

US EPA ARCHIVE DOCUMENT

## Metals

### Antimony (7440-36-0)

| Site Id | Depth | Date       | Result | Units | Method | RESIDENTIAL | Comparison to Standards (ppm) |
|---------|-------|------------|--------|-------|--------|-------------|-------------------------------|
|         |       |            |        |       |        | 10          | TCLP X 20<br>NA               |
| CMS-237 | 1.5   | 06/23/1999 | 20.3J  | mg/kg | 6010B  | X           |                               |
| CMS-417 | 0.5   | 06/24/1999 | 27.8J  | mg/kg | 6010B  | X           |                               |
| CMS-417 | 1.5   | 06/24/1999 | 17.7J  | mg/kg | 6010B  | X           |                               |
| CMS-419 | 1.5   | 07/07/1999 | 21.4J  | mg/kg | 6010B  | X           |                               |

### Arsenic (7440-38-2)

| Site Id | Depth | Date       | Result | Units | Method | RESIDENTIAL | Comparison to Standards (ppm) |
|---------|-------|------------|--------|-------|--------|-------------|-------------------------------|
|         |       |            |        |       |        | 1.7         | TCLP X 20<br>100              |
| AD-02   | 11.5  | 07/21/1999 | 3.8J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 0.5   | 06/30/1999 | 7.7J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 0.5   | 06/30/1999 | 7.6J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 1.5   | 06/30/1999 | 6.7J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 2.5   | 06/30/1999 | 9.1J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 3.5   | 06/30/1999 | 3.0J   | mg/kg | 6010B  | X           |                               |
| CMS-060 | 4.5   | 06/30/1999 | 5.9J   | mg/kg | 6010B  | X           |                               |
| CMS-089 | 0.5   | 06/28/1999 | 3.5J   | mg/kg | 6010B  | X           |                               |
| CMS-089 | 1.5   | 06/28/1999 | 3.6J   | mg/kg | 6010B  | X           |                               |
| CMS-089 | 2.5   | 06/28/1999 | 3.9J   | mg/kg | 6010B  | X           |                               |
| CMS-089 | 3.5   | 06/28/1999 | 3.7J   | mg/kg | 6010B  | X           |                               |
| CMS-098 | 0.5   | 06/28/1999 | 3.3J   | mg/kg | 6010B  | X           |                               |
| CMS-118 | 0.5   | 06/30/1999 | 5.0J   | mg/kg | 6010B  | X           |                               |
| CMS-118 | 1.5   | 06/30/1999 | 6.8J   | mg/kg | 6010B  | X           |                               |
| CMS-118 | 2.5   | 06/30/1999 | 49.3   | mg/kg | 6010B  | X           |                               |
| CMS-118 | 3.5   | 06/30/1999 | 7.4J   | mg/kg | 6010B  | X           |                               |
| CMS-118 | 4.5   | 06/30/1999 | 2.3J   | mg/kg | 6010B  | X           |                               |
| CMS-142 | 0.5   | 06/28/1999 | 3.4J   | mg/kg | 6010B  | X           |                               |
| CMS-142 | 0.5   | 06/28/1999 | 4.4J   | mg/kg | 6010B  | X           |                               |
| CMS-159 | 0.5   | 07/01/1999 | 8.1J   | mg/kg | 6010B  | X           |                               |
| CMS-164 | 0.5   | 06/22/1999 | 6.6J   | mg/kg | 6010B  | X           |                               |
| CMS-173 | 0.5   | 06/28/1999 | 8.3J   | mg/kg | 6010B  | X           |                               |
| CMS-192 | 0.5   | 06/30/1999 | 18.0J  | mg/kg | 6010B  | X           |                               |
| CMS-215 | 0.5   | 06/30/1999 | 9.9J   | mg/kg | 6010B  | X           |                               |
| CMS-237 | 0.5   | 06/23/1999 | 4.2J   | mg/kg | 6010B  | X           |                               |
| CMS-237 | 1.5   | 06/23/1999 | 12.3J  | mg/kg | 6010B  | X           |                               |
| CMS-237 | 2.5   | 06/23/1999 | 10.7J  | mg/kg | 6010B  | X           |                               |
| CMS-405 | 1.5   | 06/23/1999 | 12.9J  | mg/kg | 6010B  | X           |                               |
| CMS-405 | 1.5   | 06/23/1999 | 5.8J   | mg/kg | 6010B  | X           |                               |
| CMS-405 | 2.5   | 06/23/1999 | 14.9J  | mg/kg | 6010B  | X           |                               |
| CMS-405 | 3.5   | 06/23/1999 | 11.7J  | mg/kg | 6010B  | X           |                               |
| CMS-405 | 4.5   | 06/23/1999 | 2.5J   | mg/kg | 6010B  | X           |                               |
| CMS-407 | 2.5   | 06/28/1999 | 7.1J   | mg/kg | 6010B  | X           |                               |
| CMS-407 | 3.5   | 06/28/1999 | 2.3J   | mg/kg | 6010B  | X           |                               |
| CMS-408 | 1.5   | 06/28/1999 | 7.6J   | mg/kg | 6010B  | X           |                               |
| CMS-408 | 2.5   | 06/28/1999 | 9.9J   | mg/kg | 6010B  | X           |                               |
| CMS-417 | 0.5   | 06/24/1999 | 6.5J   | mg/kg | 6010B  | X           |                               |
| CMS-417 | 1.5   | 06/24/1999 | 10.2J  | mg/kg | 6010B  | X           |                               |
| CMS-417 | 2.5   | 06/24/1999 | 6.2J   | mg/kg | 6010B  | X           |                               |
| CMS-417 | 3.5   | 06/24/1999 | 7.5J   | mg/kg | 6010B  | X           |                               |
| CMS-419 | 1.5   | 07/07/1999 | 8.3J   | mg/kg | 6010B  | X           |                               |
| CMS-419 | 3.5   | 07/07/1999 | 7.2J   | mg/kg | 6010B  | X           |                               |

#### NOTES:

J = The compound/analyte result is considered estimated based on quality assurance/quality control exceedance(s).

X = Denotes exceedance of applicable standard.

RI Residential Standards Source:

Table 1 Direct Exposure Criteria, Remediation Regulations,

DEM-DSR-01-93, 31 March 1993, amended August 1996, Division of Site Remediation Department of Environmental Management,  
State of Rhode Island and Providence Plantation

|         |     |            |      |       |       |   |
|---------|-----|------------|------|-------|-------|---|
| CMS-419 | 5.5 | 07/07/1999 | 5.7J | mg/kg | 6010B | X |
| CMS-419 | 7.5 | 07/07/1999 | 3.0J | mg/kg | 6010B | X |
| CMS-423 | 1.5 | 07/07/1999 | 3.4J | mg/kg | 6010B | X |
| CMS-423 | 3.5 | 07/07/1999 | 5.2J | mg/kg | 6010B | X |
| CMS-423 | 3.5 | 07/07/1999 | 5.6J | mg/kg | 6010B | X |
| CMS-423 | 5.5 | 07/07/1999 | 3.6J | mg/kg | 6010B | X |
| CMS-423 | 7.5 | 07/07/1999 | 2.4J | mg/kg | 6010B | X |
| CMS-427 | 1.5 | 07/06/1999 | 3.2J | mg/kg | 6010B | X |
| CMS-427 | 3.5 | 07/06/1999 | 1.9J | mg/kg | 6010B | X |
| CMS-427 | 5.5 | 07/06/1999 | 2.7J | mg/kg | 6010B | X |
| CMS-428 | 1.5 | 07/20/1999 | 3.5J | mg/kg | 6010B | X |
| CMS-428 | 3.5 | 07/20/1999 | 4.1J | mg/kg | 6010B | X |
| CMS-428 | 5.5 | 07/20/1999 | 3.1J | mg/kg | 6010B | X |
| CMS-449 | 7.5 | 07/20/1999 | 4.8J | mg/kg | 6010B | X |
| CMS-451 | 5.5 | 07/20/1999 | 9.7J | mg/kg | 6010B | X |
| CMS-451 | 9.5 | 07/20/1999 | 2.7J | mg/kg | 6010B | X |
| CMS-455 | 2.5 | 07/19/1999 | 9.3J | mg/kg | 6010B | X |
| CMS-455 | 4.5 | 07/19/1999 | 3.1J | mg/kg | 6010B | X |
| CMS-455 | 5.5 | 07/19/1999 | 3.9J | mg/kg | 6010B | X |
| CMS-455 | 5.5 | 07/19/1999 | 3.9J | mg/kg | 6010B | X |
| CMS-455 | 7.5 | 07/19/1999 | 2.7J | mg/kg | 6010B | X |
| CMS-455 | 9.5 | 07/19/1999 | 2.0J | mg/kg | 6010B | X |
| CMS-456 | 0.5 | 07/20/1999 | 2.8J | mg/kg | 6010B | X |
| CMS-456 | 1.5 | 07/20/1999 | 3.1J | mg/kg | 6010B | X |

**Beryllium**  
(7440-41-7)

**Comparison to Standards (ppm)**

| Site Id | Depth | Date       | Result | Units | Method | RESIDENTIAL | TCLP X 20 |
|---------|-------|------------|--------|-------|--------|-------------|-----------|
|         |       |            |        |       |        | 0.4         | NA        |
| CMS-060 | 0.5   | 06/30/1999 | 1.3J   | mg/kg | 6010B  | X           |           |
| CMS-060 | 0.5   | 06/30/1999 | 0.66J  | mg/kg | 6010B  | X           |           |
| CMS-060 | 1.5   | 06/30/1999 | 0.53   | mg/kg | 6010B  | X           |           |
| CMS-060 | 2.5   | 06/30/1999 | 0.52J  | mg/kg | 6010B  | X           |           |
| CMS-060 | 3.5   | 06/30/1999 | 0.73   | mg/kg | 6010B  | X           |           |
| CMS-060 | 4.5   | 06/30/1999 | 0.51J  | mg/kg | 6010B  | X           |           |
| CMS-089 | 0.5   | 06/28/1999 | 0.70   | mg/kg | 6010B  | X           |           |
| CMS-089 | 3.5   | 06/28/1999 | 0.45J  | mg/kg | 6010B  | X           |           |
| CMS-098 | 0.5   | 06/28/1999 | 0.74J  | mg/kg | 6010B  | X           |           |
| CMS-118 | 0.5   | 06/30/1999 | 0.61   | mg/kg | 6010B  | X           |           |
| CMS-118 | 1.5   | 06/30/1999 | 0.61   | mg/kg | 6010B  | X           |           |
| CMS-118 | 2.5   | 06/30/1999 | 2.1    | mg/kg | 6010B  | X           |           |
| CMS-118 | 3.5   | 06/30/1999 | 1.1    | mg/kg | 6010B  | X           |           |
| CMS-118 | 4.5   | 06/30/1999 | 0.68   | mg/kg | 6010B  | X           |           |
| CMS-142 | 0.5   | 06/28/1999 | 0.55J  | mg/kg | 6010B  | X           |           |
| CMS-142 | 0.5   | 06/28/1999 | 0.53J  | mg/kg | 6010B  | X           |           |
| CMS-159 | 0.5   | 07/01/1999 | 0.65J  | mg/kg | 6010B  | X           |           |
| CMS-164 | 0.5   | 06/22/1999 | 1.9    | mg/kg | 6010B  | X           |           |
| CMS-173 | 0.5   | 06/28/1999 | 1.9    | mg/kg | 6010B  | X           |           |
| CMS-173 | 1.5   | 06/28/1999 | 1.3    | mg/kg | 6010B  | X           |           |
| CMS-192 | 0.5   | 06/30/1999 | 2.3    | mg/kg | 6010B  | X           |           |
| CMS-215 | 0.5   | 06/30/1999 | 3.2    | mg/kg | 6010B  | X           |           |
| CMS-237 | 0.5   | 06/23/1999 | 0.67   | mg/kg | 6010B  | X           |           |
| CMS-237 | 1.5   | 06/23/1999 | 0.50J  | mg/kg | 6010B  | X           |           |
| CMS-237 | 2.5   | 06/23/1999 | 1.5    | mg/kg | 6010B  | X           |           |
| CMS-405 | 1.5   | 06/23/1999 | 0.46J  | mg/kg | 6010B  | X           |           |
| CMS-405 | 3.5   | 06/23/1999 | 0.41J  | mg/kg | 6010B  | X           |           |

**NOTES:**

J = The compound/analyte result is considered estimated based on quality assurance/quality control exceedance(s).

X = Denotes exceedance of applicable standard.

RI Residential Standards Source:

Table 1 Direct Exposure Criteria, Remediation Regulations,  
DEM-DSR-01-93, 31 March 1993, amended August 1996, Division of Site Remediation Department of Environmental Management,  
State of Rhode Island and Providence Plantations

|         |     |            |       |       |       |   |
|---------|-----|------------|-------|-------|-------|---|
| CMS-405 | 4.5 | 06/23/1999 | 0.69  | mg/kg | 6010B | X |
| CMS-407 | 1.5 | 06/28/1999 | 0.41J | mg/kg | 6010B | X |
| CMS-407 | 2.5 | 06/28/1999 | 0.52J | mg/kg | 6010B | X |
| CMS-407 | 3.5 | 06/28/1999 | 0.54J | mg/kg | 6010B | X |
| CMS-408 | 1.5 | 06/28/1999 | 0.52J | mg/kg | 6010B | X |
| CMS-408 | 2.5 | 06/28/1999 | 0.45J | mg/kg | 6010B | X |
| CMS-417 | 1.5 | 06/24/1999 | 0.44J | mg/kg | 6010B | X |
| CMS-417 | 2.5 | 06/24/1999 | 0.49J | mg/kg | 6010B | X |
| CMS-417 | 3.5 | 06/24/1999 | 0.71  | mg/kg | 6010B | X |
| CMS-419 | 1.5 | 07/07/1999 | 0.43J | mg/kg | 6010B | X |
| CMS-419 | 3.5 | 07/07/1999 | 1.0   | mg/kg | 6010B | X |
| CMS-419 | 5.5 | 07/07/1999 | 1.4J  | mg/kg | 6010B | X |
| CMS-419 | 7.5 | 07/07/1999 | 3.9   | mg/kg | 6010B | X |
| CMS-423 | 3.5 | 07/07/1999 | 0.73  | mg/kg | 6010B | X |
| CMS-423 | 3.5 | 07/07/1999 | 0.67  | mg/kg | 6010B | X |
| CMS-423 | 5.5 | 07/07/1999 | 0.64  | mg/kg | 6010B | X |
| CMS-427 | 1.5 | 07/06/1999 | 0.49J | mg/kg | 6010B | X |
| CMS-427 | 3.5 | 07/06/1999 | 0.43J | mg/kg | 6010B | X |
| CMS-427 | 5.5 | 07/06/1999 | 0.66  | mg/kg | 6010B | X |
| CMS-428 | 1.5 | 07/20/1999 | 0.79  | mg/kg | 6010B | X |
| CMS-428 | 3.5 | 07/20/1999 | 0.74  | mg/kg | 6010B | X |
| CMS-428 | 5.5 | 07/20/1999 | 0.51J | mg/kg | 6010B | X |
| CMS-449 | 7.5 | 07/20/1999 | 0.49J | mg/kg | 6010B | X |
| CMS-451 | 5.5 | 07/20/1999 | 0.69  | mg/kg | 6010B | X |
| CMS-451 | 9.5 | 07/20/1999 | 0.44J | mg/kg | 6010B | X |
| CMS-455 | 2.5 | 07/19/1999 | 1.5   | mg/kg | 6010B | X |
| CMS-455 | 4.5 | 07/19/1999 | 0.84  | mg/kg | 6010B | X |
| CMS-455 | 5.5 | 07/19/1999 | 1.3   | mg/kg | 6010B | X |
| CMS-455 | 5.5 | 07/19/1999 | 0.74  | mg/kg | 6010B | X |
| CMS-455 | 7.5 | 07/19/1999 | 0.57J | mg/kg | 6010B | X |
| CMS-456 | 0.5 | 07/20/1999 | 0.41J | mg/kg | 6010B | X |
| CMS-456 | 1.5 | 07/20/1999 | 0.63J | mg/kg | 6010B | X |

### Cadmium

(7440-43-9)

### Comparison to Standards (ppm)

| Site Id | Depth | Date       | Result | Units | Method | RESIDENTIAL | TCLP X 20 |
|---------|-------|------------|--------|-------|--------|-------------|-----------|
|         |       |            |        |       |        | 39          | 20        |
| CMS-237 | 1.5   | 06/23/1999 | 33.7   | mg/kg | 6010B  |             | X         |
| CMS-417 | 1.5   | 06/24/1999 | 180    | mg/kg | 6010B  | X           | X         |
| CMS-419 | 1.5   | 07/07/1999 | 35.9J  | mg/kg | 6010B  |             | X         |

### Chromium

(7440-47-3)

### Comparison to Standards (ppm)

| Site Id  | Depth | Date       | Result | Units | Method | RESIDENTIAL | TCLP X 20 |
|----------|-------|------------|--------|-------|--------|-------------|-----------|
|          |       |            |        |       |        | NA          | 100       |
| AD-04    | 0.5   | 07/19/1999 | 354J   | mg/kg | 6010B  |             | X         |
| AD-04    | 0.5   | 07/19/1999 | 382J   | mg/kg | 6010B  |             | X         |
| BV01COMP | 2.0   | 11/05/1999 | 135J   | mg/kg | 6010B  |             | X         |
| CMS-159  | 0.5   | 07/01/1999 | 133    | mg/kg | 6010B  |             | X         |
| CMS-164  | 0.5   | 06/22/1999 | 185J   | mg/kg | 6010B  |             | X         |
| CMS-173  | 0.5   | 06/28/1999 | 196J   | mg/kg | 6010B  |             | X         |
| CMS-192  | 0.5   | 06/30/1999 | 472    | mg/kg | 6010B  |             | X         |
| CMS-215  | 0.5   | 06/30/1999 | 256    | mg/kg | 6010B  |             | X         |
| CMS-237  | 1.5   | 06/23/1999 | 220J   | mg/kg | 6010B  |             | X         |
| CMS-237  | 2.5   | 06/23/1999 | 190    | mg/kg | 6010B  |             | X         |
| CMS-417  | 0.5   | 06/24/1999 | 317J   | mg/kg | 6010B  |             | X         |
| CMS-417  | 1.5   | 06/24/1999 | 350J   | mg/kg | 6010B  |             | X         |
| CMS-419  | 1.5   | 07/07/1999 | 331J   | mg/kg | 6010B  |             | X         |

### NOTES:

J = The compound/analyte result is considered estimated based on quality assurance/quality control exceedance(s).

X = Denotes exceedance of applicable standard.

RI Residential Standards Source:

Table 1 Direct Exposure Criteria, Remediation Regulations,

DEM-DSR-01-93, 31 March 1993, amended August 1996, Division of Site Remediation Department of Environmental Management,  
State of Rhode Island and Providence Plantation

**Lead**

(7439-92-1)

**Comparison to Standards (ppm)**

| Site Id  | Depth | Date       | Result | Units | Method | RESIDENTIAL | TCLP X 20 |
|----------|-------|------------|--------|-------|--------|-------------|-----------|
|          |       |            |        |       |        | 150         | 100       |
| AD-04    | 0.5   | 07/19/1999 | 528    | mg/kg | 6010B  | X           | X         |
| AD-04    | 0.5   | 07/19/1999 | 629    | mg/kg | 6010B  | X           | X         |
| AD-05    | 0.5   | 07/20/1999 | 137    | mg/kg | 6010B  |             | X         |
| BV01COMP | 2.0   | 11/05/1999 | 523    | mg/kg | 6010B  | X           | X         |
| CMS-118  | 2.5   | 06/30/1999 | 204    | mg/kg | 6010B  | X           | X         |
| CMS-118  | 3.5   | 06/30/1999 | 182    | mg/kg | 6010B  | X           | X         |
| CMS-159  | 0.5   | 07/01/1999 | 620    | mg/kg | 6010B  | X           | X         |
| CMS-164  | 0.5   | 06/22/1999 | 323J   | mg/kg | 6010B  | X           | X         |
| CMS-173  | 0.5   | 06/28/1999 | 243J   | mg/kg | 6010B  | X           | X         |
| CMS-192  | 0.5   | 06/30/1999 | 551    | mg/kg | 6010B  | X           | X         |
| CMS-215  | 0.5   | 06/30/1999 | 529    | mg/kg | 6010B  | X           | X         |
| CMS-237  | 0.5   | 06/23/1999 | 228J   | mg/kg | 6010B  | X           | X         |
| CMS-237  | 1.5   | 06/23/1999 | 1450J  | mg/kg | 6010B  | X           | X         |
| CMS-237  | 2.5   | 06/23/1999 | 494J   | mg/kg | 6010B  | X           | X         |
| CMS-405  | 1.5   | 06/23/1999 | 450J   | mg/kg | 6010B  | X           | X         |
| CMS-405  | 1.5   | 06/23/1999 | 306J   | mg/kg | 6010B  | X           | X         |
| CMS-405  | 2.5   | 06/23/1999 | 1080J  | mg/kg | 6010B  | X           | X         |
| CMS-405  | 3.5   | 06/23/1999 | 3160J  | mg/kg | 6010B  | X           | X         |
| CMS-407  | 2.5   | 06/28/1999 | 184J   | mg/kg | 6010B  | X           | X         |
| CMS-407  | 3.5   | 06/28/1999 | 321J   | mg/kg | 6010B  | X           | X         |
| CMS-408  | 1.5   | 06/28/1999 | 716J   | mg/kg | 6010B  | X           | X         |
| CMS-408  | 2.5   | 06/28/1999 | 861J   | mg/kg | 6010B  | X           | X         |
| CMS-417  | 0.5   | 06/24/1999 | 805J   | mg/kg | 6010B  | X           | X         |
| CMS-417  | 1.5   | 06/24/1999 | 444J   | mg/kg | 6010B  | X           | X         |
| CMS-417  | 2.5   | 06/24/1999 | 374J   | mg/kg | 6010B  | X           | X         |
| CMS-418  | 1.5   | 06/30/1999 | 220    | mg/kg | 6010B  | X           | X         |
| CMS-419  | 1.5   | 07/07/1999 | 2010J  | mg/kg | 6010B  | X           | X         |
| CMS-423  | 3.5   | 07/07/1999 | 101J   | mg/kg | 6010B  |             | X         |
| CMS-427  | 1.5   | 07/06/1999 | 169J   | mg/kg | 6010B  | X           | X         |
| CMS-456  | 0.5   | 07/20/1999 | 175    | mg/kg | 6010B  | X           | X         |
| CMS-456  | 1.5   | 07/20/1999 | 448    | mg/kg | 6010B  | X           | X         |

**Manganese**

(7439-96-5)

**Comparison to Standards (ppm)**

| Site Id | Depth | Date       | Result | Units | Method | RESIDENTIAL | TCLP X 20 |
|---------|-------|------------|--------|-------|--------|-------------|-----------|
|         |       |            |        |       |        | 390         | NA        |
| CMS-118 | 2.5   | 06/30/1999 | 543    | mg/kg | 6010B  | X           |           |
| CMS-118 | 3.5   | 06/30/1999 | 596    | mg/kg | 6010B  | X           |           |
| CMS-164 | 0.5   | 06/22/1999 | 489J   | mg/kg | 6010B  | X           |           |
| CMS-215 | 0.5   | 06/30/1999 | 411    | mg/kg | 6010B  | X           |           |
| CMS-237 | 1.5   | 06/23/1999 | 404J   | mg/kg | 6010B  | X           |           |
| CMS-237 | 2.5   | 06/23/1999 | 396J   | mg/kg | 6010B  | X           |           |
| CMS-405 | 1.5   | 06/23/1999 | 453J   | mg/kg | 6010B  | X           |           |
| CMS-405 | 2.5   | 06/23/1999 | 526J   | mg/kg | 6010B  | X           |           |
| CMS-405 | 3.5   | 06/23/1999 | 1060J  | mg/kg | 6010B  | X           |           |
| CMS-419 | 5.5   | 07/07/1999 | 6420   | mg/kg | 6010B  | X           |           |
| CMS-419 | 7.5   | 07/07/1999 | 1080   | mg/kg | 6010B  | X           |           |
| CMS-428 | 1.5   | 07/20/1999 | 567J   | mg/kg | 6010B  | X           |           |
| CMS-428 | 5.5   | 07/20/1999 | 571J   | mg/kg | 6010B  | X           |           |
| CMS-456 | 0.5   | 07/20/1999 | 1700J  | mg/kg | 6010B  | X           |           |

**NOTES:**

J = The compound/analyte result is considered estimated based on quality assurance/quality control exceedance(s).

X = Denotes exceedance of applicable standard.

RI Residential Standards Source:

Table 1 Direct Exposure Criteria, Remediation Regulations,

DEM-DSR-01-93, 31 March 1993, amended August 1996, Division of Site Remediation Department of Environmental Management,

State of Rhode Island and Providence Plantation

# Table 8 - Split Sample Summary

| SDG  | Sample ID   | Split<br>Sample ID | Analysis | Parameter    | mg/kg     | Flag | mg/kg     | Flag | Relative<br>Percent<br>Difference |
|------|-------------|--------------------|----------|--------------|-----------|------|-----------|------|-----------------------------------|
| AD01 | AD-04-A     | AD-04-A-QC         | 8290     | 2,3,7,8-TCDD | 0.026     | J    | 0.0342    | J    | -27.24                            |
| AP01 | CMS-602-A   | CMS-602-A-QC       | 8280     | 2,3,7,8-TCDD | 0.0038    |      | 0.00316   |      | 18.39                             |
| AP02 | CMS-611-A   | CMS-611-A-QC       | 8280     | 2,3,7,8-TCDD | 0.002     | J    | 0.000221  |      | 160.20                            |
| AP03 | CMS-617-A   | CMS-617-A-QC       | 8280     | 2,3,7,8-TCDD | 0.012     |      | 0.00256   |      | 129.67                            |
| GP01 | CMS-153-B   | CMS-153-B-QC       | 8280     | 2,3,7,8-TCDD | 0.0001    | J    | 0.0000248 | U    | 120.51                            |
| GP02 | CMS-404-A   | CMS-404-A-QC       | 8280     | 2,3,7,8-TCDD | 0.000083  | J    | 0.000219  |      | -90.07                            |
| GP03 | CMS-410-E   | CMS-410-E-QC       | 8280     | 2,3,7,8-TCDD | 0.00029   | U    | 0.000449  |      | -43.03                            |
| GP04 | CMS-405-C   | CMS-405-C-QC       | 8280     | 2,3,7,8-TCDD | 0.0001    | U    | 0.0000271 |      | 114.71                            |
| GP05 | CMS-409-F   | CMS-409-F-QC       | 8280     | 2,3,7,8-TCDD | 0.0000036 | U    | 0.0000113 | U    | 0.00                              |
| GP06 | CMS-416-D   | CMS-416-D-QC       | 8280     | 2,3,7,8-TCDD | 0.0000057 | U    | 0.000006  | U    | 0.00                              |
| GP07 | CMS-142-A   | CMS-142-A-QC       | 8280     | 2,3,7,8-TCDD | 0.00069   | J    | 0.00205   |      | -99.27                            |
| GP08 | CMS-406-C   | CMS-406-C-QC       | 8280     | 2,3,7,8-TCDD | 0.0000054 | U    | 0.0000407 |      | -153.15                           |
| GP09 | CMS-060-A   | CMS-060-A-QC       | 8280     | 2,3,7,8-TCDD | 0.00082   | J    | 0.000491  |      | 50.19                             |
| GP10 | CMS-069-B   | CMS-069-B-QC       | 8280     | 2,3,7,8-TCDD | 0.00017   | J    | 0.000271  |      | -45.80                            |
| GP11 | CMS-420-C   | CMS-420-C-QC       | 8280     | 2,3,7,8-TCDD | 0.0029    | U    | 0.0006429 | U    | 0.00                              |
| GP12 | CMS-162-D   | CMS-162-D-QC       | 8280     | 2,3,7,8-TCDD | 0.00086   | J    | 0.000624  |      | 31.81                             |
| GP13 | CMS-419-B   | CMS-419-B-QC       | 8280     | 2,3,7,8-TCDD | 0.00012   | U    | 0.0001539 | UJ   | 0.00                              |
| GP14 | CMS-426-C   | CMS-426-C-QC       | 8280     | 2,3,7,8-TCDD | 0.0082    |      | 0.00431   |      | 62.19                             |
| GP15 | CMS-421-C   | CMS-421-C-QC       | 8280     | 2,3,7,8-TCDD | 0.00032   | U    | 0.0000491 | U    | 0.00                              |
| GP16 | CMS-432-C   | CMS-432-C-QC       | 8280     | 2,3,7,8-TCDD | 0.000036  | U    | 0.0000281 |      | 24.65                             |
| GP17 | CMS-455-F   | CMS-455-F-QC       | 8280     | 2,3,7,8-TCDD | 0.00014   | U    | 0.000146  |      | -4.20                             |
| GP18 | CMS-428-E   | CMS-428-E-QC       | 8280     | 2,3,7,8-TCDD | 0.000027  | U    | 0.0000083 |      | 0.00                              |
| GP19 | CMS-453-D   | CMS-453-D-QC       | 8280     | 2,3,7,8-TCDD | 0.011     | J    | 0.0429    |      | -118.37                           |
| HA01 | CMS-161-B   | CMS-161-B-QC       | 8280     | 2,3,7,8-TCDD | 0.000071  | J    | 0.000124  |      | -54.36                            |
| HA02 | CMS-147-C   | CMS-147-C-QC       | 8280     | 2,3,7,8-TCDD | 0.006     | U    | 0.000336  |      | 178.79                            |
| HA03 | CMS-177-A   | CMS-177-A-QC       | 8280     | 2,3,7,8-TCDD | 0.01      |      | 0.0226    |      | -77.30                            |
| HA04 | CMS-150-A   | CMS-150-A-QC       | 8280     | 2,3,7,8-TCDD | 0.00021   | J    | 0.000611  |      | -97.69                            |
| HA05 | CMS-193-A   | CMS-193-A-QC       | 8280     | 2,3,7,8-TCDD | 0.0072    |      | 0.00522   |      | 31.88                             |
| HA06 | CMS-191-A   | CMS-191-A-QC       | 8280     | 2,3,7,8-TCDD | 0.0054    | J    | 0.0259    |      | -130.99                           |
| HA07 | CMS-214-B   | CMS-214-B-QC       | 8280     | 2,3,7,8-TCDD | 0.00013   | J    | 0.000391  |      | -100.19                           |
| HA08 | CMS-435-A   | CMS-435-A-QC       | 8280     | 2,3,7,8-TCDD | 0.000042  | J    | 0.0000566 |      | -29.61                            |
| HA09 | CMS-019-B   | CMS-019-B-QC       | 8280     | 2,3,7,8-TCDD | 0.000031  | U    | 0.0000092 | U    | 0.00                              |
| HA10 | CMS-023-B   | CMS-023-B-QC       | 8280     | 2,3,7,8-TCDD | 0.027     | J    | 0.02809   |      | -3.96                             |
| HA11 | CMS-215-C-1 | CMS-215-C-1-Q      | 8280     | 2,3,7,8-TCDD | 0.000013  | U    | 0.000022  |      | -51.43                            |
| HA12 | CMS-463-A   | CMS-463-A-QC       | 8290     | 2,3,7,8-TCDD | 0.000016  |      | 0.000015  |      | 6.45                              |

# Table 8 - Split Sample Summary

| SDG  | Sample ID | Split<br>Sample ID | Analysis | Parameter    | mg/kg      | Flag | mg/kg     | Flag | Relative<br>Percent<br>Difference |
|------|-----------|--------------------|----------|--------------|------------|------|-----------|------|-----------------------------------|
| HA13 | CMS-477-C | CMS-477-C-QC       | 8290     | 2,3,7,8-TCDD | 0.00273    | J    | 0.0088    | J    | -105.29                           |
| HA14 | CMS-484-C | CMS-484-C-QC       | 8290     | 2,3,7,8-TCDD | .000000415 | UJ   | 0.0000044 |      | -165.52                           |
| HA15 | CMS-490-B | CMS-490-B-QC       | 8290     | 2,3,7,8-TCDD | 0.000307   |      | 0.00045   |      | -37.78                            |
| HA16 | CMS-504-A | CMS-504-A-QC       | 8290     | 2,3,7,8-TCDD | 0.0000259  |      | 0.000028  |      | -7.79                             |

# Table 9 - Field Duplicate Summary - 2,3,7,8-TCDD

| SDG  | Sample ID   | Duplicate<br>Sample ID | Analysis | Parameter    | mg/kg     | Flag | mg/kg     | Flag | Relative<br>Percent<br>Difference |
|------|-------------|------------------------|----------|--------------|-----------|------|-----------|------|-----------------------------------|
| AD01 | AD-04-A     | AD01-FD                | 8290     | 2,3,7,8-TCDD | 0.026     | J    | 0.093     | J    | -112.61                           |
| AP01 | CMS-607-A   | AP01-FD                | 8280     | 2,3,7,8-TCDD | 0.0053    | J    | 0.0095    | J    | -56.76                            |
| AP02 | CMS-611-A   | AP02-FD                | 8280     | 2,3,7,8-TCDD | 0.002     | J    | 0.0011    | J    | 58.06                             |
| AP03 | CMS-621-A   | AP03-FD                | 8280     | 2,3,7,8-TCDD | 0.0023    |      | 0.0022    |      | 4.44                              |
| BV01 | CMS-701-A   | BV01-FD                | 8280     | 2,3,7,8-TCDD | 0.00041   | J    | 0.00037   | J    | 10.26                             |
| GP01 | CMS-153-B   | GP01-FD                | 8280     | 2,3,7,8-TCDD | 0.0001    | J    | 0.00055   | J    | -138.46                           |
| GP02 | CMS-404-A   | GP02-FD                | 8280     | 2,3,7,8-TCDD | 0.000083  | J    | 0.0003    | J    | -113.32                           |
| GP03 | CMS-410-E   | GP03-FD                | 8280     | 2,3,7,8-TCDD | 0.00029   | U    | 0.00015   | U    | 0.00                              |
| GP04 | CMS-405-B   | GP04-FD                | 8280     | 2,3,7,8-TCDD | 0.00004   | UJ   | 0.000093  | UJ   | 0.00                              |
| GP05 | CMS-409-E   | GP05-FD                | 8280     | 2,3,7,8-TCDD | 0.0000084 | U    | 0.0000048 | U    | 0.00                              |
| GP06 | CMS-416-B   | GP06-FD                | 8280     | 2,3,7,8-TCDD | 0.00022   | J    | 0.0016    | J    | -151.65                           |
| GP07 | CMS-142-A   | GP07-FD                | 8280     | 2,3,7,8-TCDD | 0.00069   | J    | 0.0015    | J    | -73.97                            |
| GP08 | CMS-406-B   | GP08-FD                | 8280     | 2,3,7,8-TCDD | 0.000025  | U    | 0.000029  | U    | 0.00                              |
| GP09 | CMS-060-A   | GP09-FD                | 8280     | 2,3,7,8-TCDD | 0.00082   | J    | 0.000047  | U    | 178.32                            |
| GP10 | CMS-069-B   | GP10-FD                | 8280     | 2,3,7,8-TCDD | 0.00017   | J    | 0.00018   | J    | -5.71                             |
| GP11 | CMS-420-B   | GP11-FD                | 8280     | 2,3,7,8-TCDD | 0.000019  | U    | 0.0000087 | U    | 0.00                              |
| GP12 | CMS-162-D   | GP12-FD                | 8280     | 2,3,7,8-TCDD | 0.00086   | J    | 0.00061   | U    | 34.01                             |
| GP13 | CMS-423-D   | GP13-FD                | 8280     | 2,3,7,8-TCDD | 0.00012   | J    | 0.000021  | U    | 140.43                            |
| GP14 | CMS-426-B   | GP14-FD                | 8280     | 2,3,7,8-TCDD | 0.0033    | J    | 0.0084    | J    | -87.18                            |
| GP15 | CMS-421-B   | GP15-FD                | 8280     | 2,3,7,8-TCDD | 0.00021   | U    | 0.000079  | J    | 90.66                             |
| GP16 | CMS-432-B   | GP16-FD                | 8280     | 2,3,7,8-TCDD | 0.000087  | U    | 0.000087  | J    | 0.00                              |
| GP17 | CMS-455-E   | GP17-FD                | 8280     | 2,3,7,8-TCDD | 0.00012   | U    | 0.000073  | U    | 0.00                              |
| GP18 | CMS-428-C   | GP18-FD                | 8280     | 2,3,7,8-TCDD | 0.000037  | U    | 0.000023  | U    | 0.00                              |
| GP19 | CMS-453-D   | GP19-FD                | 8280     | 2,3,7,8-TCDD | 0.011     | J    | 0.0022    | J    | 133.33                            |
| GP20 | CMS-452-E   | GP20-FD                | 8280     | 2,3,7,8-TCDD | 0.00075   |      | 0.00057   |      | 27.27                             |
| HA01 | CMS-162-A   | HA01-FD                | 8280     | 2,3,7,8-TCDD | 0.00054   | J    | 0.00098   | J    | -57.89                            |
| HA02 | CMS-238-B   | HA02-FD                | 8280     | 2,3,7,8-TCDD | 0.00013   | J    | 0.00033   | U    | -86.96                            |
| HA03 | CMS-170-B   | HA03-FD                | 8280     | 2,3,7,8-TCDD | 0.002     | J    | 0.0072    | J    | -113.04                           |
| HA04 | CMS-150-A   | HA04-FD                | 8280     | 2,3,7,8-TCDD | 0.00021   | J    | 0.00032   | J    | -41.51                            |
| HA05 | CMS-193-A   | HA05-FD                | 8280     | 2,3,7,8-TCDD | 0.0072    |      | 0.0099    |      | -31.58                            |
| HA06 | CMS-191-A   | HA06-FD                | 8280     | 2,3,7,8-TCDD | 0.0054    | J    | 0.012     | J    | -75.86                            |
| HA07 | CMS-214-B   | HA07-FD                | 8280     | 2,3,7,8-TCDD | 0.00013   | J    | 0.00029   | J    | -76.19                            |
| HA08 | CMS-435-A   | HA08-FD                | 8280     | 2,3,7,8-TCDD | 0.000042  | J    | 0.000027  | U    | 43.48                             |
| HA09 | CMS-019-B   | HA09-FD                | 8280     | 2,3,7,8-TCDD | 0.000031  | U    | 0.000033  | J    | -6.25                             |
| HA10 | CMS-023-B   | HA10-FD                | 8280     | 2,3,7,8-TCDD | 0.027     | J    | 0.013     | J    | 70.00                             |
| HA11 | CMS-215-B-1 | HA11-FD                | 8280     | 2,3,7,8-TCDD | 0.00089   | J    | 0.0003    | J    | 99.16                             |

Table 9 - Field Duplicate Summary - 2,3,7,8-TCDD

| SDG  | Sample ID | Duplicate<br>Sample ID | Analysis | Parameter    | mg/kg      | Flag | mg/kg      | Flag | Relative<br>Percent<br>Difference |
|------|-----------|------------------------|----------|--------------|------------|------|------------|------|-----------------------------------|
| HA12 | CMS-464-A | HA12-FD                | 8290     | 2,3,7,8-TCDD | 0.00000162 |      | 0.00000261 |      | -46.81                            |
| HA13 | CMS-477-B | HA13-FD                | 8290     | 2,3,7,8-TCDD | 0.00024    | J    | 0.0000634  |      | 116.41                            |
| HA14 | CMS-484-A | HA14-FD                | 8290     | 2,3,7,8-TCDD | 0.00000051 | UJ   | 0.00000115 | J    | -77.11                            |
| HA15 | CMS-490-B | HA15-FD                | 8290     | 2,3,7,8-TCDD | 0.000307   |      | 0.000351   |      | -13.37                            |
| HA16 | CMS-500-A | HA16-FD                | 8290     | 2,3,7,8-TCDD | 0.0000168  | J    | 0.0000227  | J    | -29.87                            |

# Table 10 - Field Duplicate Summary - Aroclor 1254

| SDG  | Sample ID | Duplicate<br>Sample ID | Analysis | Parameter    | mg/kg | Flag | mg/kg | Flag | Relative<br>Percent<br>Difference |
|------|-----------|------------------------|----------|--------------|-------|------|-------|------|-----------------------------------|
| AD01 | AD-04-A   | AD01-FD                | 8082     | Aroclor 1254 | 9.1   |      | 7.1   |      | 0.00                              |
| AP01 | CMS-607-A | AP01-FD                | 8082     | Aroclor 1254 | 28.0  |      | 17.0  |      | 48.89                             |
| AP02 | CMS-611-A | AP02-FD                | 8082     | Aroclor 1254 | 1.7   | J    | 0.54  | J    | 103.57                            |
| AP03 | CMS-621-A | AP03-FD                | 8082     | Aroclor 1254 | 0.23  |      | 0.16  |      | 35.90                             |
| BV01 | CMS-701-A | BV01-FD                | 8082     | Aroclor 1254 | 0.037 | U    | 0.037 | U    | 0.00                              |
| GP01 | CMS-153-B | GP01-FD                | 8082     | Aroclor 1254 | 0.58  | J    | 0.085 | J    | 148.87                            |
| GP02 | CMS-404-A | GP02-FD                | 8082     | Aroclor 1254 | 1.6   | J    | 1.8   | J    | -11.76                            |
| GP03 | CMS-410-E | GP03-FD                | 8082     | Aroclor 1254 | 32.0  | J    | 13.0  | J    | 84.44                             |
| GP04 | CMS-405-B | GP04-FD                | 8082     | Aroclor 1254 | 1.3   | J    | 19.0  | J    | -174.38                           |
| GP05 | CMS-409-E | GP05-FD                | 8082     | Aroclor 1254 | 0.7   | U    | 0.4   | U    | 0.00                              |
| GP06 | CMS-416-B | GP06-FD                | 8082     | Aroclor 1254 | 32.0  | J    | 56.0  | J    | -54.55                            |
| GP07 | CMS-142-A | GP07-FD                | 8082     | Aroclor 1254 | 0.76  | J    | 0.59  |      | 25.19                             |
| GP08 | CMS-406-B | GP08-FD                | 8082     | Aroclor 1254 | 2.3   | J    | 0.035 | UJ   | 194.00                            |
| GP09 | CMS-060-A | GP09-FD                | 8082     | Aroclor 1254 | 0.31  | J    | 0.55  |      | -55.81                            |
| GP11 | CMS-420-B | GP11-FD                | 8082     | Aroclor 1254 | 0.44  | J    | 0.98  | J    | -76.06                            |
| GP12 | CMS-162-D | GP12-FD                | 8082     | Aroclor 1254 | 2.1   |      | 2.1   | J    | 0.00                              |
| GP13 | CMS-423-D | GP13-FD                | 8082     | Aroclor 1254 | 12.0  |      | 9.1   |      | 27.49                             |
| GP14 | CMS-426-B | GP14-FD                | 8082     | Aroclor 1254 | 5.7   |      | 3.6   | J    | 45.16                             |
| GP15 | CMS-421-B | GP15-FD                | 8082     | Aroclor 1254 | 22.0  |      | 14.0  |      | 44.44                             |
| GP16 | CMS-432-B | GP16-FD                | 8082     | Aroclor 1254 | 1.4   | J    | 0.47  | J    | 99.47                             |
| GP17 | CMS-455-E | GP17-FD                | 8082     | Aroclor 1254 | 0.24  | UJ   | 0.41  | J    | -52.31                            |
| GP18 | CMS-428-C | GP18-FD                | 8082     | Aroclor 1254 | 0.21  | J    | 0.68  | J    | -105.62                           |
| GP19 | CMS-453-D | GP19-FD                | 8082     | Aroclor 1254 | 0.13  | J    | 0.11  | J    | 16.67                             |
| GP20 | CMS-452-E | GP20-FD                | 8082     | Aroclor 1254 | 0.65  | J    | 0.08  | J    | 156.16                            |
| HA01 | CMS-162-A | HA01-FD                | 8082     | Aroclor 1254 | 2.6   | J    | 3.7   | J    | -34.92                            |
| HA02 | CMS-238-B | HA02-FD                | 8082     | Aroclor 1254 | 4.8   | J    | 1.5   | J    | 104.76                            |
| HA03 | CMS-170-B | HA03-FD                | 8082     | Aroclor 1254 | 0.24  | J    | 0.14  | J    | 52.63                             |