Table 2 - Action Level Calculations										
Site Consitituents of Concern	**RCRA**	**Landfill**	**Units**	**Surface Water Screening Criteria (1)**	**Source**	**Max Detect in Perimeter Wells**	**Predicted Surface Water Concentration (Max Detect in GW /DF) (2)**	**(1):(2) Ratio**	**Mean of Detections in Max Detect Well**	**Action Level**
ARSENIC	X	X	ug/l	1.00E+01	TN-AQWC (DW)	5.80E+00	5.80E-03	1.72E+03	4.04E+00	6.97E+03
BARIUM	X		ug/l	2.00E+03	TN-AQWC (DW)	3.60E+02	3.60E-01	5.56E+03	2.52E+02	1.40E+06
BENZENE	X		ug/l	5.00E+00	TN-AQWC (DW)	9.90E-01	9.90E-04	5.05E+03	4.98E-01	2.52E+03
BIPHENYL	X		ug/l	3.00E+02	PRG	1.80E+03	1.80E+00	1.67E+02	7.79E+02	1.30E+05
BIS(2-ETHYLHEXYL)PHTHALATE	X		ug/l	6.00E+00	TN-AQWC (DW)	8.00E+01	8.00E-02	7.50E+01	3.60E+00	2.70E+02
BORON	X	X	ug/l	7.30E+03	PRG	4.60E+03	4.60E+00	1.59E+03	2.95E+03	4.68E+06
CADMIUM		X	ug/l	5.00E+00	TN-AQWC (DW)	1.20E-01	1.20E-04	4.17E+04	1.20E-01	5.00E+03
CHLORIDE		X	ug/l	2.50E+05	TN SEC MCL	3.21E+04	3.21E+01	7.79E+03	1.56E+04	1.22E+08
CHROMIUM		X	ug/l	1.00E+02	TN-AQWC (DW)	1.00E+00	1.00E-03	1.00E+05	4.70E-01	4.70E+04
CIS-1,2 DICHLOROETHENE	X		ug/l	7.00E+01	TN-AQWC (DW)	5.80E+01	5.80E-02	1.21E+03	1.51E+01	1.82E+04
DIBENZOFURAN	X		ug/l	1.20E+01	PRG	2.20E+00	2.20E-03	5.45E+03	1.34E+00	7.31E+03
DIPHENYL ETHER	X		ug/l	6.80E+02	DuPont	5.70E+03	5.70E+00	1.19E+02	3.78E+03	4.50E+05
IRON	X	X	ug/l	1.10E+04	PRG	4.95E+04	4.95E+01	2.22E+02	3.82E+02	8.49E+04
LEAD		X	ug/l	2.50E+00	TN-AQWC (AQ)	1.10E+00	1.10E-03	2.27E+03	1.10E+00	2.50E+03
MANGANESE	X	X	ug/l	8.80E+02	PRG	1.29E+04	1.29E+01	6.82E+01	8.71E+03	5.94E+05
MERCURY		X	ug/l	5.00E-02	TN-AQWC (REC)	1.30E+00	1.30E-03	3.85E+01	1.90E-01	7.31E+00
NITRATE		X	ug/l	1.00E+04	TN MCL	1.70E+02	1.70E-01	5.88E+04	4.78E+01	2.81E+06
PCB 1242	X		ug/l	1.40E-02	TN-AQWC (AQ)	1.50E+00	1.50E-03	9.33E+00	4.75E-01	4.43E+00
PHENOL	X		ug/l	2.10E+04	TN-AQWC (REC)	1.40E+02	1.40E-01	1.50E+05	7.79E+01	1.17E+07
SULFATE		X	ug/l	2.50E+05	TN SEC MCL	1.18E+05	1.18E+02	2.12E+03	3.17E+04	6.71E+07
TETRACHLOROETHYLENE	X		ug/l	5.00E+00	TN-AQWC (DW)	8.00E+00	8.00E-03	6.25E+02	2.07E+00	1.29E+03
TRICHLOROETHENE	X		ug/l	5.00E+00	TN-AQWC (DW)	1.10E+01	1.10E-02	4.55E+02	3.12E+00	1.42E+03
VINYL CHLORIDE	X		ug/l	2.50E-01	TN-AQWC (REC)	7.00E+00	7.00E-03	3.57E+01	2.83E+00	1.01E+02

Tennessee River is classified for domestic and industrial water supply, fish and aquatic life, recreation, irrigation, and livestock watering and wildlife. Therefore, the Tennessee Ambient Water Quality Criteria was chosen as the most appropriate criteria for screening. When AWQC was not available then the MCL, PRG or DuPont site-specific value was utilized.

Sources of Screening Criteria

TN AWQS - Chapter 1200-4-3 Ambient Water Quality Criteria for water uses, most conservative of domestic supply (DW) (equivalent to MCL), fish and aquatic life (AQ), and recreational uses (Rec - water and organism) (October 2007)

For PCBs, a fish advisory for PCBs is in place for Nickajack Reservoir. Therefore criteria protective of aquatic life was utilized.

PRG - USEPA Region IX Preliminary Remediation Goal for tap water (November 2004).

DuPont - Site-specific screening level for tap water ingestion, value protective of human and ecological receptors in the river.