130 | 52 | 810 |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | ND<0.20 | 0.48 | 1.2 |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | 24 | 21 | 11 |

# Comparison of Surface Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 2 and 14, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Surface Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | SS-M2 | SS-U | SS-V | SS-W | SS-W | SS-X | SS-Y | SS-Z |
| **Depth Below Grade (ft.)** | | | | (0.2-0.8) | (0-2) | (0-1.5) | (0-2) | (2-3) | (0-0.6) | (0-0.6) | (0-0.6) |
| | | | | | | | | | | | |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | 2.2 | 6.4 | ND<1.0 |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | 88 | 16 | 200 |
| | | | | | | | | | | | |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT | NT | NT |
| | | | | | | | | | | | |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | | |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | NT | NT | NT | NT | ND<0.50 | ND<0.50 | ND<0.50 |

Notes:

mg/kg = milligrams per kilogram.
ppm = parts per million (comparable to mg/kg).
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
NA = Not applicable.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure (SPLP). Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-A | TB-A | TB-A | TB-A | TB-B | TB-B | TB-B | TB-B |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | **1** | **7.8** | **1** | NT | 0.30 | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | NT | 0.35 | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | **1** | **1** | **1** | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | **1** | NT | **1.3** | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | **56** | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | **40** | NT | 0.90 | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | **40** | NT | 0.28 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |

## ▬le 4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, Central Portion, New Haven, CT
## Sampling Dates: May 9, 10, 11, 14, and 15, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-A | TB-A | TB-A | TB-A | TB-B | TB-B | TB-B | TB-B |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 2.6 | 6.1 | 240 | 300 | 5.8 | 34 | 110 | 9.3 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | NT | ND<0.05 | ND<0.05 | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | NT | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

[redacted]e 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-C | TB-C | TB-C | TB-C | TB-D | TB-D | TB-D | TB-D |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | 0.58 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | 0.94 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | NT | NT | 0.36 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | ND<0.20 | NT | NT | 0.28 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | ND<0.20 | NT | NT | 0.45 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | ND<0.20 | NT | NT | 0.78 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | 1.2 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | 0.30 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | 0.23 | NT | NT | 1.0 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | ND<0.20 | NT | NT | 1.1 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | ND<0.005 | NT | NT |

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-C | TB-C | TB-C | TB-C | TB-D | TB-D | TB-D | TB-D |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | ND<2.0 | NT | NT |
| Arsenic | 10 | 10 | NA | 2.1 | 670 | 61 | 13 | 34 | 5.9 | 5.7 | 22 |
| Barium | 4,700 | 140,000 | NA | NT | 28 | NT | NT | NT | 38 | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | ND<1.0 | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | 3 | NT | NT | NT | ND<1.0 | NT | NT |
| Chromium | 100* | 100* | NA | NT | 7.1 | NT | NT | NT | 12 | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | 23 | NT | NT | NT | 75 | NT | NT |
| Lead | 500 | 1,000 | NA | NT | 59 | NT | NT | NT | 110 | NT | NT |
| Mercury | 20 | 610 | NA | NT | 0.80 | NT | NT | NT | 0.48 | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | 6.30 | NT | NT | NT | 7.4 | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | 15 | NT | NT | NT | 2.0 | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | ND<2.0 | NT | NT | NT | 53 | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | 0.38 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | 0.16 | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | ND<50 | NT | NT | 110 | NT | NT | NT |

Notes:
- mg/kg = milligrams per kilogram.
- ppm = Parts per million (comparable to mg/kg).
- NA = Not applicable.
- ND = Not detected above laboratory minimum detection limit.
- NT = Not tested.
- SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
- * = 100 mg/kg for hexavalent chromium.
- ☐ = Concentration exceeds associated criterion.

Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-E | TB-E | TB-E | TB-E | TB-F | TB-F | TB-F | TB-F |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | 0.35 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | 0.36 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | ND<0.20 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | ND<0.010 | NT | NT | NT |

Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-E | TB-E | TB-E | TB-E | TB-F | TB-F | TB-F | TB-F |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | ND<2.0 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 11 | 320 | 30 | 46 | 14 | 32 | 6.1 | 3.2 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | 17 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | ND<1.0 | NT | NT | ND<1.0 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | ND<2.0 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | 11 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | 6.4 | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | ND<2.0 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | 2.3 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | 2.7 | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | NT | ND<50 | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table 4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, Central Portion, New Haven, CT
## Sampling Dates: May 9, 10, 11, 14, and 15, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-G | TB-G | TB-G | TB-G | TB-H | TB-H | TB-H | TB-H |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | **1** | **7.8** | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | **1** | **7.8** | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | **8.4** | 78 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | **1** | **1** | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | **1** | **1** | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-G | TB-G | TB-G | TB-G | TB-H | TB-H | TB-H | TB-H |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 6.9 | 93 | 7.6 | ND<2.0 | 17 | 110 | 4.5 | 2.9 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | 460 | 79 | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

[redacted]e 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-I | TB-I | TB-I | TB-J | TB-J | TB-K | TB-K | TB-L |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (10-12) | (0-1) | (2-4) | (0-5) | (2-3) | (1-2) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | 0.31 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | 0.36 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | ND<0.20 | NT | NT | 0.25 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | 0.22 | NT | NT | 0.30 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | 0.61 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | 0.27 | NT | NT | 0.28 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | ND<0.20 | NT | NT | 0.55 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |

—e 4

**Comparison of Test Boring Soil Sample Analyte Concentrations**
**to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-I | TB-I | TB-I | TB-J | TB-J | TB-K | TB-K | TB-L |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (10-12) | (0-1) | (2-4) | (0-5) | (2-3) | (1-2) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | ND<2.0 | NT | NT | 3.7 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 2.2 | 3.9 | 5.3 | ND<2.0 | 6.4 | 3.8 | 29 | 2.8 |
| Barium | 4,700 | 140,000 | NA | NT | 11 | NT | NT | 74 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | ND<1.0 | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | ND<1.0 | NT | NT | 1.7 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | 4.4 | NT | NT | 8.1 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | 33 | NT | NT | 760 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | 21 | NT | NT | 1,000 | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | 0.71 | NT | NT | 1.9 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | 4.7 | NT | NT | 11 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | ND<1.0 | NT | NT | ND<1.0 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | 28 | NT | NT | 1,000 | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | ND<50 | NT | ND<50 | 330 | NT | NT | NT |

Notes:
mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

[redacted]e 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-L | TB-L | TB-L | TB-M | TB-O | TB-O | TB-O | TB-P/ MW-D |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-6) | (10-12) | (0.5-1) | (0.5-2) | (5-7) | (10-12) | (0.5-1.5) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.21 | NT | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | NT | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.20 | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT | NT |

Table 4

## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-L | TB-L | TB-L | TB-M | TB-O | TB-O | TB-O | TB-P/ MW-D |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-6) | (10-12) | (0.5-1) | (0.5-2) | (5-7) | (10-12) | (0.5-1.5) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | 4.1 | NT | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 62 | 11 | ND<2.0 | ND<2.0 | 36 | 7.1 | 2.6 | ND<2.0 |
| Barium | 4,700 | 140,000 | NA | 23 | NT | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | 3.2 | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | ND<1.0 | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | 17 | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | 210 | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | 160 | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | 0.93 | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | 70 | NT | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | ND<1.0 | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | 130 | NT | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | 390 | NT | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-P/ MW-D | TB-P/ MW-D | TB-P/ MW-D | TB-Q/ MW-E | TB-Q/ MW-E | TB-Q/ MW-E | TB-R/ MW-F | TB-R/ MW-F |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (10-12) | (2-4) | (8-10) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | ND<0.005 | ND<0.005 |

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-P/ MW-D | TB-P/ MW-D | TB-P/ MW-D | TB-Q/ MW-E | TB-Q/ MW-E | TB-Q/ MW-E | TB-R/ MW-F | TB-R/ MW-F |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (10-12) | (2-4) | (8-10) | (10-12) | (0-2) | (2-4) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | ND<2.0 | 7.4 | ND<2.0 | 34 | ND<2.0 | ND<2.0 | 2.2 | 26 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | 0.09 | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | 140 | ND<50 | NT | ND<50 | ND<50 |

Notes:
mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

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**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-R/ MW-F | TB-R/ MW-F | TB-S | TB-S | TB-S | TB-S | TB-T | TB-T |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (0-1) | (2-3.3) | (5-7) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | 5.0 | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | 2.0 | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | 9.3 | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 22 | NT | NT | NT | 1.4 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 25 | NT | NT | NT | 2.4 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 9.3 | NT | NT | NT | 1.7 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 8.7 | NT | NT | NT | 0.87 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 17 | NT | NT | NT | 1.9 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | 21 | NT | NT | NT | 2.3 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | 2.5 | NT | NT | NT | 0.49 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 65 | NT | NT | NT | 1.7 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | 7.6 | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 9.6 | NT | NT | NT | 1.2 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | 3.4 | NT | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 71 | NT | NT | NT | 0.90 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | 57 | NT | NT | NT | 1.9 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | 0.011 | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | 0.38 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | ND<0.005 | ND<0.005 | NT | 0.039 | ND<0.005 | 0.023 | NT | NT |

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**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-R/ MW-F | TB-R/ MW-F | TB-S | TB-S | TB-S | TB-S | TB-T | TB-T |
| Depth Below Grade (ft.) | | | | (5-7) | (10-12) | (0-1) | (2-3.3) | (5-7) | (10-12) | (0-2) | (2-4) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | 3.6 | NT | NT | NT | ND<2.0 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 60 | 43 | 23 | 50 | 19 | 19 | 2.7 | 4.0 |
| Barium | 4,700 | 140,000 | NA | 28 | NT | NT | NT | 33 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | ND<1.0 | NT | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | ND<1.0 | NT | NT | NT | ND<1.0 | NT | NT | NT |
| Chromium | 100* | 100* | NA | 10 | NT | NT | NT | 10 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | 75 | NT | NT | NT | 82 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | 880 | NT | NT | NT | 62 | NT | NT | NT |
| Mercury | 20 | 610 | NA | 4.4 | NT | NT | NT | 0.21 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | 7.8 | NT | NT | NT | 16 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | 5.4 | NT | NT | NT | 1.3 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | 28 | NT | NT | NT | 80 | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | ND<0.05 | NT | NT | NT | ND<0.05 |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | 7,500 | 710 | 260 | ND<50 | 480 | 860 | ND<50 | ND<50 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-T | TB-T | TB-U/ MW-G | TB-U/ MW-G | TB-U/ MW-G | TB-U/ MW-G | TB-V | TB-V |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (1-3) | (3-5) | (5-7) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | 0.76 | ND<0.20 | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | 0.55 | ND<0.20 | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | 1.6 | ND<0.20 | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | **1** | **7.8** | **1** | NT | **5.7** | ND<0.20 | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | NT | **6.5** | ND<0.20 | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | 3.2 | ND<0.20 | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | NT | **2.0** | ND<0.20 | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | **1** | **1** | **1** | NT | **4.8** | ND<0.20 | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | **1** | NT | **4.7** | ND<0.20 | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | NT | 0.74 | ND<0.20 | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | **56** | NT | 13 | ND<0.20 | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | 0.79 | ND<0.20 | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | NT | **2.9** | ND<0.20 | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | 0.41 | ND<0.20 | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | **40** | NT | 4.7 | ND<0.20 | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | **40** | NT | 11 | ND<0.20 | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |

Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-T | TB-T | TB-U/ MW-G | TB-U/ MW-G | TB-U/ MW-G | TB-U/ MW-G | TB-V | TB-V |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (1-3) | (3-5) | (5-7) | (10-12) | (0-2) | (2-4) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | 38 | 2.6 | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | ND<2.0 | 3.5 | 11 | 10 | 7.1 | 5.0 | ND<2.0 | 29 |
| Barium | 4,700 | 140,000 | NA | NT | 13 | 20 | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | ND<1.0 | ND<1.0 | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | ND<1.0 | ND<1.0 | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | 7.5 | 6.8 | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | 150 | 25 | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | 57 | 11 | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | 1.8 | ND<0.20 | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | 12 | 18 | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | ND<1.0 | 1.4 | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | 70 | 15 | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT | NT | 0.065 |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | 300 | ND<50 | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-V | TB-W/ MW-H | TB-W/ MW-H | TB-W/ MW-H | TB-W/ MW-H | TB-X | TB-X | TB-X |
| **Depth Below Grade (ft.)** | | | | (5-6.8) | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | 0.46 | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | 1.2 | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | 1.6 | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | 0.79 | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | 0.47 | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | 1.0 | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | 1.2 | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | 0.21 | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | 3.2 | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | 0.67 | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | 1.4 | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | 2.9 | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | 0.035 | ND<0.005 | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | 0.0092 | ND<0.005 | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | ND<0.005 | 0.0061 | ND<0.005 | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.005 | ND<0.005 | 0.040 | ND<0.005 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | 0.037 | ND<0.005 | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | NT |

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-V | TB-W/ MW-H | TB-W/ MW-H | TB-W/ MW-H | TB-W/ MW-H | TB-X | TB-X | TB-X |
| **Depth Below Grade (ft.)** | | | | (5-6.8) | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 3.3 | 2.7 | 6.9 | 3.4 | 5.8 | ND<2.0 | ND<2.0 | ND<2.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | 31 | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | ND<1.0 | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | ND<1.0 | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 11 | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 54 | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 31 | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | 1.0 | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 7.9 | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | 1.1 | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 51 | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | ND<0.05 | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | 270 | NT | NT | 2,800 | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Central Portion, New Haven, CT Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-X | TB-Y | TB-Y | TB-Y | TB-Z/ MW-I | TB-Z/ MW-I | TB-Z/ MW-I | TB-Z/ MW-I |
| **Depth Below Grade (ft.)** | | | | (7) | (0-2) | (2-4) | (5-7) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.67 | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.91 | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | 0.53 | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | 0.32 | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | 0.59 | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | 0.62 | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | 1.3 | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.40 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | 0.64 | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | 1.2 | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | | |
| sec-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| tert-Butylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1-Dichloroethane | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT | NT | NT |

## Table 4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, Central Portion, New Haven, CT**
**Sampling Dates: May 9, 10, 11, 14, and 15, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-X | TB-Y | TB-Y | TB-Y | TB-Z/ MW-I | TB-Z/ MW-I | TB-Z/ MW-I | TB-Z/ MW-I |
| **Depth Below Grade (ft.)** | | | | (7) | (0-2) | (2-4) | (5-7) | (0-2) | (2-4) | (5-7) | (10-12) |
| **Total Metals** | | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | ND<2.0 | NT | NT |
| Arsenic | 10 | 10 | NA | ND<2.0 | 6.7 | ND<2.0 | ND<2.0 | 2.1 | ND<2.0 | ND<2.0 | 2.5 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | 23 | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | ND<1.0 | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | ND<1.0 | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | 7.5 | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | 45 | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | 15 | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | 0.24 | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | 7.8 | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | ND<1.0 | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | 24 | NT | NT |
| **SPLP Metals** | | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50.0 | NT | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | 520 | NT | NT | 350 | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

# Table 5
## Comparison of Soil Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, AOC-1, New Haven, CT Sampling Date: May 2, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB | SS-N | SS-O | SS-P | SS-Q | SS-R | SS-S | SS-T |
| **Depth Below Grade (ft.)** | | | | (0-1) | (0-0.5) | (0-0.5) | (0-0.5) | (0-0.5) | (0-0.5) | (0-0.5) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | ND<0.20 | ND<0.20 | 0.59 | 1.3 | 0.54 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | 0.78 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | 0.32 | ND<0.20 | 1.4 | 3.1 | 1.5 |
| Benzo[a]anthracene | **1** | 7.8 | **1** | NT | 0.34 | 1.0 | 0.31 | **3.6** | **7.0** | **4.2** |
| Benzo[a]pyrene | **1** | **1** | **1** | NT | 0.29 | 0.76 | 0.23 | **2.7** | **5.6** | **3.3** |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | NT | 0.46 | **1.5** | 0.53 | **4.4** | **9.2** | **5.4** |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | 0.55 | 0.22 | 1.2 | 2.6 | 1.5 |
| Benzo[k]fluoranthene | 8.4 | 78 | **1** | NT | 0.20 | 0.66 | 0.23 | **1.1** | **1.8** | **1.5** |
| Chrysene | 84 | 780 | **1** | NT | 0.34 | **1.2** | 0.39 | **3.4** | **6.5** | **3.9** |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | ND<0.20 | ND<0.20 | ND<0.20 | 0.27 | 0.66 | 0.42 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | 0.52 | 1.9 | 0.47 | 7.3 | 14 | 8.9 |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | ND<0.20 | ND<0.20 | 0.60 | 1.2 | 0.44 |
| Indeno[1,2,3-cd]pyrene | **1** | 7.8 | **1** | NT | ND<0.20 | 0.54 | ND<0.20 | **1.1** | **2.5** | **1.6** |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | 0.77 | 0.3 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | 0.33 | 1.9 | 0.49 | 6.9 | 13 | 7.2 |
| Pyrene | 1,000 | 2,500 | 40 | NT | 0.43 | 1.6 | 0.43 | 6.5 | 14 | 7.8 |
| | | | | | | | | | | |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH)** | **500** | **2,500** | **2,500** | **3,200** | ND<50 | 180 | ND<50 | 130 | 230 | 450 |
| | | | | | | | | | | |
| **Total Metals** | | | | | | | | | | |
| Arsenic | **10** | **10** | NA | **12** | **37** | **270** | **48** | **65** | **99** | **62** |
| Barium | 4,700 | 140,000 | NA | 52 | 62 | 31 | 78 | 51 | 320 | 57 |
| Cadmium | 34 | 1,000 | NA | 1.4 | 1.3 | 1.2 | ND<1.0 | 1.5 | 5.0 | 2.3 |
| Chromium | 100 | 100 | NA | 17 | 8.0 | 8.3 | 6.6 | 8.9 | 17 | 12 |
| Lead | **500** | **1,000** | NA | 470 | 120 | 160 | 160 | 140 | **1,700** | 280 |

## [redacted]le 5

## Comparison of Soil Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, AOC-1, New Haven, CT Sampling Date: May 2, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB | SS-N | SS-O | SS-P | SS-Q | SS-R | SS-S | SS-T |
| Mercury | 20 | 610 | NA | 1.4 | ND<0.20 | ND<0.20 | ND<0.20 | 0.96 | 1.1 | 1.3 |
| Selenium | 340 | 10,000 | NA | ND<1.0 | ND<1.0 | 1.6 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 |
| | | | | | | | | | | |
| **SPLP Metals[1]** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | ND<0.05 | **0.17** | ND<0.05 | ND<0.05 | ND<0.05 | ND<0.05 |
| Barium | NA | NA | 10 | 0.30 | 0.59 | 0.20 | 0.28 | 0.36 | 0.31 | 0.40 |
| Mercury | NA | NA | 0.02 | ND<0.002 | ND<0.002 | ND<0.002 | ND<0.002 | ND<0.002 | ND<0.002 | ND<0.002 |
| Selenium | NA | NA | 0.5 | ND<0.01 | ND<0.01 | 0.015 | ND<0.01 | ND<0.01 | ND<0.01 | ND<0.01 |
| | | | | | | | | | | |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | ND | ND | ND | ND | ND | ND | ND |
| | | | | | | | | | | |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | NT | ND | ND | ND | ND | ND | ND |

Notes:

mg/kg = milligrams per kilogram.
ppm = parts per million (comparable to mg/kg).
ND = Not detected above laboratory minimum detection limit.
NC = No criterion established.
NT = Not tested.
NA = Not applicable.
(1) = Test performed on leachate from Synthetic Precipitation Leaching Procedure (SPLP) or Toxicity Characteristic Leaching Procedure (TCLP). Units are milligrams per liter (mg/L).
= 100 mg/kg for hexavalent chromium.
Bold results indicate exceedances of RSR Numerical Criteria.

Table AOC-2.1

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-XX | TB-XX | TB-XX | TB-XX | TB-XX | TB-YY | TB-YY |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (15-17) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatic Hydorcarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | 0.35 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | 0.62 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | ND<0.20 | 1.9 | 0.37 | ND<0.20 | NT | ND<0.20 | 0.66 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | ND<0.20 | 2.3 | 0.48 | ND<0.20 | NT | ND<0.20 | 0.63 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | 1.3 | 0.30 | ND<0.20 | NT | ND<0.20 | 0.33 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | 0.98 | 0.21 | ND<0.20 | NT | ND<0.20 | 0.31 |
| Benzo[a]pyrene | 1 | 1 | 1 | ND<0.20 | 1.8 | 0.36 | ND<0.20 | NT | ND<0.20 | 0.54 |
| Chrysene | 84 | 780 | 1 | ND<0.20 | 1.6 | 0.32 | ND<0.20 | NT | ND<0.20 | 0.53 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | 0.29 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | ND<0.20 | 4.4 | 0.50 | 0.29 | NT | ND<0.20 | 1.03 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | 0.27 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | 1.3 | 0.28 | ND<0.20 | NT | ND<0.20 | 0.34 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | 3.4 | 0.25 | ND<0.20 | NT | ND<0.20 | 0.479 |
| Pyrene | 1,000 | 2,500 | 40 | ND<0.20 | 3.6 | 0.48 | 0.30 | NT | ND<0.20 | 0.94 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 1.6 | ND<1.0 | 1.6 | ND<1.0 | ND<1.0 | 1.9 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | NT | 16 | NT | NT | NT | NT | 19 |
| Cadmium | 34 | 1,000 | NA | NT | 0.55 | NT | NT | NT | NT | ND<0.50 |
| Chromium | 100* | 100* | NA | NT | 4.5 | NT | NT | NT | NT | 4.2 |
| Copper | 2,500 | 76,000 | NA | NT | 23 | NT | NT | NT | NT | 21 |
| Lead | 500 | 1,000 | NA | NT | 33 | NT | NT | NT | NT | 25 |

## Table AOC-2.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT
## Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-XX | TB-XX | TB-XX | TB-XX | TB-XX | TB-YY | TB-YY |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (15-17) | (0-2) | (2-4) |
| Nickel | 1,400 | 7,500 | NA | NT | 4.3 | NT | NT | NT | NT | 4.1 |
| Thallium | 5.4 | 160 | NA | NT | ND<2.0 | NT | NT | NT | NT | ND<2.0 |
| Vanadium | 470 | 14,000 | NA | NT | 14 | NT | NT | NT | NT | 10 |
| Zinc | 20,000 | 610,000 | NA | NT | 31 | NT | NT | NT | NT | 22 |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | NT | 0.41 | NT | NT | NT | NT | 0.42 |
| Zinc | NA | NA | 50 | NT | 0.22 | NT | NT | NT | NT | 0.19 |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | 220 | ND<50 | ND<50 | NT | 53 | 220 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

Table AOC-2.1

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-YY | TB-YY | TB-ZZ | TB-ZZ | TB-ZZ | TB-ZZ | TB-ZZ |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (0-1.6) | (2.5-3.5) | (5-7) | (10-12) | (15-17) |
| **USEPA Method 8270 Polynuclear Aromatic Hydorcarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | 0.86 | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | 0.21 | ND<0.20 | 1.4 | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | ND<0.20 | 0.41 | ND<0.20 | 6.7 | NT |
| Benzo[a]anthracene | **1** | **7.8** | **1** | 0.64 | 0.524 | ND<0.20 | **2.7** | 0.25 | **16** | NT |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | 0.87 | 0.81 | ND<0.20 | **3.9** | 0.38 | **25** | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.47 | 0.34 | ND<0.20 | 1.3 | ND<0.20 | 4.2 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | **1** | 0.44 | 0.33 | ND<0.20 | **1.4** | ND<0.20 | **6.2** | NT |
| Benzo[a]pyrene | **1** | **1** | **1** | 0.67 | 0.58 | ND<0.20 | **3.1** | 0.29 | **19** | NT |
| Chrysene | 84 | 780 | **1** | 0.54 | 0.56 | ND<0.20 | **2.3** | 0.21 | **13** | NT |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | ND<0.20 | ND<0.20 | ND<0.20 | 0.35 | ND<0.20 | **1.5** | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 1.00 | 0.79 | ND<0.20 | 5.8 | 0.26 | 54 | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | 1.7 | NT |
| Indeno[1,2,3-cd]pyrene | **1** | 7.8 | **1** | 0.46 | 0.34 | ND<0.20 | **1.4** | ND<0.20 | **5.0** | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | 0.30 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.49 | 0.25 | ND<0.20 | 2.0 | ND<0.20 | 17 | NT |
| Pyrene | 1,000 | 2,500 | **40** | 0.90 | 0.83 | ND<0.20 | 5.6 | 0.28 | **50** | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 1.0 | 1.3 | 1.9 | 1.3 | 1.5 | 1.2 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | 26 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | 0.74 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | 7.5 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | 32 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | 36 | NT | NT | NT |

Table AOC-2.1

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-YY | TB-YY | TB-ZZ | TB-ZZ | TB-ZZ | TB-ZZ | TB-ZZ |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (0-1.6) | (2.5-3.5) | (5-7) | (10-12) | (15-17) |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | 7.0 | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | NT | 3.1 | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | 23 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | 36 | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | NT | NT | NT | 0.37 | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | 0.19 | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | 60 | 330 | ND<50 | 180 | ND<50 | 1,200 | NT |

Notes:
- mg/kg = milligrams per kilogram.
- ppm = Parts per million (comparable to mg/kg).
- NA = Not applicable.
- ND = Not detected above laboratory minimum detection limit.
- NT = Not tested.
- SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
- * = 100 mg/kg for hexavalent chromium.
- ☐ = Concentration exceeds associated criterion.

## Table AOC-2.2
## Comparison of Confirmatory Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mgkg) | | Pollutant Mobility Criteria for Soil (mgkg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial Commercial | GB Area | AOC2 CS1 | AOC2 CS1 | AOC2 CS1 | AOC2 CS2 | AOC2 CS2 | |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (0-2) | (2-4) | |
| **Sample Collection Date** | | | | 1/30/02 | 1/30/02 | 1/30/02 | 3/12/02 | 1/30/02 | 3/12/02 |
| **USEPA Method 8270 Polynuclear Aromatics (PAHs)** | | | | | | | | | |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | 0.97 | ND<0.20 | ND<0.20 | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | 0.41 | ND<0.20 | ND<0.20 | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.46 | 1.00 | **3.50** | 0.53 | 0.40 | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.68 | **1.70** | **5.80** | 0.75 | 0.71 | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.31 | 0.56 | 1.50 | 0.40 | 0.22 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.31 | 0.65 | **2.10** | 0.30 | 0.33 | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.55 | **1.30** | **4.40** | 0.54 | 0.54 | NT |
| Chrysene | 84 | 780 | 1 | 0.37 | 0.90 | **3.20** | 0.48 | 0.35 | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | ND<0.20 | 0.44 | ND<0.20 | ND<0.20 | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.68 | 2.00 | 6.90 | 0.72 | 0.63 | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.30 | 0.62 | **1.60** | 0.42 | 0.23 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.27 | 0.81 | 2.10 | 0.29 | 0.24 | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.64 | 1.80 | 7.80 | 0.70 | 0.61 | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | ND | NT | ND | ND | ND | NT |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | NA | NA | NA | NT | NT | NT | ND | NT | ND |
| **Connecticut Extractable Total Petroleum Hydrocarbons (ETPH)** | **500** | 2,500 | 2,500 | ND<50 | ND<50 | 71 | NT | **520** | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
☐ = Concentration exceeds associated criterion.

## Table AOC-2.2
## Comparison of Confirmatory Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mgkg) | | Pollutant Mobility Criteria for Soil (mgkg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial Commercial | GB Area | AOC2 CS2 | | AOC2 CS3 | AOC2 CS3 | AOC2 CS4 | AOC2 CS4 | AOC2 CS4 |
| **Depth Below Grade (ft.)** | | | | (5-7) | | (2-4) | (5-7) | (0-2) | (2-4) | (5-7) |
| **Sample Collection Date** | | | | 1/30/02 | 3/12/02 | 1/30/02 | 1/30/02 | 1/30/02 | 1/30/02 | 1/30/02 |
| **USEPA Method 8270 Polynuclear Aromatics (PAHs)** | | | | | | | | | | |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.72 | NT | 0.29 | 0.64 | ND<0.20 | 0.61 | 0.59 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 1.40 | NT | 0.49 | 1.10 | ND<0.20 | 1.20 | 1.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.36 | NT | ND<0.20 | 0.34 | ND<0.20 | 0.29 | 0.31 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.65 | NT | 0.24 | 0.48 | ND<0.20 | 0.48 | 0.52 |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.93 | NT | 0.36 | 0.85 | ND<0.20 | 0.79 | 0.82 |
| Chrysene | 84 | 780 | 1 | 0.67 | NT | 0.27 | 0.58 | ND<0.20 | 0.57 | 0.55 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | 1.20 | NT | 0.47 | 0.87 | ND<0.20 | 1.10 | 0.99 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.38 | NT | ND<0.20 | 0.39 | ND<0.20 | 0.33 | 0.34 |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.31 | NT | ND<0.20 | 0.29 | ND<0.20 | 0.54 | 0.35 |
| Pyrene | 1,000 | 2,500 | 40 | 1.20 | NT | 0.44 | 0.98 | ND<0.20 | 1.00 | 1.00 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | NT | ND | NT | ND | NT | NT | ND |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | NA | NA | NA | NT | ND | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (ETPH)** | 500 | 2,500 | 2,500 | ND<50 | NT | ND<50 | 55 | ND<50 | ND<50 | 50 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
☐ = Concentration exceeds associated criterion.

## Table AOC-2.2
## Comparison of Confirmatory Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mgkg) | | Pollutant Mobility Criteria for Soil (mgkg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial Commercial | GB Area | AOC2 CS5 | AOC2 CS5 | AOC2 CS6 | AOC2 CS6 | | AOC2 CS6 | |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (0-0.25) | (0-2) | | (2-4) | |
| **Sample Collection Date** | | | | 1/30/02 | 1/30/02 | 3/12/02 | 1/30/02 | 3/12/02 | 1/30/02 | 3/12/02 |
| **USEPA Method 8270 Polynuclear Aromatics (PAHs)** | | | | | | | | | | |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | NT | ND<0.20 | NT | ND<0.20 | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | NT | ND<0.20 | NT | ND<0.20 | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.34 | 0.57 | NT | ND<0.20 | NT | 0.57 | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.62 | 1.00 | NT | ND<0.20 | NT | 1.20 | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | 0.27 | NT | ND<0.20 | NT | 0.36 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.30 | 0.56 | NT | ND<0.20 | NT | 0.60 | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.40 | 0.77 | NT | ND<0.20 | NT | 0.87 | NT |
| Chrysene | 84 | 780 | 1 | 0.28 | 0.51 | NT | ND<0.20 | NT | 0.51 | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | ND<0.20 | NT | ND<0.20 | NT | ND<0.20 | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.55 | 0.86 | NT | ND<0.20 | NT | 0.96 | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | 0.33 | NT | ND<0.20 | NT | 0.35 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | 0.31 | NT | ND<0.20 | NT | 0.48 | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.51 | 0.91 | NT | ND<0.20 | NT | 0.92 | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | NT | ND | NT | NT | ND | ND | NT |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | NA | NA | NA | NT | NT | ND | NT | ND | NT | ND |
| **Connecticut Extractable Total Petroleum Hydrocarbons (ETPH)** | 500 | 2,500 | 2,500 | ND<50 | 56 | NT | ND<50 | NT | 80 | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
☐ = Concentration exceeds associated criterion.

## Table AOC-2.2
## Comparison of Confirmatory Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mgkg) | | Pollutant Mobility Criteria for Soil (mgkg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial Commercial | GB Area | AOC2 CS6 | | AOC2 CS7 | AOC2 CS7 | AOC2 CS8 | AOC2 CS9 |
| **Depth Below Grade (ft.)** | | | | (5-7) | | (2-4) | (5-7) | (7-7.5) | (7-7.5) |
| **Sample Collection Date** | | | | 1/30/02 | 3/12/02 | 1/30/02 | 1/30/02 | 1/30/02 | 1/30/02 |
| **USEPA Method 8270 Polynuclear Aromatics (PAHs)** | | | | | | | | | |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | 0.20 | ND<0.20 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | 0.37 | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.90 | NT | **1.10** | 0.91 | 0.26 | 0.46 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | **2.10** | NT | **2.00** | **1.90** | 0.59 | 0.96 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.45 | NT | 0.50 | 0.51 | ND<0.20 | 0.25 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.76 | NT | **1.10** | 0.72 | 0.33 | 0.51 |
| Benzo[a]pyrene | 1 | 1 | 1 | **1.30** | NT | **1.50** | **1.40** | 0.43 | 0.66 |
| Chrysene | 84 | 780 | 1 | 0.77 | NT | 0.92 | 0.80 | 0.23 | 0.41 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | 1.70 | NT | 2.10 | 1.70 | 0.39 | 0.69 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.48 | NT | 0.61 | 0.55 | ND<0.20 | 0.28 |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.67 | NT | 0.94 | 0.55 | ND<0.20 | 0.28 |
| Pyrene | 1,000 | 2,500 | 40 | 1.60 | NT | 2.10 | 1.80 | 0.41 | 0.73 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | NA | NA | NA | ND | NT | ND | ND | ND | NT |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | NA | NA | NA | NT | ND | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (ETPH)** | **500** | 2,500 | 2,500 | 130 | NT | 55 | 170 | ND<50 | ND<50 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
☐ = Concentration exceeds associated criterion.

**Table AOC-2.4**
**Comparison of Test Boring Soil Sample Analyte Concentrations**
**to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-AA/ MW-J | TB-AA/ MW-J | TB-AA/ MW-J | TB-AA/ MW-J | TB-BB/ MW-K | TB-BB/ MW-K |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-6.5) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | 0.39 | 0.65 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | 0.45 | 0.91 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | 0.38 | 0.55 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | ND<0.2 | 0.48 |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | 0.39 | 0.73 |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | 0.24 | 0.39 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | 0.52 | 1.1 |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | 0.36 | 0.51 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.2 | ND<0.2 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | 0.21 | 0.48 |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | 0.52 | 0.80 |
| **Total Metals** | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 1.7 | 1.1 | ND<1.0 | 1.0 | 1.1 | 1.2 |
| Barium | 4,700 | 140,000 | NA | 62 | 120 | 27 | 20 | 38 | 41 |
| Cadmium | 34 | 1,000 | NA | 0.82 | 0.59 | 0.69 | ND<0.50 | 0.55 | 0.53 |
| Chromium | 100* | 100* | NA | 18 | 8.0 | 10 | 5.8 | 11 | 10 |
| Copper | 2,500 | 76,000 | NA | 27 | 23 | 39 | 23 | 36 | 30 |
| Lead | 500 | 1,000 | NA | 8.8 | 28 | 30 | 36 | 35 | 42 |

## Table AOC-2.4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT
## Sampling Date: July 18, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-AA/ MW-J | TB-AA/ MW-J | TB-AA/ MW-J | TB-AA/ MW-J | TB-BB/ MW-K | TB-BB/ MW-K |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-6.5) | (10-12) | (0-2) | (2-4) |
| Nickel | 1,400 | 7,500 | NA | 16 | 6.6 | 12 | 5.2 | 8.0 | 7.6 |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 |
| Zinc | 20,000 | 610,000 | NA | 37 | 41 | 38 | 35 | 39 | 47 |
| **SPLP Metals** | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | NT | NT | NT | NT | 230 | **520** |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
• = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table AOC-2.4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT
## Sampling Date: July 18, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-BB/ MW-K | TB-BB/ MW-K | TB-CC | TB-CC | TB-CC | TB-CC |
| **Depth Below Grade (ft.)** | | | | (5-5.9) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.2 | ND<0.2 | NT | ND<0.2 | ND<0.2 | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | 0.25 | ND<0.2 | NT | ND<0.2 | ND<0.2 | NT |
| Anthracene | 1,000 | 2,500 | 400 | 0.41 | ND<0.2 | NT | ND<0.2 | ND<0.2 | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 1.6 | 0.47 | NT | 0.53 | 1.0 | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 1.8 | 0.59 | NT | 0.68 | 1.5 | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.81 | 0.58 | NT | 0.45 | 0.89 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.76 | 0.31 | NT | 0.33 | 0.58 | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 1.8 | 0.54 | NT | 0.61 | 1.2 | NT |
| Chrysene | 84 | 780 | 1 | 1.0 | 0.28 | NT | 0.25 | 0.62 | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | 0.26 | ND<0.2 | NT | ND<0.2 | 0.27 | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 4.2 | 0.67 | NT | 0.89 | 1.8 | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | NT | ND<0.2 | ND<0.2 | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.84 | 0.41 | NT | 0.40 | 0.80 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | NT | ND<0.2 | ND<0.2 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.96 | 0.26 | NT | 0.43 | 0.65 | NT |
| Pyrene | 1,000 | 2,500 | 40 | 5.0 | 0.64 | NT | 0.57 | 1.8 | NT |
| **Total Metals** | | | | | | | | | |
| Arsenic | 10 | 10 | NA | ND<1.0 | 1.0 | 1.5 | 1.0 | 1.6 | 1.1 |
| Barium | 4,700 | 140,000 | NA | 42 | 50 | 41 | 33 | 41 | 32 |
| Cadmium | 34 | 1,000 | NA | 0.56 | ND<0.50 | 0.56 | 0.53 | 0.76 | ND<0.50 |
| Chromium | 100* | 100* | NA | 10 | 11 | 8.9 | 9.4 | 11 | 7.3 |
| Copper | 2,500 | 76,000 | NA | 31 | 24 | 94 | 35 | 34 | 27 |
| Lead | 500 | 1,000 | NA | 28 | 29 | 29 | 45 | 39 | 37 |

## Table AOC-2.4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT
## Sampling Date: July 18, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-BB/ MW-K | TB-BB/ MW-K | TB-CC | TB-CC | TB-CC | TB-CC |
| **Depth Below Grade (ft.)** | | | | (5-5.9) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) |
| Nickel | 1,400 | 7,500 | NA | 8.1 | 7.6 | 7.8 | 7.7 | 8.7 | 6.0 |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 |
| Zinc | 20,000 | 610,000 | NA | 31 | 37 | 38 | 55 | 42 | 35 |
| **SPLP Metals** | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | ND<0.05 | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | 0.37 | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | 0.18 | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | 790 | 140 | NT | 270 | 210 | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

## Table AOC-2.4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-DD | TB-DD | TB-DD | TB-DD | TB-EE | TB-EE |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-6) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.2 | ND<0.2 | ND<0.2 | NT | NT | 8.3 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.2 | ND<0.2 | ND<0.2 | NT | NT | 2.6 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.2 | ND<0.2 | ND<0.2 | NT | NT | 20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | ND<0.2 | 0.48 | 0.98 | NT | NT | 17 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | ND<0.2 | 0.73 | 2.6 | NT | NT | 60 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.2 | 0.50 | 1.2 | NT | NT | 6.0 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.2 | 0.36 | 0.98 | NT | NT | 16 |
| Benzo[a]pyrene | 1 | 1 | 1 | ND<0.2 | 0.64 | 2.0 | NT | NT | 35 |
| Chrysene | 84 | 780 | 1 | ND<0.2 | 0.26 | 0.52 | NT | NT | 19 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.2 | ND<0.2 | 0.32 | NT | NT | 2.8 |
| Fluoranthene | 1,000 | 2,500 | 56 | ND<0.2 | 0.76 | 1.6 | NT | NT | 64 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | ND<0.2 | NT | NT | 10 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.2 | 0.42 | 1.1 | NT | NT | 7.6 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | ND<0.2 | NT | NT | 0.55 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.2 | 0.55 | 0.29 | NT | NT | 70 |
| Pyrene | 1,000 | 2,500 | 40 | ND<0.2 | 0.64 | 1.9 | NT | NT | 54 |
| **Total Metals** | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 1.5 | ND<1.0 | 1.1 | 1.2 | 1.5 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | 47 | 30 | 30 | 37 | 49 | 41 |
| Cadmium | 34 | 1,000 | NA | 0.77 | 0.58 | ND<0.50 | ND<0.50 | 0.77 | 0.55 |
| Chromium | 100* | 100* | NA | 18 | 8.5 | 9.7 | 9.0 | 20 | 11 |
| Copper | 2,500 | 76,000 | NA | 27 | 30 | 30 | 27 | 24 | 27 |
| Lead | 500 | 1,000 | NA | 8.0 | 34 | 41 | 44 | 8.8 | 19 |

Table AOC-2.4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-DD | TB-DD | TB-DD | TB-DD | TB-EE | TB-EE |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-6) | (10-12) | (0-2) | (2-4) |
| Nickel | 1,400 | 7,500 | NA | 17 | 6.4 | 8.5 | 6.9 | 17 | 8.8 |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | 3.3 | ND<2.0 | ND<2.0 | ND<2.0 |
| Zinc | 20,000 | 610,000 | NA | 38 | 42 | 44 | 43 | 39 | 38 |
| **SPLP Metals** | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | 220 | 310 | NT | NT | NT |

Notes:
mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
• = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

## Table AOC-2.4
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, AOC-2, New Haven, CT
## Sampling Date: July 18, 2001

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-EE | TB-EE | TB-FF | TB-FF | TB-FF | TB-GG |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-11) | (0-2) | (2-4) | (5-7) | (0-2) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.2 | ND<0.2 | NT | NT | ND<0.2 | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.2 | ND<0.2 | NT | NT | 0.21 | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.2 | ND<0.2 | NT | NT | ND<0.2 | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.60 | 1.0 | NT | NT | 0.99 | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.92 | 1.7 | NT | NT | 1.7 | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.46 | 0.72 | NT | NT | 0.94 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.44 | 0.86 | NT | NT | 0.74 | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.55 | 1.0 | NT | NT | 1.4 | NT |
| Chrysene | 84 | 780 | 1 | 0.25 | 0.56 | NT | NT | 0.64 | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.2 | 0.23 | NT | NT | 0.23 | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.74 | 1.6 | NT | NT | 1.3 | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | NT | NT | ND<0.2 | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.42 | 0.77 | NT | NT | 0.85 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.2 | ND<0.2 | NT | NT | ND<0.2 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.2 | 0.44 | NT | NT | 0.26 | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.80 | 1.7 | NT | NT | 1.7 | NT |
| **Total Metals** | | | | | | | | | |
| Arsenic | 10 | 10 | NA | ND<1.0 | ND<1.0 | 1.5 | ND<1.0 | 1.0 | 2.6 |
| Barium | 4,700 | 140,000 | NA | 37 | 31 | 51 | 36 | 36 | 41 |
| Cadmium | 34 | 1,000 | NA | 0.60 | ND<0.50 | 0.82 | 0.53 | 0.55 | 1.1 |
| Chromium | 100* | 100* | NA | 9.9 | 6.4 | 21 | 7.2 | 8.4 | 39 |
| Copper | 2,500 | 76,000 | NA | 30 | 15 | 27 | 22 | 28 | 31 |
| Lead | 500 | 1,000 | NA | 33 | 15 | 7.4 | 30 | 59 | 6.1 |

Table AOC-2.4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-EE | TB-EE | TB-FF | TB-FF | TB-FF | TB-GG |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-11) | (0-2) | (2-4) | (5-7) | (0-2) |
| Nickel | 1,400 | 7,500 | NA | 7.6 | 5.0 | 16 | 6.1 | 7.1 | 22 |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 |
| Zinc | 20,000 | 610,000 | NA | 220 | 22 | 39 | 34 | 38 | 42 |
| **SPLP Metals** | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | NT | NT | NT |

Notes:
mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
• = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

Table AOC-2.4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-GG | TB-GG | TB-HH | TB-HH | TB-HH | TB-HH |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (0-2) | (2-4) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatics** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.2 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.2 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.2 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.65 | NT | 0.36 | 0.39 | 0.59 | 0.22 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 1.0 | NT | 0.51 | 0.71 | 1.3 | 0.29 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.54 | NT | 0.21 | 0.41 | 0.95 | ND<0.2 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.58 | NT | 0.33 | 0.37 | 0.73 | ND<0.2 |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.91 | NT | 0.46 | 0.41 | 1.0 | 0.39 |
| Chrysene | 84 | 780 | 1 | 0.42 | NT | 0.22 | 0.25 | 0.31 | ND<0.2 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | 0.21 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Fluoranthene | 1,000 | 2,500 | 56 | 1.4 | NT | 0.72 | 0.59 | 0.74 | ND<0.2 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.2 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.56 | NT | 0.29 | 0.38 | 0.86 | ND<0.2 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.2 | NT | ND<0.2 | ND<0.2 | ND<0.2 | ND<0.2 |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.53 | NT | 0.87 | 0.36 | 0.26 | ND<0.2 |
| Pyrene | 1,000 | 2,500 | 40 | 0.84 | NT | 0.51 | 0.50 | 0.59 | 0.24 |
| **Total Metals** | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 1.4 | 1.7 | 1.1 | 1.5 | 1.6 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | 44 | 40 | 42 | 38 | 33 | 37 |
| Cadmium | 34 | 1,000 | NA | 0.56 | 0.65 | 0.57 | 0.61 | 0.53 | ND<0.50 |
| Chromium | 100* | 100* | NA | 8.7 | 10 | 12 | 19 | 8.8 | 7.5 |
| Copper | 2,500 | 76,000 | NA | 28 | 43 | 26 | 31 | 35 | 18 |
| Lead | 500 | 1,000 | NA | 29 | 39 | 24 | 23 | 43 | 16 |

Table AOC-2.4

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, AOC-2, New Haven, CT**
**Sampling Date: July 18, 2001**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-GG | TB-GG | TB-HH | TB-HH | TB-HH | TB-HH |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (0-2) | (2-4) | (5-7) | (10-12) |
| Nickel | 1,400 | 7,500 | NA | 8.1 | 14 | 8.7 | 8.8 | 7.7 | 5.6 |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 |
| Zinc | 20,000 | 610,000 | NA | 42 | 86 | 34 | 41 | 44 | 31 |
| **SPLP Metals** | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | 130 | 230 | 710 |

Notes:
mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

## Table YY
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, Southwest Portion, New Haven, CT
## Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-AAA | TB-AAA | TB-AAA | TB-AAA | TB-AAA | TB-BBB | TB-BBB |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (15-17) | (1-3) | (3-5) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.91 | ND<0.20 |
| Benzo[b]fluoranthene | **1** | **7.8** | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | **1.33** | ND<0.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.24 | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.51 | ND<0.20 |
| Benzo[a]pyrene | **1** | **1** | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.74 | ND<0.20 |
| Chrysene | 84 | 780 | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.92 | ND<0.20 |
| Dibenz[a,h]anthracene | **1** | **1** | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 1.0 | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | 7.8 | 1 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.30 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.37 | ND<0.20 |
| Pyrene | 1,000 | 2,500 | 40 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | 0.88 | ND<0.20 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1260 | **1** | **10** | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT | ND<0.50 | **15** |
| **SPLP PCBs** | | | | | | | | | | |
| PCB-1260 | NA | NA | 0.005 | NT | NT | NT | NT | NT | NT | 0.00074 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | 0.0075 | NT | NT | NT | NT |

TABLE YY

## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-AAA | TB-AAA | TB-AAA | TB-AAA | TB-AAA | TB-BBB | TB-BBB |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (15-17) | (1-3) | (3-5) |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | 0.50 | NT | NT | NT | NT | 0.35 | NT |
| Lead | NA | NA | 0.15 | ND<0.013 | NT | NT | NT | NT | ND<0.013 | NT |
| Vanadium | NA | NA | 0.50 | ND<0.05 | NT | NT | NT | NT | ND<0.05 | NT |
| Zinc | NA | NA | 50 | 0.20 | NT | NT | NT | NT | 0.26 | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | ND<1.0 | ND<1.0 | 3.4 | 5.9 | 4.2 | 17 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | 19 | NT | NT | NT | NT | 34 | NT |
| Cadmium | 34 | 1,000 | NA | ND<0.50 | NT | NT | NT | NT | 1.4 | NT |
| Chromium | 100* | 100* | NA | 3.5 | NT | NT | NT | NT | 5.8 | NT |
| Copper | 2,500 | 76,000 | NA | 5.2 | NT | NT | NT | NT | 40 | NT |
| Lead | 500 | 1,000 | NA | 43 | NT | NT | NT | NT | 58 | NT |
| Mercury | 20 | 610 | NA | ND<0.20 | NT | NT | NT | NT | 0.61 | NT |
| Nickel | 1,400 | 7,500 | NA | 2.4 | NT | NT | NT | NT | 7.3 | NT |
| Thallium | 5.4 | 160 | NA | ND<2.0 | NT | NT | NT | NT | 5.1 | NT |
| Vanadium | 470 | 14,000 | NA | 6.4 | NT | NT | NT | NT | 11 | NT |
| Zinc | 20,000 | 610,000 | NA | 13 | NT | NT | NT | NT | 35 | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | ND<50 | ND<50 | ND<50 | NT | ND<50 | 210 |
| **RSR Pesticides/Herbicides** | NA | NA | NA | NT | NT | NT | NT | NT | NT | NT |

Notes;

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
RSR = Remediation Standard Regulations.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

**TABLE YY**

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-BBB | TB-BBB | TB-CCC | TB-CCC | TB-CCC | TB-CCC | TB-DDD |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-13) | (0-2) | (2-2.5) | (5-7) | (10-13) | (0-2) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | 0.52 | NT | ND<0.20 | ND<0.20 | 0.83 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | 0.70 | NT | ND<0.20 | 0.21 | 1.43 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | 0.21 | NT | ND<0.20 | ND<0.20 | 0.28 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | 0.35 | NT | ND<0.20 | ND<0.20 | 0.69 |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | 0.47 | NT | ND<0.20 | ND<0.20 | 0.83 |
| Chrysene | 84 | 780 | 1 | NT | NT | 0.50 | NT | ND<0.20 | ND<0.20 | 0.88 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | 0.87 | NT | ND<0.20 | 0.23 | 1.4 |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | 0.34 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | ND<0.20 | ND<0.20 | 0.80 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | 0.69 | NT | ND<0.20 | ND<0.20 | 0.67 |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | 0.73 | NT | ND<0.20 | 0.31 | 1.3 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1260 | 1 | 10 | NA | 15 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **SPLP PCBs** | | | | | | | | | | |
| PCB-1260 | NA | NA | 0.005 | 0.00072 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | ND<0.005 | NT | NT | NT | NT | NT | NT |

TABLE YY

## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-BBB | TB-BBB | TB-CCC | TB-CCC | TB-CCC | TB-CCC | TB-DDD |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-13) | (0-2) | (2-2.5) | (5-7) | (10-13) | (0-2) |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | NT | NT | 0.32 | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | ND<0.013 | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | ND<0.05 | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.49 | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | **10** | **10** | NA | 5.6 | 5.4 | **36** | **21** | **11** | 4.5 | **29** |
| Barium | 4,700 | 140,000 | NA | NT | NT | 44 | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 0.81 | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 4.8 | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 47 | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 57 | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | 0.84 | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 7.3 | NT | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | 2.5 | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 14 | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 76 | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | **1,100** | ND<50 | ND<50 | NT | ND<50 | ND<50 | ND<50 |
| **RSR Pesticides/Herbicides** | NA | NA | NA | NT | NT | ND | NT | NT | NT | ND |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
RSR = Remediation Standard Regulations.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

TABLE YY

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-DDD | TB-DDD | TB-DDD | TB-EEE | TB-EEE | TB-EEE | TB-EEE |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (10-12) | (1-3) | (3-5) | (5-7) | (10-12) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | 0.51 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | 1.0 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Benzo[a]anthracene | **1** | **7.8** | **1** | ND<0.20 | **2.3** | 0.43 | 0.21 | ND<0.20 | NT | NT |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | 0.26 | **2.6** | 0.52 | 0.33 | ND<0.20 | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | 0.51 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | ND<0.20 | **1.1** | 0.26 | ND<0.20 | ND<0.20 | NT | NT |
| Benzo[a]pyrene | **1** | **1** | **1** | ND<0.20 | **2.1** | 0.41 | 0.22 | ND<0.20 | NT | NT |
| Chrysene | 84 | 780 | **1** | ND<0.20 | **1.9** | 0.39 | ND<0.20 | ND<0.20 | NT | NT |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Fluoranthene | 1,000 | 2,500 | **56** | 0.32 | 6.2 | 0.62 | 0.34 | ND<0.20 | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | 0.59 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Indeno[1,2,3-cd]pyrene | **1** | 7.8 | **1** | ND<0.20 | 0.64 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | 0.52 | ND<0.20 | ND<0.20 | ND<0.20 | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | 5.1 | 0.30 | ND<0.20 | ND<0.20 | NT | NT |
| Pyrene | 1,000 | 2,500 | **40** | 0.31 | 5.1 | 0.69 | 0.34 | ND<0.20 | NT | NT |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1260 | **1** | **10** | NA | NT | NT | NT | NT | NT | NT | NT |
| **SPLP PCBs** | | | | | | | | | | |
| PCB-1260 | NA | NA | 0.005 | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | NT | NT | NT | NT | NT |

TABLE YY

## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-DDD | TB-DDD | TB-DDD | TB-EEE | TB-EEE | TB-EEE | TB-EEE |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-7) | (10-12) | (1-3) | (3-5) | (5-7) | (10-12) |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | 0.40 | NT | NT | 0.46 | NT | NT | NT |
| Lead | NA | NA | 0.15 | 0.02 | NT | NT | ND<0.013 | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | ND<0.05 | NT | NT | ND<0.05 | NT | NT | NT |
| Zinc | NA | NA | 50 | 0.18 | NT | NT | 0.31 | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 4.2 | 12 | 22 | 3.5 | 3.5 | 3.8 | 5.8 |
| Barium | 4,700 | 140,000 | NA | 35 | NT | NT | 22 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | 0.97 | NT | NT | 0.94 | NT | NT | NT |
| Chromium | 100* | 100* | NA | 10 | NT | NT | 11 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | 15 | NT | NT | 20 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | 94 | NT | NT | 15 | NT | NT | NT |
| Mercury | 20 | 610 | NA | 0.55 | NT | NT | ND<0.20 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | 6.2 | NT | NT | 6.8 | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | 2.8 | NT | NT | 3.2 | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | 16 | NT | NT | 15 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | 40 | NT | NT | 26 | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | ND<50 | NT | ND<50 | ND<50 | NT | NT |
| **RSR Pesticides/Herbicides** | NA | NA | NA | NT | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
RSR = Remediation Standard Regulations.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

TABLE YY

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-FFF | TB-FFF | TB-FFF | TB-FFF | TB-GGG | TB-GGG | TB-GGG |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-1.2) | (2-4) | (5-7) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | 5.5 | 2.6 | ND<0.20 | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | 0.37 | 0.40 | ND<0.20 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | 24 | 2.6 | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | ND<0.20 | ND<0.20 | **34** | **5.6** | 0.45 | ND<0.20 | ND<0.20 |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | ND<0.20 | 0.24 | **44** | **7.3** | 0.75 | 0.28 | ND<0.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | ND<0.20 | 4.8 | 1.4 | ND<0.20 | ND<0.20 | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | ND<0.20 | ND<0.20 | **12** | **2.7** | 0.33 | ND<0.20 | ND<0.20 |
| Benzo[a]pyrene | **1** | **1** | **1** | ND<0.20 | ND<0.20 | **79** | **5.4** | 0.45 | ND<0.20 | ND<0.20 |
| Chrysene | 84 | 780 | **1** | ND<0.20 | ND<0.20 | **30** | **4.6** | 0.46 | ND<0.20 | ND<0.20 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | ND<0.20 | ND<0.20 | **1.6** | 0.23 | ND<0.20 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | 0.22 | 0.27 | **125** | 17 | 0.87 | 0.29 | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | 5.6 | 1.8 | ND<0.20 | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | 7.8 | **1** | ND<0.20 | ND<0.20 | **5.7** | **1.5** | ND<0.20 | ND<0.20 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | 0.22 | 6.5 | ND<0.20 | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | ND<0.20 | 22 | 12 | 0.47 | ND<0.20 | ND<0.20 |
| Pyrene | 1,000 | 2,500 | **40** | 0.21 | 0.25 | **130** | 16 | 0.78 | 0.30 | ND<0.20 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | | |
| PCB-1260 | **1** | **10** | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT | NT | NT |
| **SPLP PCBs** | | | | | | | | | | |
| PCB-1260 | NA | NA | 0.005 | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | ND<0.005 | ND<0.005 | NT | NT | NT |

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## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, Southwest Portion, New Haven, CT Sampling Date: February 13, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-FFF | TB-FFF | TB-FFF | TB-FFF | TB-GGG | TB-GGG | TB-GGG |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-1.2) | (2-4) | (5-7) |
| **SPLP Metals** | | | | | | | | | | |
| Barium | NA | NA | 10 | NT | 0.25 | NT | NT | NT | 0.37 | NT |
| Lead | NA | NA | 0.15 | NT | ND<0.013 | NT | NT | NT | ND<0.013 | NT |
| Vanadium | NA | NA | 0.50 | NT | ND<0.05 | NT | NT | NT | 0.17 | NT |
| Zinc | NA | NA | 50 | NT | 0.16 | NT | NT | NT | 0.17 | NT |
| **Total Metals** | | | | | | | | | | |
| Arsenic | 10 | 10 | NA | 2.2 | 1.9 | 16 | 6.5 | 1.8 | ND<1.0 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | NT | 15 | NT | NT | NT | 22 | NT |
| Cadmium | 34 | 1,000 | NA | NT | 0.50 | NT | NT | NT | 0.59 | NT |
| Chromium | 100* | 100* | NA | NT | 4.9 | NT | NT | NT | 5.2 | NT |
| Copper | 2,500 | 76,000 | NA | NT | 28 | NT | NT | NT | 26 | NT |
| Lead | 500 | 1,000 | NA | NT | 8.7 | NT | NT | NT | 14 | NT |
| Mercury | 20 | 610 | NA | NT | ND<0.20 | NT | NT | NT | ND<0.20 | NT |
| Nickel | 1,400 | 7,500 | NA | NT | 5.3 | NT | NT | NT | 5.6 | NT |
| Thallium | 5.4 | 160 | NA | NT | 2.4 | NT | NT | NT | ND<2.0 | NT |
| Vanadium | 470 | 14,000 | NA | NT | 11 | NT | NT | NT | 27 | NT |
| Zinc | 20,000 | 610,000 | NA | NT | 16 | NT | NT | NT | 19 | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | ND<50 | ND<50 | 130 | ND<50 | ND<50 | ND<50 |
| **RSR Pesticides/Herbicides** | NA | NA | NA | NT | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
RSR = Remediation Standard Regulations.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-II | TB-II | TB-II | TB-II | TB-JJ | TB-JJ | TB-JJ |
| Depth Below Grade (ft.) | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (4-6) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | ND<0.20 | 1.1 | ND<0.20 | 0.48 | 0.21 |
| Acenaphthylene | 1,000 | 2,500 | 84 | 0.20 | ND<0.20 | ND<0.20 | 0.96 | 0.23 | 0.25 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | 0.39 | ND<0.20 | 0.70 | 7.1 | 0.49 | 0.51 | 0.30 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | **1.9** | 0.72 | **3.3** | **17** | **3.2** | **1.9** | **1.1** |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | **1.9** | 0.57 | **3.0** | **19** | **3.8** | **1.6** | 0.96 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 1.7 | ND<0.20 | 1.6 | 4.5 | 1.9 | 0.94 | 0.63 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | 0.74 | 0.25 | 1.0 | **5.5** | **1.1** | 0.64 | 0.34 |
| Benzo[a]pyrene | **1** | **1** | **1** | **1.8** | 0.61 | **2.3** | **13** | **2.6** | **1.7** | 0.98 |
| Chrysene | 84 | 780 | **1** | **1.6** | 0.65 | **3.3** | **17** | **3.3** | **1.4** | 0.80 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | 0.27 | ND<0.20 | 0.51 | **1.4** | 0.52 | 0.24 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | 4.4 | 1.0 | 8.3 | **94** | 8.5 | 5.5 | 2.2 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | 0.32 | 1.1 | ND<0.20 | 0.53 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | **1.7** | ND<0.20 | **1.9** | **6.0** | **2.2** | **1.2** | 0.71 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | 0.48 | 4.1 | 0.38 | 1.1 | 0.41 |
| Phenanthrene | 1,000 | 2,500 | **40** | 1.7 | 0.66 | 3.9 | 36 | 3.7 | 1.7 | 0.65 |
| Pyrene | 1,000 | 2,500 | **40** | 4.0 | 1.1 | 7.6 | **88** | 7.9 | 4.3 | 2.0 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | NT | ND<0.50 | NT | NT | ND<0.50 | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | ND<0.005 | NT | NT | ND<0.005 | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | 0.025 | NT | NT | 0.19 | 0.0061 |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | ND<0.005 | NT | NT | ND<0.005 | ND<0.005 |
| Toluene | 500 | 1,000 | 67 | NT | NT | ND<0.005 | NT | NT | ND<0.005 | ND<0.005 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | 0.011 | NT | NT | ND<0.005 | ND<0.005 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | 0.0068 | NT | NT | ND<0.005 | ND<0.005 |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | ND<0.005 | NT | NT | ND<0.005 | ND<0.005 |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-II | TB-II | TB-II | TB-II | TB-JJ | TB-JJ | TB-JJ |
| **Depth Below Grade (ft.)** | | | | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) | (2-4) | (4-6) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | ND<0.05 | NT | ND<0.05 | NT | NT |
| Barium | NA | NA | 10 | NT | 0.39 | NT | NT | 0.33 | NT | NT |
| Zinc | NA | NA | 50 | NT | 0.23 | NT | NT | 0.13 | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | ND<2.0 | NT | NT | ND<2.0 | NT | NT |
| Arsenic | **10** | **10** | NA | 3.9 | 2.3 | **48** | **15** | **53** | ND<1.0 | 1.9 |
| Barium | 4,700 | 140,000 | NA | NT | 24 | NT | NT | 59 | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | 1.2 | NT | NT | 2.8 | NT | NT |
| Chromium | 100* | 100* | NA | NT | 12 | NT | NT | 14 | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | 54 | NT | NT | 71 | NT | NT |
| Lead | 500 | 1,000 | NA | NT | 24 | NT | NT | 84 | NT | NT |
| Mercury | 20 | 610 | NA | NT | ND<0.20 | NT | NT | 4.8 | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | 8.7 | NT | NT | 13 | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | ND<1.0 | NT | NT | 2.5 | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | 5.1 | **8.0** | NT | 3.9 | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | 33 | NT | NT | 43 | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | 42 | NT | NT | 67 | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | 220 | 150 | 250 | 420 | 230 | 100 | 120 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Tab[redacted]C-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJ | TB-KK | TB-KK | TB-KK | TB-KK | TB-LL | TB-LL |
| **Depth Below Grade (ft.)** | | | | (6-7) | (0-2) | (2-4) | (4-6) | (6-7) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | 0.63 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | ND<0.20 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | 1.8 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | NT | ND<0.20 | **4.7** | 0.25 | NT | 0.58 | 0.41 |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | NT | 0.24 | **5.0** | 0.20 | NT | 0.72 | 0.42 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | 2.8 | 0.23 | NT | 0.47 | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | NT | ND<0.20 | **1.8** | ND<0.20 | NT | 0.28 | ND<0.20 |
| Benzo[a]pyrene | **1** | **1** | **1** | NT | ND<0.20 | **4.1** | 0.22 | NT | 0.57 | 0.35 |
| Chrysene | 84 | 780 | **1** | NT | ND<0.20 | **4.0** | 0.21 | NT | 0.57 | 0.31 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | NT | ND<0.20 | 0.61 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | NT | 0.28 | 19 | 0.44 | NT | 1.0 | 0.61 |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | 0.70 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | NT | ND<0.20 | **2.9** | ND<0.20 | NT | 0.48 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | 0.34 | ND<0.20 | NT | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | **40** | NT | ND<0.20 | 9.7 | 0.29 | NT | 0.46 | 0.29 |
| Pyrene | 1,000 | 2,500 | **40** | NT | 0.25 | 16 | 0.40 | NT | 0.95 | 0.57 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | ND<0.50 | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | 0.0078 | NT | NT | NT | ND<0.005 | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Toluene | 500 | 1,000 | 67 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | ND<0.005 | NT | NT | NT | ND<0.005 | NT |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJ | TB-KK | TB-KK | TB-KK | TB-KK | TB-LL | TB-LL |
| **Depth Below Grade (ft.)** | | | | (6-7) | (0-2) | (2-4) | (4-6) | (6-7) | (0-2) | (2-4) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.23 | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.15 | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | 3.2 | NT | NT | NT | NT |
| Arsenic | **10** | **10** | NA | 2.7 | 3.1 | 4.7 | ND<1.0 | 3.5 | 4.8 | 2.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | 40 | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 2.8 | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 17 | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 120 | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 45 | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | 0.89 | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 17 | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | **12** | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 34 | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 70 | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | NT | 110 | 110 | ND<50 | NT | 220 | 61 |

Notes;

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

Tab [redacted] C-12.1

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, New Haven, CT**
**Sampling Date: February 8, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-LL | TB-LL | TB-MM | TB-MM | TB-MM | TB-MM | TB-NN |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | 0.31 | ND<0.20 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | 0.88 | 0.23 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | 1.0 | ND<0.20 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.65 | 4.4 | 1.4 | 2.2 | 1.5 | 0.79 | 0.88 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.77 | 4.5 | 2.0 | 2.6 | 3.3 | 1.1 | 0.98 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | 2.1 | 1.0 | 1.2 | 2.3 | 0.46 | 0.64 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | 0.27 | 1.7 | 0.57 | 1.1 | 1.3 | 0.45 | 0.33 |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.47 | 4.0 | 1.4 | 1.8 | 2.6 | 0.99 | 0.80 |
| Chrysene | 84 | 780 | 1 | 0.54 | 4.4 | 1.4 | 2.0 | 1.4 | 0.77 | 0.75 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | 0.56 | 0.24 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | 1.3 | 15 | 2.2 | 3.8 | 1.7 | 1.1 | 1.2 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | 0.38 | ND<0.20 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | 2.4 | 1.3 | 1.1 | 2.1 | 0.41 | 0.63 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | 0.90 | 0.25 | ND<1.0 | ND<1.0 | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.72 | 2.0 | 1.1 | 3.2 | ND<1.0 | 0.64 | 0.55 |
| Pyrene | 1,000 | 2,500 | 40 | 1.2 | 20 | 2.3 | 3.3 | 1.6 | 1.4 | 1.3 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | NT | NT | ND<0.50 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| Toluene | 500 | 1,000 | 67 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | NT | ND<0.005 | NT | NT | ND<0.005 |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-LL | TB-LL | TB-MM | TB-MM | TB-MM | TB-MM | TB-NN |
| **Depth Below Grade (ft.)** | | | | (5-7) | (10-12) | (0-2) | (2-4) | (5-7) | (10-12) | (0-2) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.39 | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.22 | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT | NT |
| Arsenic | **10** | **10** | NA | 3.6 | 8.5 | **25** | 1.3 | 2.1 | 1.6 | 3.6 |
| Barium | 4,700 | 140,000 | NA | NT | NT | 60 | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 1.8 | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 11 | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 69 | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 72 | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | 3.5 | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 11 | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | 1.3 | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | 4.6 | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 32 | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 69 | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | ND<50 | 500 | 73 | 360 | 280 | **610** | 220 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-NN | TB-NN | TB-NN | TB-OO | TB-OO | TB-OO | TB-PP |
| **Depth Below Grade (ft.)** | | | | (2-4) | (4-6) | (6-7) | (0-2) | (2-4) | (6-7.3) | (0-2) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | 1.0 | ND<0.20 | NT | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | NT | 2.7 | ND<0.20 | NT | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | 0.67 | NT | NT | **12** | **1.1** | NT | ND<0.20 |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | 0.90 | NT | NT | **19** | **1.3** | NT | 0.25 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.31 | NT | NT | 3.4 | 0.58 | NT | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | 1 | 0.35 | NT | NT | **5.5** | 0.51 | NT | ND<0.20 |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.69 | NT | NT | **12** | **1.1** | NT | ND<0.20 |
| Chrysene | 84 | 780 | 1 | 0.59 | NT | NT | **12** | 0.91 | NT | ND<0.20 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | ND<0.20 | NT | NT | **1.1** | ND<0.20 | NT | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | 1.1 | NT | NT | 37 | 1.7 | NT | 0.29 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | 0.88 | ND<0.20 | NT | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | 0.39 | NT | NT | **4.2** | 0.48 | NT | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | 0.32 | ND<0.20 | NT | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | **40** | 0.57 | NT | NT | 19 | 1.0 | NT | ND<0.20 |
| Pyrene | 1,000 | 2,500 | **40** | 0.97 | NT | NT | 31 | 1.7 | NT | 0.26 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT | ND<0.005 | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | NT | NT | ND<0.005 | NT | NT |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-NN | TB-NN | TB-NN | TB-OO | TB-OO | TB-OO | TB-PP |
| **Depth Below Grade (ft.)** | | | | (2-4) | (4-6) | (6-7) | (0-2) | (2-4) | (6-7.3) | (0-2) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT | NT |
| Arsenic | **10** | **10** | NA | 4.5 | 2.0 | 3.2 | 1.4 | 3.2 | 1.6 | ND<1.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | NT | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | 70 | 65 | NT | **910** | 210 | NT | 93 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

Table AOC-12.1

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, New Haven, CT**
**Sampling Date: February 8, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-PP | TB-PP | TB-QQ | TB-QQ | TB-QQ | TB-RR | TB-RR |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-6.5) | (0-2) | (5-7) | (10-12) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | 0.65 | NT | ND<1.00 | NT | ND<1.0 | ND<0.20 | ND<1.0 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | ND<1.00 | NT | 1.2 | ND<0.20 | 1.2 |
| Anthracene | 1,000 | 2,500 | 400 | 1.5 | NT | ND<1.00 | NT | 1.0 | ND<0.20 | ND<1.0 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | **6.4** | NT | ND<1.00 | NT | **3.6** | 0.64 | **1.7** |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | **7.9** | NT | ND<1.00 | NT | **6.0** | **1.2** | **4.0** |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 3.9 | NT | ND<1.00 | NT | 1.8 | 0.30 | 1.8 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | **2.7** | NT | ND<1.00 | NT | **2.5** | 0.51 | **1.4** |
| Benzo[a]pyrene | **1** | **1** | **1** | **6.5** | NT | ND<1.00 | NT | **3.9** | 0.68 | **2.3** |
| Chrysene | 84 | 780 | **1** | **5.9** | NT | ND<1.00 | NT | **3.4** | 0.62 | **1.5** |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | 0.96 | NT | ND<1.00 | NT | ND<1.0 | ND<0.20 | ND<1.0 |
| Fluoranthene | 1,000 | 2,500 | **56** | 27 | NT | ND<1.00 | NT | 7.5 | 1.0 | 1.5 |
| Fluorene | 1,000 | 2,500 | 56 | 0.51 | NT | ND<1.00 | NT | ND<1.0 | ND<0.20 | ND<1.0 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | **5.0** | NT | ND<1.00 | NT | **1.9** | 0.37 | **1.3** |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | NT | ND<1.00 | NT | ND<1.0 | ND<0.20 | ND<1.0 |
| Phenanthrene | 1,000 | 2,500 | **40** | 11 | NT | ND<1.00 | NT | 5.2 | 0.44 | ND<1.0 |
| Pyrene | 1,000 | 2,500 | **40** | 25 | NT | ND<1.00 | NT | 6.0 | 0.93 | 1.8 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | NT | ND<0.50 | NT | ND<0.50 | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | NT | NT | ND<0.005 | 0.0077 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | 0.039 | NT | NT | 0.073 | 0.043 | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | NT | NT | ND<0.005 | 0.0079 | NT | NT |
| Toluene | 500 | 1,000 | 67 | ND<0.005 | NT | NT | ND<0.005 | 0.0066 | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | ND<0.005 | 0.0064 | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | ND<0.005 | 0.015 | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.005 | NT | NT | ND<0.005 | 0.013 | NT | NT |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-PP | TB-PP | TB-QQ | TB-QQ | TB-QQ | TB-RR | TB-RR |
| **Depth Below Grade (ft.)** | | | | (2-4) | (5-6.5) | (0-2) | (5-7) | (10-12) | (0-2) | (2-4) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | ND<0.05 | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.37 | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.23 | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT | NT |
| Arsenic | **10** | **10** | NA | ND<1.0 | ND<1.0 | ND<1.0 | 1.3 | **83** | 4.7 | 1.9 |
| Barium | 4,700 | 140,000 | NA | NT | NT | 21 | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 1.2 | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 8.7 | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 57 | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 9.7 | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | ND<0.20 | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 11 | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | **5.8** | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 56 | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 22 | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | 230 | NT | **840** | NT | **520** | 100 | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-SS | TB-TT | TB-UU | TB-UU | TB-UU | TB-VV | TB-VV |
| **Depth Below Grade (ft.)** | | | | (2-3) | (1-3) | (0-2) | (2-4) | (4-6) | (0-2) | (2-4) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<1.0 | ND<0.20 | ND<1.0 | NT | ND<0.20 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<1.0 | ND<0.20 | 2.3 | NT | ND<0.20 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<1.0 | 0.34 | 3.0 | NT | ND<0.20 | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | ND<0.20 | ND<1.0 | **2.7** | **22** | NT | 0.36 | 0.40 |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | ND<0.20 | **1.2** | **4.5** | **33** | NT | 0.56 | 0.62 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | ND<1.0 | 1.4 | 8.4 | NT | ND<0.20 | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | ND<0.20 | ND<1.0 | **1.58** | **15** | NT | 0.25 | 0.27 |
| Benzo[a]pyrene | **1** | **1** | **1** | ND<0.20 | **1.1** | **3.3** | **24** | NT | 0.40 | 0.43 |
| Chrysene | 84 | 780 | **1** | ND<0.20 | ND<1.0 | **2.2** | **17** | NT | 0.32 | 0.39 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | ND<0.20 | ND<1.0 | 0.40 | **2.3** | NT | ND<0.20 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | ND<0.20 | 1.3 | 4.8 | 43 | NT | 0.60 | 0.67 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<1.0 | ND<0.20 | ND<1.0 | NT | ND<0.20 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | ND<0.20 | **1.1** | **1.5** | **9.5** | NT | 0.20 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<1.0 | ND<0.20 | 1.0 | NT | ND<0.20 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | **40** | ND<0.20 | ND<1.0 | 1.5 | 19 | NT | 0.35 | 0.34 |
| Pyrene | 1,000 | 2,500 | **40** | ND<0.20 | 1.2 | 4.2 | **43** | NT | 0.56 | 0.59 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | NT | NT | NT | ND<0.50 | NT | NT | ND<0.50 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.005 | NT | NT | 0.11 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.005 | NT | NT | ND<0.005 | NT | NT | NT |

## Table AOC-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations
## to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-SS | TB-TT | TB-UU | TB-UU | TB-UU | TB-VV | TB-VV |
| **Depth Below Grade (ft.)** | | | | (2-3) | (1-3) | (0-2) | (2-4) | (4-6) | (0-2) | (2-4) |
| **SPLP Metals** | | | | | | | | | | |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | NT | NT | NT | ND<0.05 |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT | 0.39 |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT | 0.27 |
| **Total Metals** | | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT | ND<2.0 |
| Arsenic | **10** | **10** | NA | **14** | 9.0 | 1.7 | 2.0 | 1.9 | 1.4 | 1.0 |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT | 31 |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT | 0.94 |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT | 8.1 |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT | 26 |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT | 19 |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT | ND<0.20 |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT | 8.6 |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT | ND<1.0 |
| Thallium | **5.4** | 160 | NA | NT | NT | NT | NT | NT | NT | 3.4 |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT | NT | NT | 28 |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT | 32 |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | 85 | 160 | 170 | **1,200** | **1,100** | NT | 130 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

**Table AOC-12.1**
**Comparison of Test Boring Soil Sample Analyte Concentrations**
**to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, New Haven, CT**
**Sampling Date: February 8, 2002**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | |
|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-VV | TB-WW | TB-WW | TB-WW |
| **Depth Below Grade (ft.)** | | | | (4-6) | (0-2) | (2-4) | (5-7) |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | 12 | ND<0.20 | ND<1.0 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | 28 | 1.5 | ND<1.0 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | 63 | 4.7 | 1.0 | ND<0.20 |
| Benzo[a]anthracene | **1** | **7.8** | **1** | **64** | **9.5** | **3.6** | ND<0.20 |
| Benzo[b]fluoranthene | **1** | **7.8** | **1** | **71** | **12** | **4.4** | ND<0.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 13 | 4.9 | 3.4 | ND<0.20 |
| Benzo[k]fluoranthene | **8.4** | 78 | **1** | **26** | **3.7** | **1.8** | ND<0.20 |
| Benzo[a]pyrene | **1** | **1** | **1** | **57** | **9.8** | **3.8** | ND<0.20 |
| Chrysene | 84 | 780 | **1** | **58** | **8.9** | **2.8** | ND<0.20 |
| Dibenz[a,h]anthracene | **1** | **1** | **1** | **4.5** | 0.96 | ND<1.0 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | **56** | **220** | 38 | 7.4 | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | 51 | 1.1 | ND<1.0 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | **1** | **7.8** | **1** | **15** | **5.6** | **3.2** | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | 1.7 | 0.62 | ND<1.0 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | **40** | **360** | 32 | 4.7 | ND<0.20 |
| Pyrene | 1,000 | 2,500 | **40** | **210** | 37 | 6.2 | ND<0.20 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | 1 | 10 | NA | ND<0.50 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | NT | NT |

## Tab [redacted] C-12.1
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT
## Sampling Date: February 8, 2002

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | |
|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-VV | TB-WW | TB-WW | TB-WW |
| **Depth Below Grade (ft.)** | | | | (4-6) | (0-2) | (2-4) | (5-7) |
| **SPLP Metals** | | | | | | | |
| Arsenic | NA | NA | 0.5 | NT | NT | 0.50 | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT |
| **Total Metals** | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT |
| Arsenic | **10** | **10** | NA | 7.6 | ND<1.0 | **22** | 3.1 |
| Barium | 4,700 | 140,000 | NA | NT | NT | 43 | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 1.4 | NT |
| Chromium | 100* | 100* | NA | NT | NT | 12 | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 100 | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 37 | NT |
| Mercury | 20 | 610 | NA | NT | NT | 1.1 | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 12 | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | 5.3 | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 62 | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | **820** | 150 | 150 | 160 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leachate Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
□ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJ | TB-KK | TB-OO | TB-RR | TB-VV | TB-ZZ |
| **Depth Below Grade (ft.)** | | | | (2-4) | (2-4) | (0-2) | (2-4) | (5-5.5) | (26.5-27) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/4/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.005 | ND<0.005 | NT | 3.0 | ND<0.005 |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Tetrachloroethene | 12 | 110 | 1 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Toluene | 500 | 1,000 | 67 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Trichloroethene | 56 | 520 | 1.0 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.005 | NT | 0.018 | ND<0.005 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.005 | NT | 0.014 | ND<0.005 |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJ | TB-KK | TB-OO | TB-RR | TB-VV | TB-ZZ |
| **Depth Below Grade (ft.)** | | | | (2-4) | (2-4) | (0-2) | (2-4) | (5-5.5) | (26.5-27) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/4/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | NT |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | ND<5.0 | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | ND<0.006 | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.32 | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | ND<0.04 | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | ND<0.013 | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | ND<0.002 | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | ND<0.05 | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | ND<0.01 | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | ND<0.005 | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | ND<0.05 | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.30 | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | 2.2 | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | 46 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 1.1 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 8.7 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 43 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 28 | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | ND<0.20 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 8.6 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJ | TB-KK | TB-OO | TB-RR | TB-VV | TB-ZZ |
| **Depth Below Grade (ft.)** | | | | (2-4) | (2-4) | (0-2) | (2-4) | (5-5.5) | (26.5-27) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/4/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | **6.3** | NT | NT | NT |
| Vanadium | **470** | 14,000 | NA | NT | NT | 31 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 53 | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | NT | NT | NT | NT | NT | **1,300** |

Notes;

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-HHH | TB-HHH | TB-HHH | TB-HHH | TB-III | TB-III |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (1.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | ND<0.20 | ND<0.20 | NT | NT | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | ND<0.20 | ND<0.20 | NT | NT | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | ND<0.20 | ND<0.20 | NT | NT | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | 0.26 | 0.57 | NT | NT | 0.49 |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | 0.32 | 0.65 | NT | NT | 0.49 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | 0.47 | 0.62 | NT | NT | 0.47 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | ND<0.20 | 1.2 | NT | NT | 0.75 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | ND<0.20 | 0.23 | NT | NT | ND<0.20 |
| Chrysene | 84 | 780 | 1 | NT | 0.30 | 0.55 | NT | NT | 0.49 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | ND<0.20 | 0.23 | NT | NT | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | 0.39 | 0.90 | NT | NT | 0.83 |
| Fluorene | 1,000 | 2,500 | 56 | NT | ND<0.20 | ND<0.20 | NT | NT | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | ND<0.20 | 0.99 | NT | NT | 0.82 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.20 | ND<0.20 | NT | NT | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | 0.21 | 0.39 | NT | NT | 0.60 |
| Pyrene | 1,000 | 2,500 | 40 | NT | 0.39 | 0.84 | NT | NT | 0.68 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Isopropylbenzene | 500 | 1,000 | 132 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Tetrachloroethene | 12 | 110 | 1 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Toluene | 500 | 1,000 | 67 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Trichloroethene | 56 | 520 | 1.0 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | ND<0.005 | 0.032 | ND<0.005 | NT | NT | 0.046 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.005 | ND<0.005 | ND<0.005 | NT | NT | ND<0.005 |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-HHH | TB-HHH | TB-HHH | TB-HHH | TB-III | TB-III |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (1.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | ND<0.006 | NT | NT | NT | 0.010 |
| Arsenic | NA | NA | 0.5 | NT | ND<0.05 | NT | NT | NT | ND<0.05 |
| Barium | NA | NA | 10 | NT | 0.17 | NT | NT | NT | 0.52 |
| Copper | NA | NA | 13 | NT | ND<0.04 | NT | NT | NT | 0.062 |
| Lead | NA | NA | 0.15 | NT | ND<0.013 | NT | NT | NT | 0.068 |
| Mercury | NA | NA | 0.02 | NT | ND<0.002 | NT | NT | NT | ND<0.002 |
| Nickel | NA | NA | 1.0 | NT | ND<0.05 | NT | NT | NT | ND<0.05 |
| Selenium | NA | NA | 0.50 | NT | ND<0.01 | NT | NT | NT | ND<0.01 |
| Thallium | NA | NA | 0.05 | NT | ND<0.005 | NT | NT | NT | 0.005 |
| Vanadium | NA | NA | 0.50 | NT | ND<0.05 | NT | NT | NT | ND<0.05 |
| Zinc | NA | NA | 50 | NT | 0.14 | NT | NT | NT | 0.36 |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | ND<2.0 | NT | NT | NT | 2.2 |
| Arsenic | 10 | 10 | NA | NT | 7.8 | NT | NT | NT | 70 |
| Barium | 4,700 | 140,000 | NA | NT | 35 | NT | NT | NT | 46 |
| Beryllium | 2 | 2 | NA | NT | ND<1.0 | NT | NT | NT | ND<1.0 |
| Cadmium | 34 | 1,000 | NA | NT | 1.1 | NT | NT | NT | 2.5 |
| Chromium | 100* | 100* | NA | NT | 6.7 | NT | NT | NT | 6.3 |
| Copper | 2,500 | 76,000 | NA | NT | 45 | NT | NT | NT | 220 |
| Lead | 500 | 1,000 | NA | NT | 38 | NT | NT | NT | 140 |
| Mercury | 20 | 610 | NA | NT | ND<0.20 | NT | NT | NT | 2.4 |
| Nickel | 1,400 | 7,500 | NA | NT | 13 | NT | NT | NT | 11 |
| Selenium | 340 | 10,000 | NA | NT | ND<1.0 | NT | NT | NT | 2.5 |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-HHH | TB-HHH | TB-HHH | TB-HHH | TB-III | TB-III |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (1.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | ND<2.0 | NT | NT | NT | ND<2.0 |
| Thallium | 5.4 | 160 | NA | NT | 6.6 | NT | NT | NT | 14 |
| Vanadium | 470 | 14,000 | NA | NT | 18 | NT | NT | NT | 17 |
| Zinc | 20,000 | 610,000 | NA | NT | 40 | NT | NT | NT | 220 |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | ND<50 | ND<50 | NT | NT | ND<50 |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table C-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-III | TB-III | TB-III | TB-III | TB-JJJ | TB-JJJ |
| **Depth Below Grade (ft.)** | | | | (3.5-4.5) | (5-7) | (10-12) | (20-22) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.37 | NT | 0.90 | ND<0.20 | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.45 | NT | 0.90 | ND<0.20 | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.30 | NT | 0.72 | ND<0.20 | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.85 | NT | 1.2 | ND<0.20 | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Chrysene | 84 | 780 | 1 | 0.35 | NT | 0.68 | ND<0.20 | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | NT | 0.23 | ND<0.20 | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.59 | NT | 1.6 | ND<0.20 | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.67 | NT | 1.2 | ND<0.20 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | NT | ND<0.20 | ND<0.20 | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.29 | NT | 0.47 | ND<0.20 | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.55 | NT | 1.4 | ND<0.20 | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | ND<0.005 | NT | 0.056 | ND<0.005 |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Tetrachloroethene | 12 | 110 | 1 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Toluene | 500 | 1,000 | 67 | NT | ND<0.005 | ND<0.005 | NT | 0.082 | ND<0.005 |
| Trichloroethene | 56 | 520 | 1.0 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | 0.018 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | ND<0.005 | ND<0.005 | NT | 0.337 | ND<0.005 |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-III | TB-III | TB-III | TB-III | TB-JJJ | TB-JJJ |
| **Depth Below Grade (ft.)** | | | | (3.5-4.5) | (5-7) | (10-12) | (20-22) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | NT | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | NT | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | NT | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | NT | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | ND<0.006 | NT | NT | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | 0.39 | NT | NT | NT | NT | NT |
| Copper | NA | NA | 13 | ND<0.04 | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | ND<0.013 | NT | NT | NT | NT | NT |
| Mercury | NA | NA | 0.02 | ND<0.002 | NT | NT | NT | NT | NT |
| Nickel | NA | NA | 1.0 | ND<0.05 | NT | NT | NT | NT | NT |
| Selenium | NA | NA | 0.50 | ND<0.01 | NT | NT | NT | NT | NT |
| Thallium | NA | NA | 0.05 | ND<0.005 | NT | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | ND<0.05 | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | 0.18 | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | 3.2 | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | 35 | NT | NT | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | 34 | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | ND<1.0 | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | 1.9 | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | 5.0 | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | 65 | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | 320 | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | 0.57 | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | 5.6 | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | ND<1.0 | NT | NT | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-III | TB-III | TB-III | TB-III | TB-JJJ | TB-JJJ |
| **Depth Below Grade (ft.)** | | | | (3.5-4.5) | (5-7) | (10-12) | (20-22) | (0.0-0.3) | (1-3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | ND<2.0 | NT | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | **12** | NT | NT | NT | NT | NT |
| Vanadium | **470** | 14,000 | NA | 13 | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | 50 | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | ND<50 | NT | ND<50 | ND<50 | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJJ | TB-KKK | TB-KKK | TB-KKK | TB-KKK | TB-LLL |
| **Depth Below Grade (ft.)** | | | | (5-7) | (0.0-0.3) | (1-3) | (3-5) | (5-7) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | 0.22 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | ND<0.20 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | ND<0.20 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | 0.34 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | ND<0.20 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | ND<0.20 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | 0.20 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | ND<0.20 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | ND<0.005 | ND<0.25 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJJ | TB-KKK | TB-KKK | TB-KKK | TB-KKK | TB-LLL |
| **Depth Below Grade (ft.)** | | | | (5-7) | (0.0-0.3) | (1-3) | (3-5) | (5-7) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | ND<0.006 | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.13 | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | ND<0.04 | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | ND<0.013 | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | ND<0.002 | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | ND<0.05 | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | ND<0.01 | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | ND<0.005 | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | ND<0.05 | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.12 | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | 14 | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | 30 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 2.2 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 5.6 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 25 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 18 | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | ND<0.20 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 16 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-JJJ | TB-KKK | TB-KKK | TB-KKK | TB-KKK | TB-LLL |
| **Depth Below Grade (ft.)** | | | | (5-7) | (0.0-0.3) | (1-3) | (3-5) | (5-7) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | 12 | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 15 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 12 | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | ND<50 | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-LLL | TB-LLL | TB-MMM | TB-MMM | TB-MMM | TB-NNN |
| **Depth Below Grade (ft.)** | | | | (1-3) | (5-7) | (0.0-0.3) | (0.3-1.3) | (2-4) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | 0.30 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Chrysene | 84 | 780 | 1 | 0.37 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.26 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | 0.34 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Pyrene | 1,000 | 2,500 | 40 | 0.21 | NT | NT | ND<0.20 | ND<0.20 | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Tetrachloroethene | 12 | 110 | 1 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Toluene | 500 | 1,000 | 67 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Trichloroethene | 56 | 520 | 1.0 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.25 | NT | NT | ND<0.005 | ND<0.25 | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-LLL | TB-LLL | TB-MMM | TB-MMM | TB-MMM | TB-NNN |
| **Depth Below Grade (ft.)** | | | | (1-3) | (5-7) | (0.0-0.3) | (0.3-1.3) | (2-4) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | ND<0.006 | NT | NT | ND<0.006 | ND<0.006 | NT |
| Arsenic | NA | NA | 0.5 | ND<0.05 | NT | NT | ND<0.05 | ND<0.05 | NT |
| Barium | NA | NA | 10 | 0.52 | NT | NT | 0.16 | 0.19 | NT |
| Copper | NA | NA | 13 | ND<0.04 | NT | NT | ND<0.04 | ND<0.04 | NT |
| Lead | NA | NA | 0.15 | 0.019 | NT | NT | ND<0.013 | ND<0.013 | NT |
| Mercury | NA | NA | 0.02 | ND<0.002 | NT | NT | ND<0.002 | ND<0.002 | NT |
| Nickel | NA | NA | 1.0 | ND<0.05 | NT | NT | ND<0.05 | 0.16 | NT |
| Selenium | NA | NA | 0.50 | ND<0.01 | NT | NT | ND<0.01 | ND<0.01 | NT |
| Thallium | NA | NA | 0.05 | ND<0.005 | NT | NT | ND<0.005 | ND<0.005 | NT |
| Vanadium | NA | NA | 0.50 | ND<0.05 | NT | NT | ND<0.05 | ND<0.05 | NT |
| Zinc | NA | NA | 50 | 0.21 | NT | NT | 0.12 | 0.29 | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | ND<2.0 | NT | NT | ND<2.0 | ND<2.0 | NT |
| Arsenic | 10 | 10 | NA | 14 | NT | NT | ND<1.0 | 9.4 | NT |
| Barium | 4,700 | 140,000 | NA | 40 | NT | NT | 25 | 24 | NT |
| Beryllium | 2 | 2 | NA | ND<1.0 | NT | NT | ND<1.0 | ND<1.0 | NT |
| Cadmium | 34 | 1,000 | NA | 1.9 | NT | NT | 1.3 | 3.2 | NT |
| Chromium | 100* | 100* | NA | 11 | NT | NT | 8.2 | 5.9 | NT |
| Copper | 2,500 | 76,000 | NA | 45 | NT | NT | 48 | 27 | NT |
| Lead | 500 | 1,000 | NA | 31 | NT | NT | 5.7 | 24 | NT |
| Mercury | 20 | 610 | NA | 0.22 | NT | NT | ND<0.20 | ND<0.20 | NT |
| Nickel | 1,400 | 7,500 | NA | 13 | NT | NT | 11 | 17 | NT |
| Selenium | 340 | 10,000 | NA | ND<1.0 | NT | NT | ND<1.0 | ND<1.0 | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-LLL | TB-LLL | TB-MMM | TB-MMM | TB-MMM | TB-NNN |
| **Depth Below Grade (ft.)** | | | | (1-3) | (5-7) | (0.0-0.3) | (0.3-1.3) | (2-4) | (0.0-0.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | ND<2.0 | NT | NT | ND<2.0 | ND<2.0 | NT |
| Thallium | 5.4 | 160 | NA | 9.1 | NT | NT | 7.9 | 17 | NT |
| Vanadium | 470 | 14,000 | NA | 23 | NT | NT | 52 | 12 | NT |
| Zinc | 20,000 | 610,000 | NA | 34 | NT | NT | 24 | 15 | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | ND<50 | NT | NT | 1,100 | ND<50 | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-NNN | TB-NNN | TB-NNN | TB-OOO | TB-OOO | TB-OOO |
| **Depth Below Grade (ft.)** | | | | (0.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (0.3-1.3) | (3-3.5) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | NT | NT | NT | 0.69 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | NT | NT | NT | 0.30 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | ND<0.20 | NT | NT | NT | 6.8 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **34** |
| Benzo[a]pyrene | 1 | 1 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **6.0** |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **45** |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | ND<0.20 | ND<0.20 | NT | NT | NT | 20 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **6.0** |
| Chrysene | 84 | 780 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **42** |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **7.8** |
| Fluoranthene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | NT | NT | NT | 2.8 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | NT | NT | NT | 0.60 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | ND<0.20 | ND<0.20 | NT | NT | NT | **25** |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | NT | NT | NT | 0.51 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | ND<0.20 | NT | NT | NT | 4.7 |
| Pyrene | 1,000 | 2,500 | 40 | ND<0.20 | ND<0.20 | NT | NT | NT | 1.8 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | ND<0.005 | NT | 0.019 | ND<0.005 | ND<0.25 |
| Isopropylbenzene | 500 | 1,000 | 132 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.005 | ND<0.005 | NT | 0.016 | ND<0.005 | ND<0.25 |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| Tetrachloroethene | 12 | 110 | 1 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| Toluene | 500 | 1,000 | 67 | ND<0.005 | ND<0.005 | NT | 0.044 | ND<0.005 | ND<0.25 |
| Trichloroethene | 56 | 520 | 1.0 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | ND<0.005 | NT | ND<0.005 | ND<0.005 | ND<0.25 |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.005 | ND<0.005 | NT | 0.118 | ND<0.005 | ND<0.25 |

Table AOC-12.2

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, New Haven, CT**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-NNN | TB-NNN | TB-NNN | TB-OOO | TB-OOO | TB-OOO |
| **Depth Below Grade (ft.)** | | | | (0.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (0.3-1.3) | (3-3.5) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | ND<0.006 | ND<0.006 | NT | NT | NT | 0.009 |
| Arsenic | NA | NA | 0.5 | ND<0.05 | ND<0.05 | NT | NT | NT | ND<0.05 |
| Barium | NA | NA | 10 | 0.32 | 0.38 | NT | NT | NT | 0.41 |
| Copper | NA | NA | 13 | ND<0.04 | ND<0.04 | NT | NT | NT | ND<0.04 |
| Lead | NA | NA | 0.15 | ND<0.013 | ND<0.013 | NT | NT | NT | 0.032 |
| Mercury | NA | NA | 0.02 | ND<0.002 | ND<0.002 | NT | NT | NT | ND<0.002 |
| Nickel | NA | NA | 1.0 | ND<0.05 | ND<0.05 | NT | NT | NT | ND<0.05 |
| Selenium | NA | NA | 0.50 | ND<0.01 | ND<0.01 | NT | NT | NT | ND<0.01 |
| Thallium | NA | NA | 0.05 | ND<0.005 | ND<0.005 | NT | NT | NT | ND<0.005 |
| Vanadium | NA | NA | 0.50 | ND<0.05 | ND<0.05 | NT | NT | NT | ND<0.05 |
| Zinc | NA | NA | 50 | 0.32 | 0.30 | NT | NT | NT | 0.20 |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | ND<2.0 | 11 | NT | NT | NT | ND<2.0 |
| Arsenic | 10 | 10 | NA | ND<1.0 | 2.3 | NT | NT | NT | 60 |
| Barium | 4,700 | 140,000 | NA | 51 | 230 | NT | NT | NT | 120 |
| Beryllium | 2 | 2 | NA | ND<1.0 | 7.4 | NT | NT | NT | ND<1.0 |
| Cadmium | 34 | 1,000 | NA | 1.0 | 5.4 | NT | NT | NT | 2.9 |
| Chromium | 100* | 100* | NA | 9.6 | 120[3] | NT | NT | NT | 13 |
| Copper | 2,500 | 76,000 | NA | 15 | 1,400 | NT | NT | NT | 110 |
| Lead | 500 | 1,000 | NA | 9.9 | 1,000 | NT | NT | NT | 320 |
| Mercury | 20 | 610 | NA | ND<0.20 | ND<0.20 | NT | NT | NT | 1.8 |
| Nickel | 1,400 | 7,500 | NA | 7.5 | 500 | NT | NT | NT | 14 |
| Selenium | 340 | 10,000 | NA | ND<1.0 | 1.4 | NT | NT | NT | 1.9 |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-NNN | TB-NNN | TB-NNN | TB-OOO | TB-OOO | TB-OOO |
| **Depth Below Grade (ft.)** | | | | (0.3-2.3) | (2.3-4.3) | (4.3-6.3) | (0.0-0.3) | (0.3-1.3) | (3-3.5) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | ND<2.0 | ND<2.0 | NT | NT | NT | ND<2.0 |
| Thallium | **5.4** | 160 | NA | **5.9** | **29** | NT | NT | NT | **8.8** |
| Vanadium | **470** | 14,000 | NA | 22 | 25 | NT | NT | NT | 15 |
| Zinc | 20,000 | 610,000 | NA | 20 | 2,700 | NT | NT | NT | 170 |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | ND<50 | ND<50 | NT | NT | NT | **510** |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

Table AOC-12.2

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**

**QE/English Station, New Haven, CT**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-OOO | TB-PPP | TB-PPP | TB-PPP | TB-PPP | TB-PPP |
| **Depth Below Grade (ft.)** | | | | (4-6) | (0-0.3) | (0.3-2.3) | (2.5-3) | (3.5-4) | (4.3-6.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | ND<0.20 | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | 0.25 | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | 0.23 | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | 2.0 | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | 2.8 | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | 3.2 | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | 2.5 | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | 1.2 | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | 1.8 | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | 0.50 | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | 3.0 | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | 2.8 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.20 | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | 1.1 | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | 2.9 | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | ND<0.25 | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | ND<0.25 | NT | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | ND<0.25 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.25 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | ND<0.25 | NT | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | NT | ND<0.25 | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | ND<0.25 | NT | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | NT | ND<0.25 | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | ND<0.25 | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | ND<0.25 | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | ND<0.25 | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | ND<0.25 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-OOO | TB-PPP | TB-PPP | TB-PPP | TB-PPP | TB-PPP |
| **Depth Below Grade (ft.)** | | | | (4-6) | (0-0.3) | (0.3-2.3) | (2.5-3) | (3.5-4) | (4.3-6.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | ND<0.006 | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | ND<0.05 | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | 0.25 | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | ND<0.04 | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | ND<0.013 | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | ND<0.002 | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | ND<0.05 | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | ND<0.01 | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | ND<0.005 | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | ND<0.05 | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | 0.27 | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | 6.8 | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | 76 | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | ND<1.0 | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | 1.4 | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | 16 | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | 55 | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | 51 | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | 0.23 | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | 12 | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | ND<1.0 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-OOO | TB-PPP | TB-PPP | TB-PPP | TB-PPP | TB-PPP |
| **Depth Below Grade (ft.)** | | | | (4-6) | (0-0.3) | (0.3-2.3) | (2.5-3) | (3.5-4) | (4.3-6.3) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | ND<2.0 | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | 7.9 | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | 41 | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | 68 | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | ND<50 | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory minimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-QQQ | TB-QQQ | TB-QQQ | TB-QQQ | TB-RRR | TB-RRR |
| **Depth Below Grade (ft.)** | | | | (0-0.3) | (0.3-2.3) | (2.3-4.3) | (4.3-5) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | ND<0.25 | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | ND<0.25 | NT | NT | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | ND<0.25 | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | ND<0.25 | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | ND<0.25 | NT | NT | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | ND<0.25 | NT | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | ND<0.25 | NT | NT | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | ND<0.25 | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | ND<0.25 | NT | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.25 | NT | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | ND<0.25 | NT | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | ND<0.25 | NT | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-QQQ | TB-QQQ | TB-QQQ | TB-QQQ | TB-RRR | TB-RRR |
| **Depth Below Grade (ft.)** | | | | (0-0.3) | (0.3-2.3) | (2.3-4.3) | (4.3-5) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | NT | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | NT | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | NT | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | NT | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |

Ta[redacted]OC-12.2

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, New Haven, CT**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-QQQ | TB-QQQ | TB-QQQ | TB-QQQ | TB-RRR | TB-RRR |
| **Depth Below Grade (ft.)** | | | | (0-0.3) | (0.3-2.3) | (2.3-4.3) | (4.3-5) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/1/2002 | 4/2/2002 | 4/2/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | NT | NT | NT |

Notes:

- mg/kg = milligrams per kilogram.
- ppm = Parts per million (comparable to mg/kg).
- NA = Not applicable.
- ND = Not detected above laboratory minimum detection limit.
- NT = Not tested.
- SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
- • = 100 mg/kg for hexavalent chromium.
- (1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
- (2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
- (3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
- (4) = Submitted as a Quality Control (QC) duplicate sample.
- ☐ = Concentration exceeds associated criterion.

Table AOC-12.2

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**

**QE/English Station, New Haven, CT**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-RRR | TB-RRR | TB-SSS | TB-SSS | TB-SSS | TB-SSS |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) | (2.6-4.6) | (6.6-8.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.005 | NT | NT | NT | 0.019 | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Tetrachloroethene | 12 | 110 | 1 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Toluene | 500 | 1,000 | 67 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Trichloroethene | 56 | 520 | 1.0 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | ND<0.005 | NT | NT | NT | ND<0.005 | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-RRR | TB-RRR | TB-SSS | TB-SSS | TB-SSS | TB-SSS |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) | (2.6-4.6) | (6.6-8.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | NT | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | NT | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | NT | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | NT | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |

Table AOC-12.2

## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-RRR | TB-RRR | TB-SSS | TB-SSS | TB-SSS | TB-SSS |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) | (2.6-4.6) | (6.6-8.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | ND<50 | 620 | NT |

Notes:

- mg/kg = milligrams per kilogram.
- ppm = Parts per million (comparable to mg/kg).
- NA = Not applicable.
- ND = Not detected above laboratory minimum detection limit.
- NT = Not tested.
- SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
- • = 100 mg/kg for hexavalent chromium.
- (1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
- (2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
- (3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
- (4) = Submitted as a Quality Control (QC) duplicate sample.
- ☐ = Concentration exceeds associated criterion.

Ta[redacted]OC-12.2

**Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria**
**QE/English Station, New Haven, CT**

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-TTT | TB-TTT | TB-TTT | TB-TTT | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (0.3-0.6) | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | NT |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | NT |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | NT |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | NT |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | NT |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | NT |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | NT |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | ND<0.005 | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | ND<0.005 | NT | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | ND<0.005 | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | ND<0.005 | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | ND<0.005 | NT | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | NT | ND<0.005 | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | ND<0.005 | NT | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | NT | ND<0.005 | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | ND<0.005 | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | ND<0.005 | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | ND<0.005 | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | ND<0.005 | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-TTT | TB-TTT | TB-TTT | TB-TTT | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (0.3-0.6) | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1248 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1254 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| PCB-1260 | 1 | 10 | NA | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 |
| **Cyanide (total)** | 1,400 | 41,000 | NA | NT | NT | NT | NT | NT | NT |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | NT | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | NT | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | NT | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | NT | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-TTT | TB-TTT | TB-TTT | TB-TTT | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (0.3-0.6) | (0.6-2.6) | (4.6-6.6) | (0.0-0.3) | (0.3-0.6) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |
| Thallium | **5.4** | 160 | NA | NT | NT | NT | NT | NT | NT |
| Vanadium | **470** | 14,000 | NA | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | **500** | 2,500 | 2,500 | NT | NT | NT | NT | NT | NT |

Notes:

mg/kg = milligrams per kilogram.
ppm = Parts per million (comparable to mg/kg).
NA = Not applicable.
ND = Not detected above laboratory minimum detection limit.
NT = Not tested.
SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
* = 100 mg/kg for hexavalent chromium.
(1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
(2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
(3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
(4) = Submitted as a Quality Control (QC) duplicate sample.
☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (2.6-4.6) | (4.6-6.6) | (10-15) | (15-17) | (20-22) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | NT | 0.50 | 0.24 | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | ND<0.20 | ND<0.20 | NT | 1.3 | 1.2 | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | ND<0.20 | 0.30 | NT | 1.5 | 0.99 | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | ND<0.20 | 1.2 | NT | 2.6 | 3.5 | ND<0.20 |
| Benzo[a]pyrene | 1 | 1 | 1 | 0.27 | 1.1 | NT | 3.3 | 6.3 | ND<0.20 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | 0.27 | 1.7 | NT | 3.6 | 7.2 | ND<0.20 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | 0.30 | 1.3 | NT | 2.3 | 2.4 | ND<0.20 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | ND<0.20 | 0.75 | NT | 1.6 | 4.0 | ND<0.20 |
| Chrysene | 84 | 780 | 1 | ND<0.20 | 1.1 | NT | 2.6 | 4.1 | ND<0.20 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | ND<0.20 | 0.25 | NT | 0.30 | 0.66 | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | 0.24 | 2.4 | NT | 5.3 | 13 | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | NT | 1.9 | 0.30 | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | 0.28 | 1.3 | NT | 2.6 | 2.8 | ND<0.20 |
| Naphthalene | 1,000 | 2,500 | 56 | ND<0.20 | ND<0.20 | NT | 3.8 | 0.72 | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | ND<0.20 | 1.4 | NT | 6.2 | 1.7 | ND<0.20 |
| Pyrene | 1,000 | 2,500 | 40 | 0.22 | 2.0 | NT | 5.0 | 14 | ND<0.20 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | NT | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | NT | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | NT | NT | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | NT | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | NT | NT | NT | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | NT | NT | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | NT | NT | NT | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | NT | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | NT | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | NT | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations
## to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (2.6-4.6) | (4.6-6.6) | (10-15) | (15-17) | (20-22) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8082 Polychlorinated Biphenyls (PCBs)** | | | | | | | | | |
| PCB-1242 | 1 | 10 | NA | NT | NT | ND<0.50 | NT | ND<0.50 | NT |
| PCB-1248 | 1 | 10 | NA | NT | NT | ND<0.50 | NT | ND<0.50 | NT |
| PCB-1254 | 1 | 10 | NA | NT | NT | ND<0.50 | NT | ND<0.50 | NT |
| PCB-1260 | 1 | 10 | NA | NT | NT | ND<0.50 | NT | ND<0.50 | NT |
| **Cyanide (total)** | 1,400 | 41,000 | NA | ND<5.0 | ND<5.0 | NT | ND<5.0 | ND<5.0 | ND<5.0 |
| **SPLP Metals** | | | | | | | | | |
| Antimony | NA | NA | 0.06 | NT | NT | NT | NT | NT | NT |
| Arsenic | NA | NA | 0.5 | NT | NT | NT | NT | NT | NT |
| Barium | NA | NA | 10 | NT | NT | NT | NT | NT | NT |
| Copper | NA | NA | 13 | NT | NT | NT | NT | NT | NT |
| Lead | NA | NA | 0.15 | NT | NT | NT | NT | NT | NT |
| Mercury | NA | NA | 0.02 | NT | NT | NT | NT | NT | NT |
| Nickel | NA | NA | 1.0 | NT | NT | NT | NT | NT | NT |
| Selenium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Thallium | NA | NA | 0.05 | NT | NT | NT | NT | NT | NT |
| Vanadium | NA | NA | 0.50 | NT | NT | NT | NT | NT | NT |
| Zinc | NA | NA | 50 | NT | NT | NT | NT | NT | NT |
| **Total Metals** | | | | | | | | | |
| Antimony | 27 | 8,200 | NA | NT | NT | NT | NT | NT | NT |
| Arsenic | 10 | 10 | NA | NT | NT | NT | NT | NT | NT |
| Barium | 4,700 | 140,000 | NA | NT | NT | NT | NT | NT | NT |
| Beryllium | 2 | 2 | NA | NT | NT | NT | NT | NT | NT |
| Cadmium | 34 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Chromium | 100* | 100* | NA | NT | NT | NT | NT | NT | NT |
| Copper | 2,500 | 76,000 | NA | NT | NT | NT | NT | NT | NT |
| Lead | 500 | 1,000 | NA | NT | NT | NT | NT | NT | NT |
| Mercury | 20 | 610 | NA | NT | NT | NT | NT | NT | NT |
| Nickel | 1,400 | 7,500 | NA | NT | NT | NT | NT | NT | NT |
| Selenium | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU | TB-UUU |
| **Depth Below Grade (ft.)** | | | | (0.6-2.6) | (2.6-4.6) | (4.6-6.6) | (10-15) | (15-17) | (20-22) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **Total Metals (Cont'd)** | | | | | | | | | |
| Silver | 340 | 10,000 | NA | NT | NT | NT | NT | NT | NT |
| Thallium | 5.4 | 160 | NA | NT | NT | NT | NT | NT | NT |
| Vanadium | 470 | 14,000 | NA | NT | NT | NT | NT | NT | NT |
| Zinc | 20,000 | 610,000 | NA | NT | NT | NT | NT | NT | NT |
| **Connecticut Extractable Total Petroleum Hydrocarbons (CTETPH)** | 500 | 2,500 | 2,500 | NT | NT | NT | NT | NT | NT |

Notes:

- mg/kg = milligrams per kilogram.
- ppm = Parts per million (comparable to mg/kg).
- NA = Not applicable.
- ND = Not detected above laboratory minimum detection limit.
- NT = Not tested.
- SPLP = Test performed on leachate from Synthetic Precipitation Leaching Procedure. Units are milligrams per liter (mg/L).
- • = 100 mg/kg for hexavalent chromium.
- (1) = Not enough residual sample to analyze for leachable (SPLP) PCBs. Additional sample was collected for SPLP PCB testing on May 8, 2002. SPLP PCBs were not detected above the laboratory mimimum detection limit.
- (2) = Sample also tested for leachable (SPLP) PCBs. None detected above laboratory minimum detection limit.
- (3) = Sample also tested for hexavalent chromium. None detected above laboratory minimum detection limit.
- (4) = Submitted as a Quality Control (QC) duplicate sample.
- ☐ = Concentration exceeds associated criterion.

## Table AOC-12.2
## Comparison of Test Boring Soil Sample Analyte Concentrations
## to DEP Remediation Standard Regulations Numerical Criteria
## QE/English Station, New Haven, CT

| Analyte | Direct Exposure Criteria for Soil (mg/kg) | | Pollutant Mobility Criteria for Soil (mg/kg) | Soil Sample Concentrations (ppm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Residential | Industrial/ Commercial | GB Area | TB-VVV | TB-VVV | TB-VVV | TB-VVV | TB-VVV | TB-VVV |
| **Depth Below Grade (ft.)** | | | | (0.0-0.3) | (0.3-0.6) | (2-2.6) | (2.6-4.6) | (4.6-6.6) | (15-17) |
| **Sample Collection Date** | | | | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 | 4/2/2002 |
| **USEPA Method 8270 Polynuclear Aromatic Hydrocarbons (PAHs)** | | | | | | | | | |
| Acenaphthene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 |
| Acenaphthylene | 1,000 | 2,500 | 84 | NT | NT | NT | NT | NT | ND<0.20 |
| Anthracene | 1,000 | 2,500 | 400 | NT | NT | NT | NT | NT | ND<0.20 |
| Benzo[a]anthracene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | ND<0.20 |
| Benzo[a]pyrene | 1 | 1 | 1 | NT | NT | NT | NT | NT | 0.23 |
| Benzo[b]fluoranthene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.21 |
| Benzo[g,h,i]perylene | 1,000 | 2,500 | 42 | NT | NT | NT | NT | NT | 0.22 |
| Benzo[k]fluoranthene | 8.4 | 78 | 1 | NT | NT | NT | NT | NT | ND<0.20 |
| Chrysene | 84 | 780 | 1 | NT | NT | NT | NT | NT | ND<0.20 |
| Dibenz[a,h]anthracene | 1 | 1 | 1 | NT | NT | NT | NT | NT | ND<0.20 |
| Fluoranthene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 |
| Fluorene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 |
| Indeno[1,2,3-cd]pyrene | 1 | 7.8 | 1 | NT | NT | NT | NT | NT | 0.23 |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | NT | NT | ND<0.20 |
| Phenanthrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | ND<0.20 |
| Pyrene | 1,000 | 2,500 | 40 | NT | NT | NT | NT | NT | 0.23 |
| **USEPA Method 8260 Volatile Organic Compounds (VOCs)** | | | | | | | | | |
| Ethylbenzene | 500 | 1,000 | 10.1 | NT | NT | NT | ND<0.005 | NT | NT |
| Isopropylbenzene | 500 | 1,000 | 132 | NT | NT | NT | ND<0.005 | NT | NT |
| 4-Isopropyltoluene | 500 | 1,000 | 41.8 | NT | NT | NT | ND<0.005 | NT | NT |
| Naphthalene | 1,000 | 2,500 | 56 | NT | NT | NT | 0.34 | NT | NT |
| n-Propylbenzene | 500 | 1,000 | 14 | NT | NT | NT | ND<0.005 | NT | NT |
| Tetrachloroethene | 12 | 110 | 1 | NT | NT | NT | ND<0.005 | NT | NT |
| Toluene | 500 | 1,000 | 67 | NT | NT | NT | ND<0.005 | NT | NT |
| Trichloroethene | 56 | 520 | 1.0 | NT | NT | NT | ND<0.005 | NT | NT |
| 1,1,1-Trichloroethane | 500 | 1,000 | 40 | NT | NT | NT | ND<0.005 | NT | NT |
| 1,2,4-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | 0.013 | NT | NT |
| 1,3,5-Trimethylbenzene | 500 | 1,000 | 70 | NT | NT | NT | 0.0071 | NT | NT |
| Xylenes (total) | 500 | 1,000 | 19.5 | NT | NT | NT | ND<0.005 | NT | NT |