

CHAPTER 62-777 CONTAMINANT CLEANUP TARGET LEVELS

62-777.100 Referenced Guidelines.

62-777.150 Applicability.

62-777.170 Derivation of Cleanup Target Levels.

62-777.100 Referenced Guidelines.

Specific references to the guidelines listed below are made within this chapter. These guidelines are not standards as defined in Section 403.803, F.S. Use of the guidelines is not mandatory; the guidelines are included for informational purposes only.

(1) Approach to the Assessment of Sediment Quality in Florida Coastal Water, Volumes 1-4, dated November 1994.

(2) Technical Report: Development of Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated February 2005.

(3) Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits, dated October 12, 2004.

(4) Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters, dated January 2003.

Specific Authority 376.303, 376.30701, 376.3071, 376.3078(4), 376.81, 403.061, 403.704 FS. Law Implemented 376.3071, 376.30701, 376.3078(4), 376.81, 403.707 FS. History—New 8-5-99, Amended 4-17-05.

62-777.150 Applicability.

(1) This chapter provides criteria in tables and figures that apply to site rehabilitation at sites that are governed by the terms of a brownfield site rehabilitation agreement pursuant to Chapter 62-785, F.A.C.; to site rehabilitation pursuant to Chapters 62-730, F.A.C., Hazardous Waste, and 62-780, F.A.C., Contaminated Site Cleanup Criteria; and to the program specific contaminants of concern for site rehabilitation pursuant to Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria, and Chapter 62-782, F.A.C., Drycleaning Solvent Cleanup Criteria; and to the treatment of soil at facilities permitted pursuant to Chapter 62-713, F.A.C., Soil Treatment Facilities. Those rule chapters identify the specific contaminants of concern to be addressed and those rule chapters should be referenced for use and application of the tables

and figures.

(2) Chapter 62-770, F.A.C., Table A, titled “Petroleum Products’ Contaminants of Concern”, identifies the specific petroleum products’ contaminants of concern for use at sites being addressed pursuant to Chapter 62-770, F.A.C.

(3) Contaminants of concern for sites pursuant to Chapters 62-730 and 62-780, F.A.C., are based on the site-specific circumstances and may include other contaminants of concern not listed in the tables and figures contained in this rule chapter.

(4) Chapter 62-782, F.A.C., Table A, titled “Drycleaning Contaminants of Concern”, identifies the specific drycleaning contaminants of concern for use at sites being addressed pursuant to Chapter 62-782, F.A.C.

(5) Contaminants of concern for sites that are governed by the terms of a brownfield site rehabilitation agreement pursuant to Chapter 62-785, F.A.C., are based on the site-specific circumstances and may include other contaminants of concern not listed in the tables and figures contained in this rule chapter.

(6) Contaminants of concern for soil treated pursuant to Chapter 62-713, F.A.C., are based on the types of soil that the facility is permitted to treat.

(7) As further provided in substantive provisions of the above-referenced rule chapters, contaminant cleanup target levels (CTLs) are default cleanup criteria and do not establish standards pursuant to Chapters 62-302, 62-520, or 62-550, F.A.C. Deviations from the default cleanup criteria are allowed if approved by the Department pursuant to applicable provisions of Chapters 62-713, 62-730, 62-770, 62-780, 62-782, and 62-785, F.A.C. Nothing herein is intended to limit the use of risk assessments and site-specific considerations to establish site-specific CTLs.

Specific Authority 376.303, 376.30701, 376.3071, 376.3078(4), 376.81, 403.061, 403.704 FS. Law Implemented 376.30701, 376.3071, 376.3078(4), 376.81, 403.707 FS. History—New 8-5-99, Amended 4-17-05.

62-777.170 Derivation of Cleanup Target Levels.

(1) Groundwater and Surface Water. In deriving groundwater and surface water CTLs, the methodology presented in the technical report referenced in subsection 62-777.100(2), F.A.C., was utilized.

(a) CTLs for contaminants found in groundwater are provided in Table I. The CTLs for contaminants are not to be construed to create any new water quality standards pursuant to Chapters 62-520 and 62-550, F.A.C. The numerical standards promulgated pursuant to Chapter 62-520, F.A.C., or CTLs derived using the minimum criteria specified in Chapter 62-520, F.A.C., are the CTLs referenced in Table I. In deriving groundwater CTLs based upon the minimum criteria specified in Chapter 62-520, F.A.C., the following factors were considered: calculations using a lifetime excess cancer risk level of $1.0E-6$ and; a hazard quotient of 1 or less; and nuisance, organoleptic, and aesthetic considerations. For contaminants not listed in Table I, the equations provided in Figures 1 and 2 and nuisance, organoleptic, and aesthetic considerations may be used to calculate CTLs for contaminants found in groundwater for sites or facilities subject to Chapter 62-713, 62-730, 62-780, or 62-785, F.A.C.

(b) CTLs for contaminants found in surface water or in contaminated groundwater that is discharging into surface water or that may discharge into surface water in the future based on available information (for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling), are also provided in Table I. The CTLs for contaminants are not to be construed to create any new water quality standards pursuant to Chapter 62-302, F.A.C. The numerical standards promulgated in Chapter 62-302, F.A.C., CTLs derived based on human health endpoints and calculated using Figure 3A, or CTLs derived using the toxicity criteria specified in Chapter 62-302, F.A.C., and calculated using Figure 3B, are the CTLs referenced in Table I. For contaminants not listed in Table I, the equations provided in Figure 3A and the methodology provided in Figure 3B may be used to calculate CTLs for contaminants found in surface water, or groundwater that is discharging into surface water for sites or facilities subject to Chapter 62-713, 62-730, 62-780, or 62-785, F.A.C.

(c) Table IV provides site-specific conditions and geochemical parameters that may be used for a technical evaluation of the appropriateness of natural attenuation.

(d) Table V provides default source concentrations that may be used for a technical evaluation of the appropriateness of natural attenuation.

(2) Soil. In deriving soil CTLs, the methodology presented in the technical report referenced in subsection 62-777.100(2), F.A.C., was utilized.

(a) CTLs for contaminants found in soil are provided in Table II. As further provided in other substantive provisions of those rule chapters, the soil CTLs contained herein are default criteria. Deviations from the default criteria are allowed if approved by the Department pursuant to applicable provisions of Chapters 62-713, 62-730, 62-770, 62-780, 62-782, and 62-785, F.A.C. In deriving soil CTLs for human exposure to each contaminant found in soil, the following factors were considered: calculations using a lifetime excess cancer risk level of 1.0E-6 and a hazard quotient of 1 or less. The leachability-based soil CTLs for protection of the groundwater and surface water were derived based on the groundwater and surface water CTLs provided in Table I. The equations provided in Figures 4, 5, 6, 7, and 8 may be used to calculate CTLs for contaminants found in soil not listed in Table II for sites or facilities subject to Chapter 62-713, 62-730, 62-780, or 62-785, F.A.C. To calculate 2,3,7,8-TCDD equivalent concentrations for evaluation of samples that contain dioxins and furans, the Toxic Equivalent Factors (TEFs) and approach described in the technical report referenced in subsection 62-777.100(2), F.A.C., shall be used. To calculate benzo(a)pyrene equivalent concentrations for evaluation of samples that contain carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs), the TEFs and approach described in the technical report referenced in subsection 62-777.100(2), F.A.C., shall be used.

(b) Table III provides soil properties, and test methods that may be used for determining soil properties, for the derivation of alternative CTLs based on site-specific soil characteristics [refer to the technical report referenced in subsection 62-777.100(2), F.A.C., for guidance on the derivation of alternative CTLs].

(c) Table VI provides default parameters that may be used in Figures 4, 5, and 7.

Specific Authority 376.303, 376.30701, 376.3071, 376.3078(4), 376.81, 403.061, 403.704 FS. Law Implemented 376.3071, 376.30701, 376.3078(4), 376.81, 403.707 FS. History—New 8-5-99, Amended 4-17-05.

PLEASE SEE TABLES I, II, III, IV, V, VI, FIGURE 1, FIGURE 2, FIGURE 3A, FIGURE 3B, FIGURE 4, FIGURE 5, FIGURE 6, FIGURE 7, FIGURE 8, FIGURE 9, FIGURE 10