

documentation support the conclusion that the concentration in sample 156-B74G-13.5-14.0 is likely less than the 20 mg/kg CrSCC.

The ratio of Cr⁺⁶ to total Cr was examined for samples in boring B74. As listed in **Table 6**, one sample (156-B74G_13.5-14.0) has a ratio that exceeds 1 and for the other samples collected from this boring, the maximum ratio is 0.32. For sample 156-B74G_13.5-14.0, with a ratio of 1.25, the actual Cr⁺⁶ concentration in the sample is less than the detection limit of 27.25 mg/kg. Using the maximum ratio of 0.32 found in the other samples from boring B74 and the total Cr concentration of 21.8 mg/kg, the predicted Cr⁺⁶ concentration for sample 156-B74G_13.5-14.0 is 7.1 mg/kg. This estimate of the Cr+6 concentration in sample 156-B74G_13.5-14.0 supports the contention that the elevated detection limit is a result of the analytical method and not an exceedance of the CrSCC.

Since the estimated Cr⁺⁶ concentration is less than the NJDEP CrSCC of 20 mg/kg, no additional remediation is required for soils associated with boring B74.

Table 6 Boring B74 Cr⁺⁶ Sample Results

Sample ID	Sample Depth (ft bgs)	Cr ⁺⁶ (mg/kg)	Total Cr (mg/kg)	Ratio of Cr ⁺⁶ /Total Cr (mg/kg)
156-B74A_1.1-1.6	1.1-1.6	2.14 U	6.6	0.32
156-B74B_4-4.5	4-4.5	24.2	257	0.09
156-B74C_5-5.5	5-5.5	5.5	155	0.04
156-B74D_8-8.5	8-8.5	2.46 U	15.2	0.16
156-B74F_10-10.5	10-10.5	2.29 U	12.1	0.19
156-B74F_12-12.5	12-12.5	2.36 U	12.9	0.18
156-B74G_13.5-14.0	13.5-14	27.25 U	21.8	1.25

Notes:

- bgs – below ground surface
- Cr – total chromium
- Cr⁺⁶ – hexavalent chromium
- ft – feet
- ID - identifier
- mg/kg – milligrams per kilogram
- U - The analyte was not detected above the sample reporting limit shown.

For boring PE-81, located adjacent to Building 1, the TEE is above the sample elevation with a concentration exceeding the CrSCC of 20 mg/kg for Cr⁺⁶. **Table 7** depicts information for the sample collected from boring PE-81.