THE PRELIMINARY TEXT OF THE PROPOSED RULE DEVELOPMENT IS NOT AVAILABLE AT THIS TIME.

DEPARTMENT OF HEALTH

Board of Speech-Language Pathology and Audiology

RULE TITLE: RULE NO.: Disciplinary Guidelines 64B20-7.001

PURPOSE AND EFFECT: The Board shall undertake a review of Rule 64B20-7.001 in its entirety for any technical, grammatical or substantial changes which the Board may deem necessary.

SUBJECT AREA TO BE ADDRESSED: Disciplinary Guidelines.

SPECIFIC AUTHORITY: 468.1135(4) FS.

LAW IMPLEMENTED: 468.1295 FS.

IF REOUESTED IN WRITING AND NOT DEEMED UNNECESSARY BY THE AGENCY HEAD, A RULE DEVELOPMENT WORKSHOP WILL BE HELD AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., Thursday, May 27, 1999

PLACE: Omni West Beach Hotel, 1601 Belvedere Road, West Palm Beach, Florida

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE DEVELOPMENT AND A COPY OF THE PRELIMINARY DRAFT, IF AVAILABLE, IS: Sue Foster, Executive Director, Board of Speech-Language Pathology and Audiology/MQA, 2020 Capital Circle, S. E., Bin #C08, Tallahassee, Florida 32399-3258

THE PRELIMINARY TEXT OF THE PROPOSED RULE DEVELOPMENT IS NOT AVAILABLE AT THIS TIME.

Section II **Proposed Rules**

DEPARTMENT OF INSURANCE

RULE CHAPTER TITLE:	RULE CHAPTER NO.:			
Medicare Supplement Insurance	4-156, Part I			
RULE TITLES:	RULE NOS.:			
Definitions	4-156.003			
Benefit Standards for Policies or				
Certificates Issued or Delivered				
on or After January 1, 1992	4-156.007			
Standard Medicare Supplement Benef	fit Plans 4-156.008			
Open Enrollment	4-156.009			
Guaranteed Issue for Eligible Persons	4-156.0095			
Loss Ratio Standards and Refund or				
Credit of Premium	4-156.011			
Required Disclosure Provisions	4-156.014			
PURPOSE AND EFFECT: This Medicare Supplement rule is				
amended to incorporate changes needed to bring this regulation				
into compliance with Federal stand	dards. Additionally, the			

amendments also include a change to address an issue raised by the Joint Administrative Procedures Committee and clarification of particular issues related to the issuance of Medicare Supplement Insurance.

SUMMARY: The proposed changes amend the minimum standards for Medicare Supplement Insurance in Florida.

OF SUMMARY STATEMENT OF **ESTIMATED** REGULATORY COSTS: No SERC has been prepared.

Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative, must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 624.308, 627.673, 627.674(2) FS. LAW IMPLEMENTED: 624.307(1), 627.410, 627.411, 627.673, 627.674, 627.6741, 627.6745, 627.6746 FS.

IF REOUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE TIME, DATE, AND PLACE SHOWN BELOW:

TIME AND DATE: 10:00 a.m., May 18, 1999

PLACE: Room 116, Larson Building, 200 East Gaines Street, Tallahassee, Florida

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: Frank Dino, Actuary, Life & Health Forms & Rates, Division of Insurer Services, Department of Insurance, 200 East Gaines Street, Tallahassee, Florida 32399-0328, (850)413-5014

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this program, please advise the Department at least 5 calendar days before the program by contacting Liz Morris at (850)413-5112.

THE FULL TEXT OF THE PROPOSED RULES IS:

4-156.003 Definitions.

For purposes of this <u>rule</u> regulation:

- (1) No change.
- (2) "Bankruptcy" means when a Medicare+Choice organization that is not an issuer has filed, or has had filed against it, a petition for declaration of bankruptcy and has ceased doing business in the state.
- (3)(2) "Certificate" means any certificate delivered or issued for delivery in this state under a group Medicare supplement policy.
- (4)(3) "Certificate Form" means the form on which the certificate is delivered or issued for delivery by the issuer.
- (5) "Continuous period of creditable coverage" means the period during which an individual was covered by creditable coverage, if during the period of the coverage the individual had no breaks in coverage greater than sixty-three (63) days.
- (6) "Creditable coverage" means, with respect to an individual, coverage of the individual as defined in section 627.6561(5), Florida Statutes.

- (7)(4) "Department" means the Florida Department of Insurance.
- (8) "Employee welfare benefit plan" means a plan, fund or program of employee benefits as defined in 29 U.S.C. Section 1002 (Employee Retirement Income Security Act).
- (9) "Insolvency" means that all the assets of the insurer, if made immediately available, would not be sufficient to discharge all its liabilities or that the insurer is unable to pay its debts as they become due in the usual course of business. When the context of any provision of the insurance code so indicates, insolvency also includes and is defined as impairment of surplus as defined in s. 631.011(10), F.S., and impairment of capital as defined in s. 631.011(9), F.S.
 - (5) through (6) renumbered (10) through (11) No change.
- (12) "Medicare+Choice plan" means a plan of coverage for health benefits under Medicare Part C as defined in Section 1859 found in Title IV, Subtitle A, Chapter 1 of P.L. 105-33, and includes:
- (a) Coordinated care plans which provide health care services, including but not limited to health maintenance organization plans (with or without a point-of-service option), plans offered by provider-sponsored organizations, and preferred provider organization plans;
- (b) Medical savings account plans coupled with a contribution into a Medicare+Choice medical savings account; and
 - (c) Medicare+Choice private fee-for-service plans.
 - (7) through (11) renumbered (13) through (17) No change.
- (18) "Secretary" means the Secretary of the United States

 Department of Health and Human Services.

Specific Authority 624.308(1), 627.674(2) FS. Law Implemented <u>624.307(1)</u>, 627.674, 627.6741 FS. History–New 1-1-81, Formerly 4-51.03, Amended 11-7-88, 9-4-89, 12-9-90, Formerly 4-51.003, Amended 1-1-92, 7-14-96,

4-156.007 Benefit Standards for Policies or Certificates Issued or Delivered on or After January 1, 1992.

The following standards are applicable to all Medicare supplement policies or certificates delivered or issued for delivery in this State on or after January 1, 1992. No policy or certificate may be advertised, solicited, delivered or issued for delivery in this State as a Medicare supplement policy or certificate unless it complies with these benefit standards.

- (1) General Standards. The following standards apply to Medicare supplement policies and certificates and are in addition to all other requirements of this regulation.
 - (a) through (d) No change.
- (e) Each Medicare supplement policy shall be guaranteed renewable and
 - 1. through 2. No change.

3.a. If the Medicare supplement policy is terminated by the group policyholder and is not replaced as provided under Section 4-156.007(1)(e)5., the issuer shall offer certificateholders an individual Medicare supplement policy which. (at the option of the certificateholder):

(<u>I</u>)a. Provides for continuation of the benefits contained in the group policy, or

- (II)b. Provides for such benefits as otherwise meets the requirements of this rule.
- b. In either case the individual Medicare supplement policy is issued at the original issue age of the terminated certificateholder, and is at the duration of the terminated certificate at the time of conversion.
 - 4. through 5. No change.
 - (f) through (g) No change.
- (2) Standards for Basic ("Core") Benefits Common to All Benefit Plans.
 - (a) through (d) No change.
- (f) Coverage for the coinsurance amount (or in the case of hospital outpatient department services under a prospective payment system, the copayment amount) of Medicare eligible expenses under Part B regardless of hospital confinement, subject to the Medicare Part B deductible.
 - (3) No change.

Specific Authority 624.308, 627.674(2)(a) FS. Law Implemented 624.307(1), 627.410, 627.674, 627.6741 FS. History–New 1-1-92, Amended _____.

- 4-156.008 Standard Medicare Supplement Benefit Plans.
- (1) through (4) No change.
- (5) Make-up of benefit plans:
- (a) through (f) No change.
- (g) Standardized Medicare supplement benefit high deductible plan "F" shall include only 100% of covered expenses following the payment of the annual high deductible plan "F" deductible.
- 1. The covered expenses as defined in paragraphs 4-156.007(3)(a), (b), (e) and (h) respectively include:
 - a. The core benefit as defined in subsection 4-156.007(2);
 - b. The Medicare Part A deductible;
 - c. Skilled nursing facility care;
 - d. The Medicare Part B deductible;
- e. One hundred percent (100%) of the Medicare Part B excess charges, and
- f. Medically necessary emergency care in a foreign country.
- 2. The annual high deductible plan "F" deductible shall consist of out-of-pocket expenses, other than premiums, for services covered by the Medicare supplement plan "F" policy, and shall be in addition to any other specific benefit deductibles.
- 3. The annual high deductible Plan "F" deductible shall be:

- a. \$1,500 for 1998 and 1999, and shall be based on the calendar year:
- b. Adjusted annually thereafter by the Secretary to reflect the change in the Consumer Price Index for all urban consumers for the twelve-month period ending with August of the preceding year, and rounded to the nearest multiple of \$10.
- (g) through (j) are renumbered as (h) through (k) with no other changes.
- (1) Standardized Medicare supplement benefit high deductible plan "J" shall include only 100% of covered expenses following the payment of the annual high deductible plan "J" deductible.
- 1. The covered expenses as defined in Rule 4-156.007(3)(a),(b),(c), (e), (g), (h), (i), and (j) respectively include:
 - a. The core benefit as defined in subsection 4-156.007(2);
 - b. The Medicare Part A deductible:
 - c. Skilled nursing facility care;
 - d. Medicare Part B deductible;
- e. One hundred percent (100%) of the Medicare Part B **Excess Charges:**
 - f. Extended Outpatient Prescription Drug Benefit;
- g. Medically Necessary Emergency Care in a Foreign Country;
 - h. Preventive Medical Care Benefit; and
 - i. At-Home Recovery Benefit.
- 2. The annual high deductible plan "J" deductible shall consist of out-of-pocket expenses, other than premiums, for services covered by the Medicare supplement plan "J" policy, and shall be in addition to any other specific benefit deductibles.
 - 3. The annual deductible shall be:
 - a. \$1,500 for 1998 and 1999 based on a calendar year;
- b. Adjusted annually thereafter by the Secretary to reflect the change in the Consumer Price Index for all urban consumers for the twelve-month period ending with August of the preceding year, and rounded to the nearest multiple of \$10.

Specific Authority 624.308, 627.674(2) FS. Law Implemented 624.307(1), 627.674, 627.6741 FS. History-New 1-1-92, Amended 12-17-96,

- 4-156.009 Open Enrollment.
- (1) No change.
- (2)(a) If an applicant qualifies under subsection (1) and submits an application during the time period referenced in subsection (1) and, as of the date of application, has had a continuous period of creditable coverage of at least six (6) months, the issuer shall not exclude benefits based on a pre-existing condition.
- (b) If the applicant qualifies under subsection (1) and submits an application during the time period referenced in subsection (1) and, as of the date of application, has had a continuous period of creditable coverage that is less than six

- (6) months, the issuer shall reduce the period of any pre-existing condition exclusion by the aggregate of the period of creditable coverage applicable to the applicant as of the enrollment date. The Secretary shall specify the manner of the reduction under this subsection.
- (3)(2) Rule 4-156.009(1) and Rule 4-156.019(1) shall not be construed as preventing the exclusion of benefits under a policy, during the first six (6) months, based on a preexisting condition for which the policyholder or certificateholder received treatment or was otherwise diagnosed during the six (6) months before it became effective.

Specific Authority 624.308, 627.674(2) FS. Law Implemented 624.307(1), 627.674(3), 627.6741, 627.6746 FS. History-New 1-1-92, Amended

- 4-156.0095 Guaranteed Issue for Eligible Persons.
- (1) Guaranteed Issue.
- (a) Eligible persons are those individuals described in subsection (2) who:
- 1. Apply to enroll under the policy not later than sixty-three (63) days after the date of the termination of enrollment described in subsection (2); and
- 2. Submit evidence of the date of termination or disenrollment with the application for a Medicare supplement policy.
 - (b) With respect to eligible persons, an issuer shall not:
- 1. Deny or condition the issuance or effectiveness of a Medicare supplement policy described in subsection (3) that is offered and is available for issuance to new enrollees by the
- 2. Discriminate in the pricing of such a Medicare supplement policy because of
 - a. health status,
 - b. claims experience,
 - c. receipt of health care, or
 - d. medical condition; and
- 3. Impose an exclusion of benefits based on a preexisting condition under such a Medicare supplement policy.
- (2) Eligible Persons. An eligible person is an individual described in any of the following paragraphs:
- (a) The individual is enrolled under an employee welfare benefit plan that provides health benefits that supplement the benefits under Medicare, which plan terminates or ceases to provide at least the minimum benefits as provided under a medicare supplement Plan "A" as defined in Rule 4-156.008(1) of the supplemental health benefits to the individual:
- (b) The individual is enrolled with a Medicare+Choice organization under a Medicare+Choice plan under Part C of Medicare, and any of the following circumstances apply:
- (I) The organization's or plan's certification [under this part] has been terminated or the organization has terminated or otherwise discontinued providing the plan in the area in which the individual resides;

- (II) The individual is no longer eligible to elect the plan because of a change in the individual's place of residence or other change in circumstances specified by the Secretary, but not including termination of the individual's enrollment on the basis described in section 1851(g)(3)(B) of the federal Social Security Act (where the individual has not paid premiums on a timely basis or has engaged in disruptive behavior as specified in standards under section 1856), or the plan is terminated for all individuals within a residence area;
- (III) The individual demonstrates, in accordance with guidelines established by the Secretary, that:
- (A) The organization offering the plan substantially violated a material provision of the organization's contract under this part in relation to the individual, including the failure to provide an enrollee on a timely basis medically necessary care for which benefits are available under the plan or the failure to provide such covered care in accordance with applicable quality standards; or
- (B) The organization, or agent or other entity acting on the organization's behalf, materially misrepresented the plan's provisions in marketing the plan to the individual; or
- (C) The individual meets such other exceptional conditions as the Secretary may provide."
 - (c)1. The individual is enrolled with:
- a. An eligible organization under a contract under Section 1876 (Medicare risk or cost):
- b. A similar organization operating under demonstration project authority, effective for periods before April 1, 1999;
- c. An organization under an agreement under Section 1833(a)(1)(A) (Health care prepayment plan): or
 - d. An organization under a Medicare Select policy; and
- 2. The enrollment ceases under the same circumstances that would permit discontinuance of an individual's election of coverage under Rule 4-156.0095(2)(b) and under Section 1851(e)(4) of the Federal Social Security Act.
- (d) The individual is enrolled under a Medicare supplement policy and the enrollment ceases because of:
- 1.a. The insolvency of the issuer or bankruptcy of the nonissuer organization; or
- b. Other involuntary termination of coverage or enrollment under the policy;
- 2. The issuer of the policy substantially violated a material provision of the policy; or
- 3. The issuer, or an agent or other entity acting on the issuer's behalf, materially misrepresented the policy's provisions in marketing the policy to the individual.
- (e)1. The individual was enrolled under a Medicare supplement policy and terminated enrollment and subsequently enrolled, for the first time, with:
- <u>a. Any Medicare+Choice organization under Medicare+Choice plan under part C of Medicare;</u>

- b. Any eligible organization under a contract under Section 1876 (Medicare risk or cost), any similar organization operating under demonstration project authority:
- c. An organization under an agreement under section 1833(a)(1)(A) (health care prepayment plan); or
 - d. A Medicare Select policy; and
- 2. The subsequent enrollment under subparagraph 1. is terminated by the enrollee during any period within the first twelve (12) months of the subsequent enrollment (during which the enrollee is permitted to terminate the subsequent enrollment under section 1851(e) of the federal Social Security Act); or
- (f) The individual, upon first becoming eligible for benefits under Part A of Medicare at age 65, enrolls in a Medicare+Choice plan under Part C of Medicare, and disenrolls from the plan by not later than twelve (12) months after the effective date of enrollment.
- (3) Products to Which Eligible Persons Are Entitled. The Medicare supplement policy to which eligible persons are entitled under:
- (a) Rule 4-156.0095(2)(a), (b), (c) and (d) is a Medicare supplement policy which has a benefit package classified as Plan A, B, C, or F offered by any issuer.
- (b) Rule 4-156.0095(2)(e) is the same Medicare supplement policy in which the individual was most recently previously enrolled, if available from the same issuer, or, if not so available, a policy described in paragraph (3)(a).
- (c) Rule 4-156.0095(2)(f) shall include any Medicare supplement policy offered by any issuer.
 - (4) Notification provisions.
- (a)1. At the time of an event described in subsection (2) of this rule because of which an individual loses coverage or benefits due to the termination of a contract or agreement, policy, or plan, the organization that terminates the contract or agreement, the issuer terminating the policy, or the administrator of the plan being terminated, respectively, shall notify the individual of his or her rights under this section, and of the obligations of issuers of Medicare supplement policies under subsection (1).
- 2. The notice shall be communicated contemporaneously with the notification of termination.
- (b)1. At the time of an event described in subsection (2) of this rule because of which an individual ceases enrollment under a contract or agreement, policy, or plan, the organization that offers the contract or agreement, regardless of the basis for the cessation of enrollment, the issuer offering the policy, or the administrator of the plan, respectively, shall notify the individual of the individual's rights under this section, and of the obligations of issuers of Medicare supplement policies under subsection (1).
- 2. The notice shall be communicated within ten working days of the issuer receiving notification of disenrollment.

Specific Authority 624.308, 627.674(2) FS. Law Implemented 624.307(1), 627.410, 627.673, 627.674, 627.6745, 627.6746 FS. History–New

- 4-156.011 Loss Ratio Standards and Refund or Credit of Premium.
 - (1) No change.
 - (2) Refund or Credit Calculation
- (a)1. An issuer shall collect and file with the Department, in compliance with the instructions to the form, by May 31 of each year the data contained in the "Medicare Supplement Refund Calculation Form", Form DI4-MSR (6/96), for each type in a standard Medicare supplement benefit plan, and each type of pre-standardized business.
- 2. Form DI4-MSR is hereby adopted and incorporated by reference, and. Form DI4-MSR may be obtained by writing to the Department of Insurance, Division of Insurer Services, Bureau of Life and Health Forms and Ratess, 200 East Gaines Street, Tallahassee, Florida 32399-03280300.
 - (b)1. No change.
- 2. In particular, for policies and certificates issued as pre-standardized business:
- a.(I) In the preparation of the "Reporting Form for the Calculation of the Benchmark Loss Ratio" (DI4-MSB) (rev. 6/96), the insurer shall consider January 1, 1992, to be the date of inception for all policies and certificates and first year premium shall be the 1992 earned premium.
- (II) Form DI4-MSB is hereby adopted and incorporated by reference, and. Form DI4-MSB may be obtained by writing the Department of Insurance, Division of Insurer Services, Bureau of Life and Health Forms and Rates, Larson Building, 200 East Gaines Street, Tallahassee, FL 32399-03280300.
 - b. through c. No change.
 - (c) No change.
 - (3) Annual Filing of Premium Rates.
- (a)1. An issuer of Medicare supplement policies and certificates issued before or after January 1, 1992 shall file annually its rates, rating schedule and supporting documentation including ratios of incurred losses to earned premiums by policy duration for approval by the Department in accordance with Section 627.410, Florida Statutes.
- 2. The supporting documentation shall also demonstrate in accordance with actuarial standards of practice using reasonable assumptions that the appropriate loss ratio standards can be expected to be met over the entire period for which rates are computed. The Such demonstration shall exclude active life reserves. An expected third-year loss ratio which is greater than or equal to the applicable percentage shall be demonstrated for policies or certificates in force less than three (3) years.
 - (b) No change.
- (c) If an issuer fails to make premium adjustments necessary to meet or exceed the loss ratio required by this rule, the Department shall may order premium adjustments, refunds

or premium credits required to achieve the loss ratio specified in this rule and maintain compliance with rule 4-149, unless the premium adjustment does not exceeds a de minimis level of \$10 per policy for the average annual premium.

(4) No change.

Specific Authority 624.308, 627.674(2) FS. Law Implemented <u>624.307(1)</u>, 627.410, 627.673, 627.674, 627.6745, 627.6746 FS. History–New 1-1-92, Amended 7-14-96, 12-17-96,

- 4-156.014 Required Disclosure Provisions.
- (1) through (2) No change.
- (3)(a) through (b) No change.
- (c) The outline of coverage shall be in the language prescribed in Form DI4-MSC (3/99 10/91) and formatted in no less than twelve (12) point type. All plans A-J shall be shown on the cover page, and the plan(s) that are offered by the issuer shall be prominently identified. Premium information for plans that are offered shall be shown on the cover page or immediately following the cover page and shall prominently displayed. The premium and mode shall be stated for all plans that are offered to the prospective applicant. All possible premiums for the prospective applicant shall be illustrated.
 - (d) through (f) No change.

Specific Authority 624.308(1), 627.674(2) FS. Law Implemented 627.674 FS. History–New 1-1-81, Formerly 4-51.06, Amended 9-4-89, 3-13-90, 12-9-90, Formerly 4-51.006, Amended 1-1-92, 7-14-96, 12-17-96.

NAME OF PERSON ORIGINATING PROPOSED RULE: Jim Bracher, Bureau Chief, Life & Health Forms & Rates, Division of Insurer Services, Department of Insurance, 200 East Tallahassee, Florida 32399-0328, Gaines Street, (850)413-5110

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Kevin McCarty, Deputy Division Director, Division of Insurer Services, Department of Insurance, 200 East Gaines Street, Tallahassee, Florida 32399-0328

DATE PROPOSED RULE APPROVED BY THE AGENCY HEAD: April 13, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: January 15, 1999

ALL WRITTEN COMMENTS MUST BE RECEIVED NO LATER THAN THE DATE OF THE PUBLIC HEARING.

WATER MANAGEMENT DISTRICTS

Southwest Florida Water Management District

RULE CHAPTER TITLE: **RULE CHAPTER NO.:** Procedural 40D-1 **RULE TITLES: RULE NOS.:** Variances from Water Well Construction Rules (Chapter 40D-3, F.A.C.) 40D-1.1001 Emergency Authorization of Permits for Activities Regulated Under Part IV of Chapter 373, F.S. 40D-1.1021

Emergency Authorization for Well

Construction Permits

40D-1.1022

Emergency Authorization for Works

of the District Permits

40D-1.1023

PURPOSE AND EFFECT: To revise certain of the District's Exceptions to the Uniform Rules of Procedure in response to comments provided by the Joint Administrative Procedures Committee, and to correct an error regarding authorization of Rule 40D-1.1002, F.A.C., by the Administration Commission. SUMMARY: Revisions to Rule 40D-1.1001, F.A.C., remove redundant language regarding the submission of logs as part of an abandonment plan that is submitted with a request for a variance from water well construction rules. The revisions also repeal a procedure for orally requesting and receiving such variances under certain circumstances. The revisions to Rules 40D-1.1021, 40D-1.1022 and 40D-1.1023, F.A.C., specifically define the circumstances under which an emergency authorization for a permit may be granted by the District for activities requested under Part IV of Chapter 373, F.S.; for well construction, repair or abandonment; and for activities involving works of the District.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST: A Statement of Estimated Regulatory Cost is not being prepared based on the District's determination that the proposed revisions to Rules 40D-1.1001, 40D-1.1021, 40D-1.1022 and 40D-1.1023, F.A.C., will not result in a substantial increase in costs to affected parties and there will not be significant adverse effects on competition, employment, investment or productivity.

Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 373.044, 373.113, 373.149, 373.171, 373.308, 373.309 FS., 61-691, Laws of Florida.

LAW IMPLEMENTED: 373.084, 373.085, 373.103, 373.303, 373.306, 373.308, 373.309, 373.313, 373.316, 373.326, 373.342, 373.439 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN THE FAW.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Karen E. West, Senior Attorney, Office of General Counsel, 2379 Broad Street, Brooksville, Florida 34609-6899, (352)796-7211, extension 4651

THE FULL TEXT OF THE PROPOSED RULES IS:

SUBPART A VARIANCE OR WAIVER

40D-1.1001 Variances from Water Well Construction Rules (Chapter 40D-3, F.A.C.).

(1) No change.

(2) Any affected person may request a variance from any part of Chapter 40D-3, F.A.C., for an individual well by making written request which must include those specific requirements from which a variance is requested, any alternate or substitute methods or conditions considered appropriate, and reasons why the variance is considered necessary. When submitting an abandonment plan as part of a variance request to the District, the contractor shall supply any available logs, including but not limited to caliper, natural gamma and lithologic logs of the hole.

Other logs may be required based on well conditions.

- (3) Oral variance requests from contractors will be received and decisions rendered by the District when, in the opinion of the District, an emergency situation exists and warrants such verbal request and decision. Approved oral variances must be detailed and submitted in writing by the applicant to the District along with a Well Completion Report form within 10 days of completion.
 - (4) through (5) renumbered (3) through (4) No change.

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.303, 373.308, 373.309, 373.313, 373,316, 373.326 FS. History–New 7-1-90, Amended 9-30-91, 12-31-92, Formerly 40D-3.501, Amended 7-2-98.

SUBPART C LICENSING

40D-1.1021 Emergency Authorization of Permits for Activities Regulated Under Part IV of Chapter 373, F.S.

- (1) Permission to begin construction which requires a permit under Chapters 40D-4, 40D-40 and 40D-400, F.A.C., prior to the issuance of a permit may be applied for in writing, when emergency conditions threaten the safety of life or property, or passing or imminent floods threaten the safety of any stormwater management system, dam, impoundment, reservoir, appurtenant work or works exist which would justify such permission. However, no such permission shall be granted unless the construction is already under consideration for a permit under Part IV of Chapter 373, F.S. A serious set of unforeseen or unforeseeable circumstances must exist to create an emergency.
- (2) The Executive Director may grant the emergency authorization. The emergency authorization shall be presented to the Board for concurrence at its next meeting. The failure to receive the Board's concurrence shall invalidate the emergency authorization.

Specific Authority 373.044, 373.113, 373.149, 373.171 FS. Law Implemented 373.439 FS. History–Readopted 10-5-74, Amended 10-24-76, Formerly 16J-4.16, Amended 10-1-84, Formerly 40D-4.451, Amended 7-2-98.

- 40D-1.1022 Emergency Well Authorization for Construction Permits.
- (1) Emergency well construction permits shall be issued by the Executive Director or the Executive Director's designee when one of the following conditions exist which justifies the issuance: (a) an existing well supplying a particular use has failed and must be immediately replaced;
- (b) The health, safety, or general welfare of the people affected by said emergency would be jeopardized without such authorization; or
- (c) emergency authorization is needed to immediately mitigate or resolve potentially hazardous degradation of water resources.
- (2) If Chapter 40D-2, Consumptive Use of Water, also applies to the well, an emergency permit may issued only if, in addition to qualifying under (1) above, an application for a Water Use Permit (WUP) has been filed with the District. Issuance of an emergency permit will not be evidence of any entitlement to the WUP.
- (3) The applicant for an emergency permit shall submit the application and fee in accordance with sections 40D-3.101 and 40D-3.201, F.A.C., along with any other requested information within 48 hours after making oral application.
- (4) Section 40D-3.411, F.A.C., shall apply to all construction performed under an emergency permit.

Emergency permits may be issued by the Executive Director when conditions exist which justify such issuance. Emergency permits may be applied for and issued orally. However, a serious set of unforeseen or unforeseeable circumstances must exist to create the emergency. The applicant for an emergency permit shall reduce his application to writing in accordance with Rule 40D-3.101, F.A.C., within 48 hours after making oral application. Rule 40D-3.411, F.A.C., shall apply to construction performed under an emergency permit.

Specific Authority 373.044, 373.171, 373.308, 373.309, 373.326, 373.342 FS. Law Implemented 373.306, 373.308, 373.309, 373.313, 373.342 FS. History-Readopted 10-5-74, Formerly 16J-3.12, Amended 7-1-90, 9-30-91, Formerly 40D-3.451, Amended 7-2-98.

- 40D-1.1023 Emergency Authorization for Works of the District Permits.
- (1) Permission to begin construction, alteration, repair, or operation of the work or works which require a permit under Chapter 40D-6, F.A.C., prior to the issuance of a permit may be applied for in writing, when emergency conditions threaten public health, safety or welfare exist which would justify such permission. However, no such permission shall be granted unless the proposed activity is already under consideration for a permit under Rule 40D-6.041, F.A.C. A serious set of unforeseen or unforeseeable circumstances must exist to create an emergency.

(2) The Executive Director may grant the emergency authorization. The emergency authorization shall be presented to the Board for concurrence at its next meeting. The failure to receive the Board's concurrence shall invalidate the emergency authorization.

Specific Authority 373.044, 373.113, 373.149, 373.171 FS., Ch. 61-691, Laws of Florida Law Implemented 373.084, 373.085, 373.103 FS. History-Readopted 10-5-74, Amended 12-31-74, 10-24-76, Formerly 16J-1.14, Formerly 40D-6.451, Amended 7-2-98.

NAME OF PERSON ORIGINATING PROPOSED RULE: Karen E. West, Senior Attorney, Office of General Counsel, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609-6899, (352)796-7211, Extension 4651

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Governing Board of the Southwest Florida Water Management District

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: March 24, 1998

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: January 29, 1999

WATER MANAGEMENT DISTRICTS

Southwest Florida Water Management District

RULE CHAPTER TITLE: RULE CHAPTER NO .: 40D-1 Procedure RULE TITLE: RULE NO.: Forms and Instructions 40D-1.659

PURPOSE AND EFFECT: The purpose of the proposed rule amendment is to adopt by reference District Form O&M/ASGN (/99) for use by entities to transfer responsibility for the operation and maintenance of surface water management facilities associated with residential subdivisions or condominiums.

SUMMARY: The proposed form will be used by entities responsible for the operation and maintenance of surface water management systems associated with residential subdivisions or condominiums to transfer such responsibility to a homeowner's or condominium association, when there is a delayed transfer of responsibility in accordance with Section 2.6 of the Environmental Resource Permitting Basis of Review.

OF STATEMENT SUMMARY OF **ESTIMATED** REGULATORY COST: A Statement of Estimated Regulatory Cost is not being prepared based on the District's determination that the proposed revisions to 40D-1.659, F.A.C., will not result in a substantial increase in costs to affected parties and there will not be significant adverse effects on competition, employment, investment or productivity. Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 373.044, 373.113 FS.

LAW IMPLEMENTED: 373.113, 373.413, 373.414, 373.416, 373.419, 373.421 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN THE FAW.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Karen E. West, Senior Attorney, Office of General Counsel, 2379 Broad Street, Brooksville, Florida 34609-6899, (352)796-7211, extension 4651

THE PRELIMINARY TEXT OF THE PROPOSED RULE **DEVELOPMENT IS:**

40D-1.659 Forms and Instructions.

The following forms and instructions have been approved by the Governing Board and are incorporated by reference into this Chapter. Copies of these forms and may be obtained from the District.

GROUND WATER – No change.

SURFACE WATER

Application for Permit – Used for Docks or Piers and Bulkheads

- (1) through (5) No change.
- (6) through (11) Reserved.

(12) TRANSFER OF ENVIRONMENTAL RESOURCE PERMIT FOR RESIDENTIAL SUBDIVISIONS CONDOMINIUMS PREVIOUSLY TRANSFERRED OPERATION PHASE FORM O&M/ASGN (/99)

Specific Authority 373.044, 373.113 FS. Law Implemented 373.113, 373.413, 373.414, 373.416, 373.419, 373.421 FS. History-New 12-31-74, Amended 10-24-76, Formerly 16J-0.40, 40D-1.901, 40D-1.1901, Amended 12-22-94, 5-10-95, 10-19-95, 5-26-96, 7-23-96,

NAME OF PERSON ORIGINATING PROPOSED RULE: Karen E. West, Senior Attorney, Office of General Counsel NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Governing Board of the Southwest Florida Water Management District

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: March 30, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: October 30, 1998

The Southwest Florida Water Management District does not discriminate on the basis of any individual's disability status. Anyone requiring reasonable accommodation as provided for in the American's With Disabilities Act should contact Dianne Lee at (352)796-7211 or 1(800)423-1476, extension 4658; only number 1(800)231-6103; FAX (352)754-6878/SUNCOM 663-6878.

WATER MANAGEMENT DISTRICTS

Southwest Florida Water Management District

RULE CHAPTER TITLE: **RULE CHAPTER NO.:**

Individual Environmental

Resource Permits 40D-4 RULE TITLE: **RULE NO.:**

Publications and Agreements

Incorporated by Reference 40D-4.091

PURPOSE AND EFFECT: The purpose of the proposed rule amendments is to revise Section 2.6, Legal Operation and Maintenance Entity Requirements, of the Basis of Review for Environmental Resource Permitting regarding requirements for entities responsible for the operation and maintenance of surface water management system facilities.

SUMMARY: The proposed revisions to Section 2.6 of the Environmental Resource Permitting Basis of Review will provide greater flexibility to permittees regarding the transfer of operation and maintenance responsibility to property owners or condominium owners associations. Permittees will e able to delay transfer of responsibility until such time as the first successful reinspection of the surface water management

Revisions to Section 2.6.1(3), preclude the necessity of the formation of a property owners' associations as the responsible operation and maintenance entity for subdivisions consisting of 10 lots or less and relying on passive surface water management systems.

The amendments provide for the documentation necessary if operating entities other than associations and which are established via ordinances or other legislation are proposed. Further revisions clarify the requirements for submission of necessary documentation, provide a more complete definition of surface water management facilities, and specify requirements for the inclusion of a budget item in the association documents to ensure adequate funding for the replacement, operation and maintenance of surface water management facilities.

SUMMARY OF STATEMENT OF REGULATORY COST: A Statement of Estimated Regulatory Cost is not being prepared based on the District's determination that the proposed revisions to 40D-4.091, F.A.C., and Section 2.6 of the Basis of Review for Environmental Resource Permitting will not result in a substantial increase in costs to affected parties and there will not be significant adverse effects on competition, employment, investment or productivity.

Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 373.044, 373.046, 373.113, 373.171, 373.414 FS.

LAW IMPLEMENTED: 373.046, 373.103(8), 373.114, 373.403, 373.413, 373.414, 373.416, 373.429, 373.441 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE. A HEARING WILL BE SCHEDULED AND ANNOUNCED IN THE FAW.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Karen E. West, Senior Attorney, Office of General Counsel, 2379 Broad Street, Brooksville, Florida 34609-6899, (352) 96-7211, extension 4651

THE PRELIMINARY TEXT OF THE PROPOSED RULE **DEVELOPMENT IS:**

40D-4.091 Publications and Agreements Incorporated by Reference.

The following documents are hereby incorporated into this chapter and Chapters 40D-40 and 40D-400, F.A.C.:

- (1) "Basis of Review for Environmental Resource Permit Applications within the Southwest Florida Water Management District, _____ July 2, 1998." This document is available from the District upon request.
 - (2) through (3) No change.

Specific Authority 120.54(8), 373.044, 373.046, 373.113, 373.171, 373.414 FS. Law Implemented 373.046, 373.103(8), 373.114, 373.403, 373.413, 373.414, 373.416, 373.429, 373.441 FS. History–New 4-2-87, Amended 3-1-88, 9-11-88, 10-1-88, 4-1-91, 11-16-92, 1-30-94, 10-3-95, 12-26-95, 5-26-96, 7-23-96, 4-17-97, 4-12-98, 7-2-98, 12-3-98.

ENVIRONMENTAL RESOURCE PERMITTING **BASIS OF REVIEW**

CHAPTER TWO - ADMINISTRATIVE CRITERIA

- 2.6 Legal Operation and /Maintenance Entity Requirements 2.6.1 Acceptable Entities - The District considers the following entities or persons are acceptable to satisfy the requirements of Rules condition for issuance of permits, 40D-4.301(1)(i) and (i), and limiting condition, 40D-4.381(1)(a)(o), F.A.C.:
- a. Local governmental units, including counties or municipalities.
- b. Active Chapter 298, F.S., drainage districts; drainage districts created by special act of the Legislature; or Chapter 190, F.S., Community Development Districts, or Chapter 170, F.S., special assessment districts.
- c. Non-profit corporations, including homeowners' associations, property owners' associations (see 2.6.2), condominium owners' associations or master associations. Protective covenants, deed restrictions or a declaration of condominium must be recorded for this option in accordance with section 2.6.2.2.5 below.
- d. Legally constituted communication, water, sewer, electrical or other public utilities.
 - e. State or federal agencies.
- f. The permittee, provided that property owner or developer only in the following circumstances:

- (1) The property is wholly owned by the permittee and ownership is intended to be retained. This would apply to a farm, corporate office or single industrial facility, for example;
- (2) The project is a residential subdivision, condominium, commercial subdivision or industrial park and responsibility for the operation and maintenance of the surface water management system facilities will be transferred to a homeowners' association, property owners' association, condominium owners' association or master association. The transfer of responsibility shall occur no later than the first reinspection of the surface water management system conducted pursuant to the permit following transfer to the operation phase. At the time of the first reinspection, the permittee may request, in writing, that the transfer of responsibility to the association occur at some specified later date. The District shall approve such request if the permittee demonstrates that it can perform all necessary operation and maintenance responsibilities during the extended time period. In any event, within thirty (30) days after the sale of the last lot, parcel or unit in the project, the permittee shall request the transfer of responsibility for the operation and maintenance of the surface water management system facilities to the association. The permittee must submit to the District, Form O&M/ASGN (/99). This form is available upon request at any District service office. The District must approve the transfer in writing before the transfer of responsibility to the association is effective. Protective covenants, deed restrictions or a declaration of condominium must be recorded for this option in accordance with section 2.6.2.2.6 below; or The ownership of the property is retained by the permittee and is either leased or rented to third parties such as in shopping centers or mobile home parks.
- (3) The project is a residential subdivision consisting of 10 lots or less and responsibility for the operation and maintenance of the surface water management system facilities will be transferred to the lot owners, jointly and severally. The transfer of responsibility shall occur following the first successful reinspection of the surface water management system pursuant to the permit. "First successful reinspection" means the first periodic reinspection of the surface water management system conducted pursuant to the permit following transfer to the operation phase, at which the District determines that the system is functioning properly and requires no corrective action. The transfer must be approved by the District in writing before the transfer of responsibility to the lot owners is effective. This option is available for residential subdivisions which have surface water management systems that are passively operated and maintained, and are designed to be dry except during and immediately following a rainfall event. This option is not available for residential subdivisions with surface water management systems containing any of the exfiltration or effluent filtration following features: stormwater treatment facilities or facilities that require

specialized or commercially conducted operation and maintenance, such as wet ponds with an orifice bleed down, pumps, on-site wetland mitigation areas, or operable discharge structures. Protective covenants or deed restrictions must be recorded for this option in accordance with section 2.6.2.3 below.

To satisfy these requirements, the permittee must provide written documentation. If the operation and maintenance entity is a governmental unit, prior to staff construction approval, the permittee must supply written proof in the appropriate form by either letter or draft resolution outlining the terms and conditions under which the governmental entity will accept the operation and maintenance of all of the surface water management system and related facilities including lakes, easements, etc. These documents are required to be finalized prior to issuance of the operation authorization.

Operation and Maintenance Entity Documentation **Association** Requirements

2.6.2.1 Requirements for Governments and Utilities - If the applicant is not a governmental unit or a utility but proposes to transfer responsibility for the operation and maintenance of the surface water management system facilities to a governmental unit or a utility, the applicant shall submit with the permit application appropriate documentation, such as a resolution or an ordinance, from the governing body of the governmental unit or the utility outlining the terms and conditions under which it will accept responsibility to operate and maintain the surface water management system facilities. For those entities identified in subsections 2.6.1.b and d, the applicant shall also submit documentation regarding the establishment of the entity, such as a copy of the county or city ordinance, special act of the Legislature, Florida Land and Water Adjudicatory Commission rule or articles of incorporation. For entities identified in subsections 2.6.1.b and d that are not yet in existence, the applicant shall provide documentation, such as a letter, that the entity will be formed and will be responsible for operation and maintenance of the applicant's surface water management system facilities. An employee who has been authorized, in writing, by the governing body to act on behalf of the governmental unit or utility may accept the responsibility to operate and maintain the surface water management system facilities on behalf of that entity. For all of the entities addressed in this section, final documentation of acceptance of responsibility shall be submitted within 180 days after beginning construction or with the Statement of Completion and as-built construction plans if construction is completed prior to 180 days. Failure to submit the appropriate final documents will result in the permittee remaining responsible for the operation and maintenance of the permitted system and all other permit conditions. If a Homeowners or Property Owners Association or Master Association is proposed, the applicant shall submit drafts of the Articles of Incorporation for the Association, and the Declaration of

Protective Covenants or Deed Restrictions, as well as a reference map if referred to in the documents, with the original permit application. The permittee shall submit copies of these documents in their final form either (1) within 180 days of beginning construction or with the as built construction plans if construction is completed prior to 180 days or (2) prior to lot sales, whichever occurs first. "Final form" as applied to the Articles of Incorporation for the Association means the documents as filed with the Department of State, Division of Corporations, including the Certificate of Incorporation. "Final form" as applied to the Declaration of Protective Covenants or Deed Restrictions means the documents as recorded in the official records for the county where the project is situated, including the clerk of court's official book and page numbers.

2.6.2.2 <u>Requirements for Associations</u>

If a Condominium Association is proposed, the applicant shall submit draft Articles of Incorporation for the Condominium Association, and Declaration of Condominium with the original permit application. The applicant shall also submit a copy of the acceptance letter from the Department of Business and Professional Regulation, Division of Florida Land Sales, Condominiums and Mobile Homes, stating that the documents are proper for filing. The permittee shall submit copies of these documents in their final form either (1) within 180 days of beginning construction or with the as built construction plans if construction is completed prior to 180 days or (2) prior to unit sales, whichever occurs first. "Final form" as applied to the Articles of Incorporation for the Condominium Association means the documents as filed with the Department of State, Division of Corporations, including the Certificate of Incorporation. "Final form" as applied to the Declaration of Condominium means the documents as recorded in the official records for the county, including the clerk of court's official book and page numbers.

2.6.2.2.1 If a homeowners' association, property owners' association or master association is proposed, the applicant shall submit, with the permit application, draft copies of the articles of incorporation for the association, the declaration of protective covenants or deed restrictions, and a reference map or plat if referred to in the documents. Copies of these documents in their final form shall be submitted either: (1) within 180 days after beginning construction or with the Statement of Completion and as-built construction plans if construction is completed prior to 180 days, or (2) prior to lot or parcel sales, whichever occurs first. Where there will be a delayed transfer to the association, a copy of the association's articles of incorporation in final form shall be submitted to the District prior to transfer of operation and maintenance responsibility to the association. "Final form" as applied to the articles of incorporation for the association means the document as filed with the Florida Department of State, Division of Corporations, including the certificate of

incorporation. "Final form" as applied to the declaration of protective covenants or deed restrictions means the document as recorded in the official records for the county where the project is located, including the clerk of court's official record book and page numbers. The final documents shall be the same as the draft documents approved by the District during the permit application review process with respect to the provisions required pursuant to sections 2.6.2.2.4, 2.6.2.2.5, and 2.6.2.2.6. The District's approval of any proposed changes to the final documents regarding these provisions must be obtained in writing prior to their inclusion in the final documents.

2.6.2.2.2 If a condominium association is proposed, the applicant shall submit, with the permit application, draft copies of the articles of incorporation for the association and the declaration of condominium. The applicant shall also submit a copy of the acceptance letter from the Department of Business and Professional Regulation, Division of Florida Land Sales, Condominiums and Mobile Homes, stating that the documents are proper for filing. Copies of these documents in their final form shall be submitted either: (1) within 180 days after beginning construction or with the Statement of Completion and as-built construction plans if construction is completed prior to 180 days, or (2) prior to unit sales, whichever occurs first. Where there will be a delayed transfer to the association, a copy of the association's articles of incorporation in final form shall be submitted prior to transfer of operation and maintenance responsibility to the association. "Final form" as applied to the articles of incorporation for the association means the document as filed with the Florida Department of State, Division of Corporations, including the certificate of incorporation. "Final form" as applied to the declaration of condominium means the document as recorded in the official records for the county where the project is located, including the clerk of court's official record book and page numbers. The final documents shall be the same as the draft documents approved by the District during the permit application review process with respect to the provisions required pursuant to sections 2.6.2.2.4, 2.6.2.2.5, and 2.6.2.2.6. The District's approval of any proposed changes to the final documents regarding these provisions must be obtained in writing prior to their inclusion in the final documents.

2.6.2.2.3 The aAssociation whether a non-profit association or a condominium association, must comply with the applicable provisions of Florida law, including but not limited to such as Chapters 617, 718 and or 719, F.S., as applicable.

2.6.2.2.4 The articles of incorporation for the association shall must provide reflect that the aAssociation has the power to do the following:

- a. Own and convey property.;
- b. Operate and maintain common property, specifically the surface water management system facilities, including all inlets, ditches, swales, culverts, water control structures,

retention and detention areas, ponds, lakes, floodplain compensation areas, wetlands and any associated buffer areas, and wetland mitigation areas any mitigation areas as permitted by the Southwest Florida Water Management District including all lakes, retention areas, culverts and related appurtenances.;

- c. Establish rules and regulations.;
- d. Assess members and enforce said assessments.;
- e. Sue and be sued.:
- f. Contract for services to provide for operation and maintenance of the surface water management system facilities if the aAssociation contemplates employing a maintenance company.;
- g. Require all the homeowners, lot owners, property owners parcel owners, or unit owners to be members.;
- h. Exist in perpetuity; however, the aArticles of iIncorporation shall must provide that if the aAssociation is dissolved, the control or right of access to the property containing the property consisting of the surface water management system facilities shall be conveyed or dedicated to an appropriate governmental unit or public utility agency of local government, and that if not accepted, then the surface water management system facilities shall be conveyed dedicated to a similar non-profit corporation similar to the association.; and
- i. Take any other action necessary for the purposes for which the aAssociation is organized.

The articles of incorporation of a master association in existence as of [effective date of rule] shall not be amended to include the provisions required by section 2.6.2.2.4 if the master association is proposed as the operation and maintenance entity for a new phase of a multi-phase project. However, a copy of the association's articles of incorporation shall be submitted with the permit application for construction of the new phase.

2.6.2.2.5 The <u>d</u>Declaration of <u>p</u>Protective <u>c</u>Covenants, <u>d</u>Deed rRestrictions or dDeclaration of cCondominium shall provide all of must set forth the following:

a. A definition for the term "surface water management system facilities" substantially as follows:

The surface water management system facilities shall include, but are not limited to: all inlets, ditches, swales, culverts, water control structures, retention and detention areas, ponds, lakes, floodplain compensation areas, wetlands and any associated buffer areas, and wetland mitigation areas. It is the responsibility of the Association to operate and maintain the surface water management system;

b. The surface water management system facilities are located on land that is designated common property on the plat. are located on land that is owned by the aAssociation, or are located on land that is subject to an easement in favor of the association and its successors. described therein as common property;

- c. No construction activities may be conducted relative to any portion of the surface water management system facilities. Prohibited activities include, but are not limited to: digging or excavation; depositing fill, debris or any other material or item; constructing or altering any water control structure; or any other construction to modify the surface water management system facilities. If the project includes a wetland mitigation area, as defined in section 1.7.24, or a wet detention pond, no vegetation in these areas shall be removed, cut, trimmed or sprayed with herbicide without specific written approval from the District. Construction and maintenance activities which are consistent with the design and permit conditions approved by the District in the Environmental Resource Permit may be conducted without specific written approval from the District.
- d. The association is responsible for operation and maintenance of the surface water management system facilities. Operation and maintenance and reinspection reporting shall be performed in accordance with the terms and conditions of the Environmental Resource Permit.
- e. All the lot owners, parcel owners or unit owners must be members of the association.
- <u>f.e.</u> There is a A method of assessing funds and collecting the assessed funds by the association for operation, and maintenance <u>and replacement</u> of the surface water management system <u>facilities.</u>;
- g. The District has the right to take enforcement measures, including a civil action for injunction and/or penalties, against the association to compel it to correct any outstanding problems with the surface water management system facilities.
- <u>h.d.</u> Any amendment of these <u>declaration of protective</u> covenants, deed restrictions or <u>declaration of condominium</u> documents which would affecting the surface water management system <u>facilities</u> or the <u>operation and maintenance of the surface water management system facilities shall, including the water management portions of the common areas, must have the prior <u>written</u> approval of the <u>Southwest Florida Water Management</u> District.; and</u>
- <u>i.e.</u> The <u>restrictions</u> Declaration of Covenants <u>shall</u> will be in effect for at least 25 years with automatic renewal periods thereafter.
- j. If the association ceases to exist, all of the lot owners, parcel owners or unit owners shall be jointly and severally responsible for operation and maintenance of the surface water management system facilities in accordance with the requirements of the Environmental Resource Permit, unless and until an alternate entity assumes responsibility as explained in subsection 2.6.2.2.4.h.
- k. For projects which have on-site wetland mitigation as defined in section 1.7.24 which requires ongoing monitoring and maintenance, the declaration of protective covenants, deed restrictions or declaration of condominium shall include a provision requiring the association to allocate sufficient funds in its budget for monitoring and maintenance of the wetland

- mitigation area(s) each year until the District determines that the area(s) is successful in accordance with the Environmental Resource Permit.
- 2.6.2.2.6 For delayed transfers to associations, the articles of incorporation shall comply with section 2.6.2.2.4, and the declaration of protective covenants, deed restrictions or declaration of condominium shall comply with section 2.6.2.2.5, except that the provisions set forth in subsection "d" thereof shall not apply and, instead, the following provisions shall be substituted:
- a. The permittee shall be responsible for operation and maintenance of the surface water management system facilities until responsibility is transferred to the association. The permittee shall submit to the District, Form O&M/ASGN (/99), which must be approved by the District, before the transfer of responsibility to the association is effective.
- b. The association shall be responsible for operation and maintenance of the surface water management system facilities upon transfer of responsibility from the permittee.
- c. Operation and maintenance and reinspection reporting shall be performed in accordance with the terms and conditions of the Environmental Resource Permit.
- 2.6.2.6 Modification of the requirements of this section can only be based upon:
- a. Intervening local government requirements of a more stringent nature such as the requirement of a maintenance agreement and posting of bond by the developer.
- b. A unique project requiring an alternate entity. The alternate entity must be evaluated independently. All necessary agreements or easements must be documented in the file of record before approval will be given.
- 2.6.2.2.7 For projects which have on-site wetland mitigation as defined in section 1.7.24, which requires ongoing monitoring and maintenance, and a homeowners' association, property owners' association, condominium owners' association or master association is proposed as the operation and maintenance entity, the applicant shall submit, with the permit application, a proposed budget for the association. The budget shall specifically allocate sufficient funds for monitoring and maintenance of the Rutland mitigation area(s) for the first year. A copy of the final budget shall be submitted to the District with the copy of the association's final articles of incorporation. The final budget shall include, at a minimum, the sum of money allocated for monitoring and maintenance of the wetland mitigation area(s) approved by the District during the permit application review process. Sufficient funds shall be allocated in subsequent budgets for monitoring and maintenance until the District determines that the wetland mitigation is successful in accordance with the Environmental Resource Permit (see section 2.6.2.2.5.k.). If the funds allocated any year are less than the funds allocated in the

association's budget for its first year, the association shall so advise the District in writing within fifteen (15) days of adoption of the budget.

2.6.2.3 Requirements for Small Subdivisions with the Lot Owners as the Operation and Maintenance Entity - The declaration of protective covenants or deed restrictions for residential subdivisions consisting of 10 lots or less and for which the lot owners are proposed as the operation and maintenance entity shall contain the provisions in subsections 2.6.2.2.5 "a," "c," "h," and "i," and the following additional provisions:

a. The surface water management system facilities are located on land that is designated common property on the plat or are located on land that is subject to an easement in favor of all of the lot owners within the subdivision.

b. The permittee shall be responsible for operation and maintenance of the surface water management system facilities until the first successful reinspection conducted pursuant to the Environmental Resource Permit. The transfer of responsibility to the lot owners will not be effective until the District approves the transfer in writing.

c. The lot owners shall be jointly and severally responsible for operation and maintenance of the surface water management system facilities after the first successful reinspection.

d. Operation and maintenance, and reinspection reporting shall be performed in accordance with the terms and conditions of the Environmental Resource Permit.

e. The District has the right to take enforcement measures. including a civil action for injunction and/or penalties, against any lot owner(s) to compel such lot owner(s) to correct any outstanding maintenance problems with the surface water management system facilities.

The applicant shall submit, with the permit application, a draft copy of the declaration of protective covenants or deed restrictions, and a reference map or plat if referred to in the document. A copy of the declaration of protective covenants or deed restrictions in its final form shall be submitted, either: (1) within 180 days after beginning construction or with the Statement of Completion and as-built construction plans if construction is completed prior to 180 days, or (2) prior to lot sales, whichever occurs first. "Final form" as applied to the declaration of protective covenants or deed restrictions means the document as recorded in the official records for the county where the project is located, including the clerk of court's official record book and page numbers. The final documents shall be the same as the draft documents approved by the District during the permit application review process with respect to the provisions required pursuant to this section. The District's approval of any proposed changes to the final documents regarding these provisions must be obtained in writing prior to their inclusion in the final documents.

2.6.3 Future Ooperation and Mmaintenance – No change.

NAME OF PERSON ORIGINATING PROPOSED RULE: Karen E. West, Senior Attorney, Office of General Counsel NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Governing Board of the Southwest Florida Water Management District

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: March 30, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: October 23, 1998

The Southwest Florida Water Management District does not discriminate on the basis of any individual's disability status. Anyone requiring reasonable accommodation as provided for in the American's With Disabilities Act should contact Dianne Lee at (352)796-7211 or 1(800)423-1476, extension 4658; number 1(800)231-6103, Fax number only (352)754-6878, Suncom 663-6878.

AGENCY FOR HEALTH CARE ADMINISTRATION

Division of Medicaid

RULE NO.: RULE TITLE:

Payment Methodology for Nursing

Home Services

59G-6.010

PURPOSE AND EFFECT: The purpose of the proposed amendment is to provide for the phase-in of a case-mix reimbursement methodology for nursing home services as required by Specific Appropriation 255 of the 1998-99 General Appropriations Act, Chapter 98-46, Laws of Florida. Based on a case-mix index for each facility an additional payment will be calculated and added to the nursing facility's patient care component of the per diem rate. The effect of the proposed amendment is to provide a detailed methodology for the calculation of the case-mix rate that will be added to the nursing facility's patient care component of the per diem rate.

SUMMARY: The proposed amendment to rule 59G-6.010 incorporates revisions to the Plan with respect to Medicaid provider reimbursement. The amendment describes the methodology for calculating the case-mix add-on.

SUMMARY OF STATEMENT OF **ESTIMATED** REGULATORY COST: A statement of estimated regulatory cost has not been prepared. Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice. SPECIFIC AUTHORITY: 409.919 FS.

LAW IMPLEMENTED 409.908 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE TIME, DATE AND PLACE SHOWN BELOW (IF NOT REQUESTED, THIS HEARING WILL NOT BE HELD):

TIME AND DATE: 10:00 a.m., May 17, 1999

PLACE: Room 2118, 2727 Fort Knox Boulevard, Building 3, Tallahassee, Florida

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: John Owens, Medicaid Cost Reimbursement, Agency for Health Care Administration, P. O. Box 12400, Tallahassee, Florida 32317-2400

THE FULL TEXT OF THE PROPOSED RULE IS:

59G-6.010 Payment Methodology for Nursing Home Services.

Reimbursement to participating nursing homes for services provided shall be in accord with the Florida Title XIX Long-Term Care Reimbursement Plan, Version XVI XV, Effective Date ______ February 14, 1999, and incorporated herein by reference. A copy of the Plan as revised may be obtained by writing to the Director of Medicaid, P. O. Box 13000, Tallahassee, Florida 32317-3000. The plan incorporates Provider Reimbursement Manual (HCFA Pub. 15-1).

Specific Authority 409.919 FS. Law Implemented 409.908 FS. History–New 7-1-85, Amended 10-1-85, Formerly 10C-7.482, Amended 7-1-86, 1-1-88, 3-26-90, 9-30-90, 12-17-90, 9-15-91, 3-26-92, 10-22-92, 4-13-93, 6-27-93, Formerly 10C-7.0482, Amended 4-10-94, 9-22-94, 5-22-95, 11-27-95, 11-6-97, 2-14-99

NAME OF PERSON ORIGINATING PROPOSED RULE: Mr. John Owens

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Mr. Gary Crayton

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 14, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: March 12, 1999

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

Board of Professional Engineers

RULE TITLE: RULE NO.:

Continuing Education Requirements for

Reactivation of Inactive License 61G15-22.001

PURPOSE AND EFFECT: The Board proposes to amend the existing rule by updating the rule text.

SUMMARY: This rule amendment is for the purpose of updating the continuing education requirements for reactivation of an inactive license.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST: No Statement of Estimated Regulatory Cost was prepared.

Any person who wishes to provide information regarding the statement of estimated costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 471.019(2) FS. LAW IMPLEMENTED: 471.019(2) FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE NOTICED IN THE NEXT AVAILABLE ISSUE OF THE FLORIDA ADMINISTRATIVE WEEKLY.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Dennis Barton, Executive Director, Board of Professional Engineers, 1208 Hays Street, Tallahassee, Florida 32301

THE FULL TEXT OF THE PROPOSED RULE IS:

61G15-22.001 Continuing Education Requirements for Reactivation of Inactive License.

A license which has been inactive for more than one year may be reactivated upon application to FEMC and demonstration to the Board by the licensee of having attended twelve hours of engineering related education per inactive year. The education shall be related to the licensee's field of practice. Of the first twelve hours of such education, at least eight shall <u>involve</u> be contact hours involving engineering professionalism and ethics and the law and rules governing the practice of engineering in a course approved by the Board. Verification of the above-mentioned education shall be in the form of tuition or registration receipts, records, or letters of verification from the institutions or entities providing the training in question.

Specific Authority 471.019(2) FS. Law Implemented 471.019(2) FS. History–New 8-19-80, Formerly 21H-22.01, Amended 5-14-86, Formerly 21H-22.001, Amended

NAME OF PERSON ORIGINATING PROPOSED RULE: Board of Professional Engineers

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Board of Professional Engineers

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: March 8, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: February 12, 1999

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 98-92R

RULE CHAPTER TITLE:	RULE CHAPTER NO.:
Soil Treatment Facilities	62-713
RULE TITLES:	RULE NOS.:
Intent	62-713.100
Definitions	62-713.200
Documents Incorporated by Reference	62-713.210
Approval of Alternate Procedures	
and Requirements	62-713.220
General Provisions	62-713.300
Stationary Soil Treatment Facility	
Design Requirements	62-713.400
Operational Requirements	62-713.500
Soil Sampling and Analysis Plan	62-713.510
Evaluation and Use of Treated Soil	62-713.520

Stationary Soil Treatment Facility Closure and Financial Assurance 62-713.600 Mobile Soil Treatment Facilities 62-713.800 **Forms** 62-713.900

PURPOSE AND EFFECT: The Department is proposing in a separate rulemaking procedure to repeal Chapter 62-775, F.A.C., which regulates facilities which thermally treat petroleum-contaminated soil. In its place, the Department is proposing to create Chapter 62-713, F.A.C., which will regulate these same facilities, as well as facilities which use different technologies to treat soils contaminated with different constituents. At the same time, the Department is proposing to create in a separate rulemaking procedure Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, to establish certain cleanup target levels applicable to the rehabilitation of brownfields, petroleum and drycleaning sites and at soil treatment facilities.

The purpose of Chapter 62-713 is to set forth requirements for the proper design, operation and closure of facilities which treat contaminated soil, regardless of the treatment technology used, and to set forth criteria for evaluating when contaminated soil has been adequately treated so that it can be considered cleaned soil. This chapter also provides methods for evaluating and approving, on a case-by-case basis, the treatment of contaminated materials other than soil and the beneficial use of soil and other materials which have not been treated to meet the cleaned soil criteria.

Currently, facilities which thermally treat petroleum-contaminated soil operate under a general permit, which sometimes includes an approval of alternate procedures to treat similar materials. Facilities which treat other contaminated soils or similar media operate under a solid waste management facility permit for which there are only limited rule requirements. Different facilities are required to meet different criteria for determining when the treated soils are "clean" depending on when they were permitted and what sort of permit they received. Chapter 62-713 will, over a period of time, require all facilities which treat contaminated soil to operate under a specific, individual permit and to meet the same criteria for determining when soils are "clean."

SUMMARY: This rule chapter sets forth an intent section, a definitions section, and a section listing those documents incorporated by reference. It authorizes the Department to approve alternate procedures and requirements which provide an equivalent degree of protection for public health and the environment, and also authorizes the Department's District offices to approve some alternate procedures for treating materials other than soil, or for using treated soil which does not meet the criteria for cleaned soil. The applicability section sets out a compliance schedule for existing facilities, clarifies that some portions of Chapter 62-701 will apply to soil treatment facilities, authorizes blending of soils under some conditions, sets out general requirements for permit applications, and establishes fees.

The rule sets out facility design requirements which require a detailed description of the facility and the proposed treatment processes. It requires a leachate control system, and a ground water monitoring system which is similar to that required of landfills but with several specified differences. An operation plan is required as part of the permit application, and recordkeeping requirements are designated. A soil sampling and analysis plan is required, and includes details on the pre-treatment and post-treatment testing needed. Testing requirements for petroleum-contaminated soil are different from the requirements for non-petroleum contaminated soil.

The rule sets out criteria for evaluating whether the soil has been adequately treated so that it can be distributed as "cleaned" soil. In general, cleaned soil must meet the target levels set forth in Chapter 62-777 for residential direct exposure and leachability, or the permittee must establish appropriate cleanup levels on a case-by-case basis. The rule also provides management options for soil which does not meet the criteria as cleaned soil.

Criteria for closure of soil treatment facilities, and requirements for financial assurance to cover the costs of closure, are provided. Long term care of at least five years must be provided unless the permittee can demonstrate that the facility has been closed so that violations of ground water standards or criteria is unlikely. A general permit for mobile soil treatment facilities, which is currently provided in Chapter 62-775, is established with few changes. Finally, forms are incorporated by reference.

Any person who wishes to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 403.061, 403.704, 403.814 FS.

LAW IMPLEMENTED: 403.0877, 403.707, 403.814 FS.

HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Department of Environmental Protection, Twin Towers Building, 2600 Blair Stone Road, Room 609, Tallahassee, Florida

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel, (850)488-2996 or 1(800)955-8771 (TDD), at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: Mary Jean Yon, Solid Waste Section, Mail Station 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)488-0300

THE FULL TEXT OF THE PROPOSED RULES IS:

62-713.100 Intent.

- (1) Prior to adoption of this chapter, facilities which thermally treat petroleum-contaminated soil were regulated by Chapter 62-775, F.A.C. It is the intent of the Department to repeal Chapter 62-775, F.A.C., and promulgate this chapter in its place. It is also the intent of the Department to replace other rule provisions which cross-reference Chapter 62-775, F.A.C., so that they correctly reference this chapter.
- (2) The purpose of this chapter is to set forth requirements for the proper design, operation and closure of facilities which treat various kinds of contaminated soil, regardless of the treatment technology used. This chapter also sets forth criteria for evaluating when contaminated soil has been adequately treated, so that it can be considered cleaned soil.
- (3) This chapter provides methods for approving the treatment of contaminated materials other than soil, and for approving the beneficial use of soil and other materials which have not been treated to meet the cleaned soil criteria. These methods are intended to be applied on a case-by-case basis as part of a permit or permit modification.
- (4) This chapter is intended to apply to stationary soil treatment facilities that accept contaminated soils from more than one off-site location and to mobile soil treatment facilities operated at contaminated sites prior to approval of remedial action plans. This chapter does not apply to on-site treatment at a contaminated site if the on-site treatment at the site: (a) has been previously approved by the Department as part of a remedial action activity; or (b) is allowed according to the source removal provisions of Rule 62-770.300, F.A.C.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. History-New .

62-713.200 Definitions.

In addition to the definitions in Rule 62-701.200, F.A.C., and solely for the purposes of this chapter, the following words, phrases or terms shall have the following meaning:

- (1) "Background concentrations" means concentrations of contaminants that are naturally occurring in the ground water, surface water, soil or sediment in the vicinity of the site.
- (2) "Cleaned soil" means soil which has been treated at a soil treatment facility, which has received a completed post-treatment analysis, and which meets all of the criteria specified in Rule 62-713.520(2), F.A.C.
- (3) "Contaminated soil" means soil that has become contaminated with concentrations of chemical constituents that: (a) are in excess of the Residential Direct Exposure soil cleanup target levels in Table II of Chapter 62-777, F.A.C.; (b) are in excess of the soil cleanup target levels calculated in accordance with Rule 62-713.520(2)(c), F.A.C.; or (c) are expected to result in exceedances of the Department's ground water or surface water standards or criteria as evaluated in Rule 62-713.510(6)(d), F.A.C.

- (4) "Mobile soil treatment facility" means a soil thermal treatment facility which is transported to a soil contamination site for the sole purposes of treating petroleum contaminated soil from that specific site.
- (5) "Non-petroleum contaminated soil" contaminated soil which does not meet the definition of petroleum contaminated soil.
- (6) "Petroleum contaminated soil" means soil which has become contaminated with one or more of the following liquid products made from petroleum: all forms of fuel known as gasoline, diesel fuel, jet fuel, kerosene, grades 2 through 6 fuel oils, crude oil, bunker C oil, residual oils; and non-hazardous petroleum based lubricating, hydraulic, and mineral oils. This definition includes soil which, although predominately contaminated with petroleum, also contains small amounts of volatile organic halocarbons provided the total weight of the volatile organic halocarbons in the soil is less than one percent of the total weight of petroleum contamination in the soil as determined by a total recoverable petroleum hydrocarbon analysis.
- (7) "Soil treatment facility" means either a stationary or mobile facility designed, constructed or utilized, and permitted by the Department to handle, store, and treat or process contaminated soil. The term does not include electrical power plants in which thermal treatment of contaminated soil from its own property results in ash which is disposed of in accordance with Chapters 62-701 or 62-702, F.A.C., and it does not include facilities which treat hazardous wastes.
- (8) "Stationary soil treatment facility" means a facility which treats soil contaminated with petroleum or other chemical contaminants which is generated at off-site locations and transported to the facility.
- (9) "Treated soil" means soil which has undergone treatment at a soil treatment facility to reduce the levels of contaminants in the soil. Treated soil includes cleaned soil, soil which has undergone treatment but has not yet been analyzed, and soil which has undergone treatment but does not meet the definition of cleaned soil. Treated soil does not include soil which has been blended but not undergone any other treatment or processing at the facility.
- (10) "Volatile organic aromatics" means the contaminants benzene, toluene, total xylenes and ethylbenzene in petroleum contaminated soil.
- (11) "Volatile organic halocarbons" means organic compounds which are chemically combined with one or more of the following halogens: fluorine, chlorine, bromine or iodine. The total weight of volatile organic halocarbons in a soil sample shall be the sum of the concentrations of the individual volatile organic halocarbons listed in and determined by EPA Method 8021B or EPA Method 8260B.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. <u>History–New</u>

- 62-713.210 Documents Incorporated by Reference.
- (1) EPA Publication SW-846, Chapter Nine "Sampling Plan", Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 1982, Third Edition, as amended by Final Update III, May 1997.
- (2) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final report, dated May 26, 1999.
- (3) The following EPA test methods found in EPA Document SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 1982, Third Edition, as amended by Final Update III, May 1997:
- (a) Method 1311, Toxicity Characteristic Leaching Procedure;
- (b) Method 1312, Synthetic Precipitation Leaching Procedure.
- (c) Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors; and
- (d) Method 8260B, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS).

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. History-New

- 62-713.220 Approval of Alternate Procedures and Requirements.
- (1) The owner or operator of a facility may request alternate procedures and requirements in accordance with Rule 62-701.310, F.A.C.
- (2) In addition, the owner or operator may request alternate procedures and requirements from the appropriate District office of the Department. Such a request shall be included as part of a permit application or modification, and need not be accompanied by any additional fee; however, all of the other criteria of Rule 62-701.310, F.A.C., must be met. Requests under this subsection shall be limited to the following:
- (a) Treatment of materials other than soil. The Department shall approve a request to treat other soil-like materials, such as sludges, tank residues, and sorbent materials, upon a demonstration that the facility will be designed and operated to properly treat such materials, and that the materials will be evaluated and either used or disposed of in accordance with the provisions of this chapter.
- (b) The beneficial use of treated soil which does not meet the criteria for cleaned soil. The Department shall approve such a request upon a demonstration that the proposed use of the treated soil will not pose a significant threat to public health or the environment. In making this demonstration for the proposed use, the owner or operator may consider background concentrations of receiving soils, whether the material will be blended with other materials, the potential pathways of exposure to the contamination, the use of institutional and

engineering controls to reduce the potential for exposure, and the likelihood that the material may have unlimited distribution or come into direct contact with the public.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS.

- 62-713.300 General Provisions.
- (1) Applicability.
- (a) This chapter applies only to soil treatment facilities. Nothing in this chapter shall be construed to authorize the disposal of solid waste at soil treatment facilities.
- (b) No person shall construct or operate a soil treatment facility without a permit issued by the Department. Persons operating soil treatment facilities under a permit (including a general permit) issued by the Department prior to [effective date], may continue to operate that facility under the terms of their existing permit until it expires except that the treated soil shall meet the requirements of Rule 62-713.520, F.A.C., by [effective date plus 180 days]. All modifications or renewals of existing permits, and all new construction or operation permits issued on or after [effective date] for soil treatment facilities shall comply with this rule.
- (c) The design requirements of Rules 62-713.400(1)(e) and (2), F.A.C., shall not apply to any facility for which construction was complete prior to [effective date]. These design requirements will apply to any lateral expansion of such a facility.
- (d) Ground water monitoring plans which had been approved by the Department prior to [effective date] will be considered to meet the requirements of Rule 62-713.400(3), F.A.C., providing the facility has not significantly changed its operations or types of materials accepted since that approval
- (e) For facilities operating under a general permit, a timely and sufficient application for an operation permit for a soil treatment facility will be considered a renewal application for purposes of Section 120.60(4), F.S.
 - (2) Other requirements.
- (a) Soil treatment facilities are considered solid waste management facilities, and contaminated soil is considered solid waste. The following provisions of Chapter 62-701, F.A.C., will apply to such facilities unless otherwise specified herein.
 - 1. Rule 62-701.200 Definitions.
 - 2. Rules 62-701.300(1) and (2)(c)-(h) Prohibitions.
- 3. Rule 62-701.310 Approval of Alternate Procedures and Requirements.
- 4. Rule 62-701.320 Solid Waste Management Facility Permit Requirements, General. Rule 62-701.320(12), F.A.C., regarding setbacks from airports, does not apply to soil treatment facilities unless the facility accepts soil contaminated with putrescible wastes.

- (b) For stationary facilities, stormwater shall be controlled in accordance with Chapters 62-25 and 62-330, F.A.C. A copy of any permit for stormwater control issued by the Department, or documentation that no such permit is required, shall be submitted to the Department before the facility receives waste. Applicants should be aware that other government agencies may also regulate stormwater management and may require separate permits.
- (c) Nothing in this chapter shall be construed to exempt a facility from compliance with local zoning or land use ordinances, or with any other laws, rules, or ordinances. Applicants should also be aware that other Department permits, including permits for air or surface water discharges or solid waste disposal, may be required for soil treatment facilities.
- (d) No hazardous waste shall be accepted for treatment at a soil treatment facility unless such a facility is permitted to treat hazardous waste pursuant to Chapter 62-730, F.A.C.
- (e) The blending of soils, either before or after treatment, is allowed if the activity will enhance treatment or beneficial use of the soils and if it is included in the facility's operation plan, with the following exceptions:
- 1. The blending of contaminated soil with uncontaminated soil to avoid treating the contaminated soil is prohibited; and
- 2. Soil which exhibits the characteristic of toxicity for metals (EPA HW No. D004-D011) as established in 40 CFR 261.24 may not be blended.
- (f) The owner or operator of the facility shall maintain records of blending procedures used both before and after treatment. Either records of blending ratios with calculations to estimate total metals concentrations of blended soil or resampling and analysis of blended soil are acceptable.
- (3) Permit application. A permit application to construct or operate a stationary soil treatment facility shall be submitted on Form 62-713.900(1) and shall be signed, dated and sealed by a professional engineer registered under Chapter 471, F.S. It shall provide the information required in Rules 62-701.320(5), (6), (7), (8)(a) and (14), F.A.C. and shall also include the following information:
- (a) A site plan, of a scale not greater than 200 feet to the inch, which shows the facility location and identifies the proposed treated and untreated soil storage areas, total acreage of the site, and any other features which are relevant to the prohibitions or location restrictions in this rule, such as water bodies or wetlands on or within 200 feet of the site, and potable water wells on or within 500 feet of the site;
- (b) A detailed description of how the applicant will comply with the facility design requirements contained in Rule 62-713.400, F.A.C.;
- (c) A hydrogeological investigation which meets the criteria of Rule 62-701.410, F.A.C. and a certification signed and sealed by a professional engineer registered under Chapter 471, F.S. or a professional geologist registered under 492, F.S.

- that the location of the facility is not reasonably subject to sinkhole formation and has adequate subsurface strength to support the weight of the facility:
- (d) A ground water monitoring plan which meets the criteria set forth in Rule 62-713.400(3), F.A.C.
- (e) An operation plan which describes how the applicant will comply with Rule 62-713.500, F.A.C.;
- (f) A soil sampling and analysis plan which describes how the applicant will comply with Rule 62-713.510, F.A.C.;
- (g) A detailed description of how the applicant will comply with the use of treated soil requirements contained in Rule 62-713.520, F.A.C.;
- (h) A closure and long term care plan which describes how the applicant will comply with Rules 62-713.600(1) through (5), F.A.C.;
- (i) The financial assurance documentation required by Rule 62-713.600(6), F.A.C.; and
- (j) Documentation that the applicant either owns the land or has legal authorization from the land owner to use the land for a soil treatment facility and to conduct long-term care.
- (4) Fees. The fee for a permit to construct, operate, and close a soil treatment facility is \$2000. The fee for renewing a permit which does not involve additional construction or a significantly different treatment process is \$1000. The fee for renewing a permit involving only long-term care is \$250. The fee for a general permit to operate a mobile soil treatment facility is \$250.
- (5) There are several requirements throughout this chapter that requests or demonstrations must be approved by the Department. Unless otherwise specifically stated, this means that the requests or demonstrations must be submitted to the appropriate Department District Office as part of a permit application or request for permit modification. The Department will evaluate such requests or demonstrations in accordance with the applicable criteria set forth in this chapter, and will approve or modify permit conditions if those criteria are met.
- (6) Solely for the purposes of this chapter, the management of treated soil will not be considered to pose a "significant threat to public health or the environment" if it is used, stored, or disposed of so that:
- (a) The excess lifetime cancer risk level is less than or equal to 1.0x10⁻⁶, or is not calculable because all potential exposure pathways have been eliminated, or is no greater than background concentrations of receiving soils;
- (b) The hazard index (sum of the hazard quotients) is less than or equal to 1.0, or is not calculable because all potential exposure pathways have been eliminated, or is no greater than background concentrations of receiving soils; and
- (c) The Department's ground water and surface water standards or criteria will not be violated.
- Specific Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.707 FS. History–New

- 62-713.400 Stationary Soil Treatment Facility Design Requirements.
- (1) Soil treatment facilities shall be designed to manage both contaminated and treated soils and to minimize their threat to public health and the environment. The design of soil treatment facilities shall be based upon technologies which can reasonably be expected to produce a treated soil which, if managed in accordance with this chapter, will not pose a significant threat to public health or the environment. A permit application for a soil treatment facility shall include the following design requirements:
- (a) A description of the likely sources of the contaminated soils which are proposed to be managed and treated by the facility and identification of the contaminants of concern expected to be present in the soils from the sources described;
- (b) A description of the maximum capacity of contaminated soil the facility is designed to process, either in tons per day for a continuous flow treatment process (such as thermal treatment) or total tons for a batch treatment process (such as bioremediation);
- (c) A detailed description of the treatment technology and functions of all processing equipment that will be used. The description shall explain the flow of contaminated soil through all the proposed unit operations, explain the associated equipment operations in detail, and shall include:
- 1. Regular facility operations as they are expected to occur;
- 2. Procedures for start up operations, and scheduled and unscheduled shut down operations;
- 3. Potential safety hazards and control methods, including fire detection and control;
- 4. A description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources;
- 5. The chemical composition and usage rate of any chemical additives that will be used in the treatment process;
- 6. A description and usage rate of any biological additives that will be used in the treatment process;
 - 7. Process flow diagrams for the facility operations;
- 8. For continuous flow treatment processes, a description of the equipment design criteria and critical operating parameters for the unit operations selected, including maximum design flowrates, required heat inputs, minimum required residence times, minimum required treatment temperatures, and expected equipment performance;
- 9. For batch treatment processes, a description of the design criteria and critical operating parameters, including minimum required soil holding times, minimum area requirements for treatment, maximum soil pile height, minimum distance allowed between contaminated soil windrows, minimum and maximum allowed temperatures and air flowrates, and orientation of nutrient addition or aeration piping; and

- 10. For treatment technologies other than thermal treatment of petroleum soil, results of studies from pilot projects or actual operating facilities which demonstrate the feasibility of the technology proposed for treating the contaminated soils expected at the facility, and which support the proposed design criteria and operating parameters:
- (d) A description of loading, unloading, and processing areas; and
- (e) A description of the leachate control system which is designed to prevent discharge of leachate and mixing of leachate with stormwater. All areas where contaminated soil is stored, where any processing takes place which could result in the release of leachate, and where treated soil which has not met the criteria as cleaned soil is stored must have an impervious surface with a leachate collection system and a cover or roof designed to prevent the contact of rainfall with the soil. For the purposes of this rule, an impervious surface means a poured concrete pad having a minimum thickness of four inches, or an asphalt concrete paving with a minimum thickness of one and one-half inches, with an additional component to restrict leaching to ground water such as a soil cement sub-base, an epoxy seal or a geomembrane.
- (2) Certification. After completion of construction of a soil treatment facility, and before acceptance of any contaminated soil, the engineer of record shall certify to the Department on Form 62-701.900(2) that the permitted construction is complete and that it was done in accordance with the plans and design submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated. The applicant shall provide at least seven days advance notice to the Department prior to accepting contaminated soil so that the Department has the opportunity to inspect the facility.
- (3) Water quality monitoring plan. A water quality monitoring plan which meets the requirements of Rule 62-701.510 and Chapter 62-522, F.A.C. and is based upon the hydrogeological investigation required in Rule 62-713.300(3)(c), F.A.C., shall be included with the permit application, and shall be implemented and maintained by the owner or operator, with the following additions and exceptions:
- (a) All areas where contaminated soil or treated soil which has not met the criteria as cleaned soil are stored, as well as the processing area, must be located within the ground water monitoring system.
- (b) The well spacing requirements of Rule 62-701.510(3)(d)3., F.A.C., do not apply. A minimum of one upgradient and two downgradient wells is required, as specified in Chapter 62-522, F.A.C.
- (c) The water quality parameters of Rule 62-701.510(8), F.A.C., do not apply to routine testing except as described below. Rather, the routine water quality parameters for ground water sampling, surface water sampling and leachate sampling

shall be based upon the types of contaminated soil the facility will treat, shall include the field parameters listed in Rules 62-701.510(8)(a), (b) and (c), F.A.C. for ground water, surface water and leachate, respectively, and shall also include the following test parameters:

- 1. For petroleum contaminated soil:
- a. Volatile organic aromatics;
- b. Polynuclear aromatic hydrocarbons; and
- c. Arsenic, cadmium, chromium, and lead.
- 2. For non-petroleum contaminated soil:
- a. Volatile organic compounds;
- b. Semi-volatile organic compounds;
- c. Pesticides; and
- d. Arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.
- (d) For routine sampling, representative samples of ground water from background well(s) and detection wells and of surface water and leachate shall be collected and analyzed at least semi-annually.
- (e) Background water quality shall be sampled and analyzed in accordance with the provisions of Rule 62-701.510(6)(a), F.A.C. In addition, all background and detection wells shall be sampled and analyzed at least once prior to permit renewal for those parameters listed in Rule 62-701.510(8)(a), F.A.C.
- (f) The owner or operator of the facility may request a permit modification from the appropriate District Office of the Department to delete specific water quality parameters from routine analyses of samples from detection wells, surface water, and leachate. The Department will grant a request for a permit modification upon a demonstration that these parameters are not reasonably expected to be in or derived from the waste which was received at the facility or generated as part of the treatment process. Leachate sampling may be used to support this demonstration.
- (g) The leachate sampling requirements of Rule 62-701.510(6)(b)2., F.A.C. shall not apply.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. History-New

62-713.500 Operational Requirements.

Owners and operators of stationary soil treatment facilities shall comply with the following operational requirements:

- (1) An operation plan for the facility shall be prepared which includes:
- (a) A description of general facility operations, the number of personnel responsible for the operations including their respective job descriptions, and the types of equipment that will be used at the facility;
- (b) Procedures to chemically test the contaminated soil received by the facility and to properly manage or dispose of unauthorized soil;

- (c) Procedures to ensure the pretreatment and post-treatment testing requirements of Rule 62-713.510, F.A.C. are properly implemented;
- (d) A contingency plan to cover operation interruptions and emergencies such as fires, explosions, or natural disasters;
- (e) A description of where all the contaminated soil and treated soil will be stored at the facility;
- (f) Procedures to ensure operational records required in subsection (5) of this rule are adequately prepared and maintained; and
- (g) Procedures to ensure each batch of contaminated soil shall be clearly identified by source and stockpiled separately until all pretreatment sampling and analyses required by Rule 62-713.510, F.A.C, are complete.
- (2) All activities at the facility shall be performed in accordance with the operation plan, the facility's permit conditions and the requirements of this chapter. The operation plan shall be updated as operations change but no less frequently than upon renewal of the permit. The Department shall be notified of changes to the operation plan other than those required for routine maintenance.
- (3) Unless an alternate quantity is included in the operation plan submitted with the permit application, which includes a demonstration that a larger volume of untreated soil can be properly managed at the facility, the maximum quantity of untreated soil stored at the facility shall be limited to:
- (a) Thirty times the average daily through-put of the treatment equipment being used for continuous flow treatment processes; and
- (b) The amount of contaminated soil that can be treated based upon the minimum area and maximum soil height requirements in Rule 62-713.400(1)(c)9., F.A.C. for batch treatment processes.
- (4) Contaminated soil shall be physically screened, or otherwise processed, in order to ensure that particles greater in size than what can be properly treated are prevented from entering into the treatment units. The allowable particle size is two inch mesh (diameter) or smaller, unless a demonstration is provided in the permit application that the treatment units can adequately process larger particles sizes. All non-treatable materials physically screened from the contaminated soil shall be disposed of at a permitted Class I landfill or Waste-to-Energy facility if allowed under that facility's permit or certification.
- (5) All operational records shall be maintained and kept at the facility for a minimum of five years and shall be available for inspection by the Department. These records shall include the following:
- (a) Tonnages of soils received on a per-job basis along with the required pretreatment analytical records;
- (b) Daily operating logs demonstrating that the critical operational parameters contained in Rules 62-713.400(1)(c)8. and 9., F.A.C., are being achieved;

- (c) Blending records required in Rule 62-713.300(2)(f), F.A.C.:
- (d) Soil testing records required on Form 62-713.900(3); and
- (e) The results of any additional soil laboratory analyses required in Rules 62-713.510 and .520, F.A.C, which are needed to operate the facility and manage the treated soil.
- (6) Any hazardous waste that is inadvertently accepted or is generated at the facility as a result of the treatment process shall be managed as a hazardous waste pursuant to Chapter 62-730, F.A.C.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. History-New

62-713.510 Soil Sampling and Analysis Plan.

The permit application for a stationary soil treatment facility shall include a soil sampling and analysis plan which describes the sampling procedures necessary to properly characterize both contaminated and treated soils managed at the facility. The plan shall ensure that representative samples of the soils are obtained which exhibit the chemical concentrations of contaminants in the soils and that a sufficient number of these samples are collected to represent the variability of the contaminants in the soils.

- (1) The plan shall include documentation that all sampling and analyses under this rule shall be performed in accordance with Chapter 62-160, F.A.C., and that all analyses shall be conducted with detection limits which are at or below both the relevant soil cleanup target levels in Table II of Chapter 62-777, F.A.C. and the applicable ground water or surface water standards or criteria for the chemicals of concern in the soil.
- (2) The plan shall include a detailed description of the procedures which will be used to obtain representative soil samples and of the planned sample collection frequencies. This description shall apply to soil both before and after treatment. Unless otherwise specified in this section or in the soil sampling and analysis plan, the procedures contained in EPA Publication SW-846, Chapter Nine, Sampling Plan shall be used.
- (3) General plan requirements. The plan shall include a detailed description of the contaminants reasonably expected to be present in the contaminated soils which will be treated by the facility and the test methods that will be used to analyze the soils for these parameters both before and after treatment. Unless otherwise specified in this chapter, both the pretreatment and post-treatment testing requirements shall be based upon the contaminants reasonably expected to be present in the contaminated soils.
- (4) Pretreatment testing for petroleum contaminated soil. In the description of the pretreatment testing planned for petroleum contaminated soil, the following apply:

- (a) For petroleum contaminated soil from sites which have an approved Site Assessment Report according to the requirements of Chapter 62-770, F.A.C., existing data from the site assessment may be used, if documented on Form 62-713.900(3), F.A.C., in lieu of separate pretreatment analyses; or
- (b) The sampling frequency contained in Table A shall be the minimum allowed, analyses shall be documented with the laboratory reports, and the following test parameters shall be
 - 1. Volatile organic halocarbons;
 - 2. Total recoverable petroleum hydrocarbons:
- 3. Total analyses for arsenic, cadmium, chromium, and lead: and.
- 4. For soils contaminated with used oil, analysis for total organic halogens shall also be required.
- (5) Pretreatment testing for non-petroleum contaminated soil. In the description of the pretreatment testing planned for non-petroleum contaminated soil, the following apply:
- (a) For non-petroleum contaminated soil from a site which has a Site Assessment Report previously approved by the Department, or a similar site assessment document previously approved by the Department, existing data from the site assessment may be used, if documented on Form 62-713.900(3), F.A.C., in lieu of separate pretreatment analyses; or
- (b) In the description of the pretreatment testing planned for non-petroleum contaminated soil, the sampling frequency contained in Table A shall be the minimum allowed, analyses shall be documented with the laboratory reports, and the following test parameters shall be included, unless the facility owner or operator demonstrates that one or more of these parameters are not reasonably expected to be present in the contaminated soil:
 - 1. Volatile organic compounds;
 - 2. Semi-volatile organic compounds;
 - 3. Pesticides; and
- 4. Total analyses for arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.
- (6) Post-treatment testing. Post-treatment testing shall be designed to ensure the facility is achieving the requirements for evaluation and use of treated soil in Rule 62-713.520, F.A.C. In the description of the post-treatment testing, the following apply:
 - (a) The following sampling frequencies shall be used:
- 1. For volatile organic compounds, at least one discrete soil sample shall be collected every 400 tons of treated soil; and
- 2. For all other chemicals or compounds, when continuous flow treatment processes are used, a treated soil sample shall be collected at least hourly and composited over an eight operational hour maximum time interval or at least once every

400 tons, whichever is less. If batch treatment processes are used, then a treated soil composite sample, consisting of at least four randomly selected sub-samples, shall be collected no less than once every 400 tons of treated soil.

- (b) For petroleum contaminated soil, the following test parameters shall be included and all analyses shall be documented with the laboratory reports:
 - 1. Volatile organic aromatics;
 - 2. Total recoverable petroleum hydrocarbons;
 - 3. Polynuclear aromatic hydrocarbons; and
- 4. Total analyses for arsenic, cadmium, chromium, and lead.
- (c) For non-petroleum contaminated soil, the same test parameters as are required in paragraph (b) of subsection (5) shall be included and all analyses shall be documented with the laboratory reports.
- (d) Leachability impacts. In addition to the testing requirements above, post-treatment testing shall include an analysis of the potential leachability impacts from the treated soil and all analyses shall be documented with the laboratory reports. When evaluating leachability impacts from a treated soil, the concentrations of contaminants detected in the post-treatment analysis of the treated soil shall be compared to the corresponding soil cleanup target levels for leachability based on ground water and surface water criteria identified in Table II of Chapter 62-777, F.A.C. As an alternative, leachability of treated soil can also be evaluated using the Synthetic Precipitation Leaching Procedure (SPLP), EPA Method 1312, or the Toxicity Characteristic Leaching Procedure (TCLP), EPA Method 1311 for soil which was contaminated with used oil or similar petroleum products, and extracts generated by using these procedures shall be analyzed for the contaminants detected in the post-treatment analysis of the treated soil. Results of the analysis of the extracts shall be compared to the ground water and surface water criteria columns in Table I of Chapter 62-777, F.A.C.
- (7) Polychlorinated biphenyls. Soil contaminated with used oil, used hydraulic oil, or used mineral oil may contain polychlorinated biphenyls (PCB). Applicants should be aware that such contaminated soil may be regulated by the U.S. Environmental Protection Agency under 40 CFR Part 761. Such soil containing PCBs shall not be treated pursuant to this chapter at a soil treatment facility unless the following conditions are met:
- (a) Soil contaminated with used oil, used hydraulic oil, or used mineral oil shall be analyzed for PCB concentrations. Soil PCB concentrations must be less than 50 ppm. Such soil shall not be blended, mixed or diluted to meet this specification.
- (b) If the analytical results obtained pursuant to paragraph (a) above are equal to or greater than 2 ppm, a sample of the used oil, used hydraulic oil, or used mineral oil source must be shown to have a PCB concentration of less than 50 ppm. If a sample of the used oil, used hydraulic oil, or used mineral oil is

- not available, a previous record of laboratory data and analytical results may be utilized to show the PCB concentration in the used oil, used hydraulic oil, or used mineral oil. If, after a reasonable effort, a previous record of laboratory data and analytical results can not be located, and the basis for not being able to obtain this information is documented in writing and maintained with the facility's operational records, then the soil may be treated in accordance with paragraph (a) above.
- (8) Additional metals leachability testing. If the total concentration of a metal in a soil sample, which has been analyzed according to the requirements of Rule 62-713.510, F.A.C., exceeds its corresponding total metal concentration in Table B, then a TCLP test shall be required for the metal in that soil.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS. History–New

62-713.520 Evaluation and Use of Treated Soil.

- (1) The permit application for a stationary soil treatment facility shall include a description of how the treated soils will be properly used or managed so they will not pose a significant threat to public health or the environment.
- (2) Cleaned soil can be land applied or used without further restrictions, except that the cleaned soil shall not be deposited in surface waters or wetlands unless it can be demonstrated that the cleaned soil is not expected to cause surface water violations or to be toxic to aquatic life and do not contain other chemicals or materials which could cause nuisance odors if saturated. Cleaned soil is treated soil which meets all of the following criteria:
- (a) The concentrations of all contaminants detected in the treated soil are at or below the corresponding concentrations for Residential Direct Exposure soil cleanup target levels contained in Table II of Chapter 62-777, F.A.C. or as provided in paragraph (2)(c) below;
- (b) The concentrations of all contaminants detected in the treated soil are at or below the corresponding soil cleanup target levels for leachability identified in Table II of Chapter 62-777, F.A.C. The applicant may use leachability determinations based on SPLP test results, or on TCLP test results for soil which was contaminated with used oil or similar petroleum products, in lieu of some or all of the values in Table II to demonstrate that the Department's ground water and surface water standards or criteria will not be violated; and
- (c) For contaminants detected in the treated soil but not listed in Table II of Chapter 62-777, F.A.C., the soil cleanup target levels for those contaminants shall be decided on a case-by-case basis and shall be calculated using the following:
- 1. An excess lifetime cancer risk level less than or equal to 1.0×10^{-6} :
- 2. A hazard index (sum of the hazard quotients) less than or equal to 1.0;

- 3. The equations provided in Figures 4, 5, 6, 7, 8, and 9, of Chapter 62-777, F.A.C., as applicable; and
- 4. Best achievable detection limits for the chemicals of concern in the soil.
- (3) When providing the demonstrations or calculations required in subsection (2) above, the applicant may use information contained in "Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report" dated May 26, 1999.
- (4) Treated soil which does not meet the criteria for cleaned soil shall be managed in one of the following manners: (a) It may be treated again;
- (b) It may be blended in accordance with Rule 62-713.300(2)(e), F.A.C., so that it meets the criteria for cleaned soil;
- (c) It may be disposed of in a Class I landfill or Waste-to-Energy facility if allowed under that facility's permit or certification; or
- (d) It may be beneficially used in accordance with an approval of alternate procedures and requirements as provided in Rule 62-713.220, F.A.C.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.707 FS.

- 62-713.600 Stationary Soil Treatment Facility Closure and Financial Assurance.
- (1) Closure. The permit application shall include a closure plan that identifies the steps needed to close the facility. The closure plan shall demonstrate how the facility will be closed to meet the following requirements:
 - (a) There will be no need for further facility maintenance;
- (b) Contaminants from soils accepted by the facility will not be expected to cause violations of Department water quality standards;
- (c) All tanks, piping, secondary containment and ancillary equipment will be emptied and cleaned or removed from the site:
- (d) Storage and process tanks and integral piping shall be closed in accordance with Chapter 62-761, F.A.C.; and
- (e) Any contaminated soil or leachate on the site, including in situ soil that has become contaminated during facility operations, will be removed or treated so that it poses no significant threat to human health or the environment.
- (2) At least 90 days prior to the date when contaminated soil will no longer be accepted, the owner or operator of the facility shall submit an updated and detailed closure plan to the Department to reflect any changes in the closure plan due to actual operational conditions at the facility. This updated plan shall be signed, dated and sealed by a professional engineer registered under Chapter 471, F.S.

- (3) Within 90 days after receiving the final shipment of contaminated soil, the owner or operator shall remove or otherwise dispose of all soil in accordance with the approved closure plan.
- (4) Closure shall be completed within 180 days after receiving the final shipment of contaminated soil. When closure is completed, the owner or operator shall provide a written certification to the Department that closure is complete. This closure certification shall be signed, dated and sealed by a professional engineer registered under Chapter 471, F.S. The Department will make an inspection within 30 days to verify the closure and advise the owner or operator of the closure status.
- (5) Long term care. The owner or operator of the soil treatment facility shall continue to monitor and maintain the facility for five years from the date of closing. This time period shall be extended if assessment monitoring or corrective action is required in accordance with Rule 62-701.510(7), F.A.C., or if site-specific conditions make it likely that any contamination which may emanate from the storage areas would not be detected within five years. Long term care shall not be required if the owner or operator can demonstrate that all contaminated soil, as well as treated soil which has not met the criteria as cleaned soil, has been removed from the site and that site-specific conditions make it unlikely that any ground water or surface water standards or criteria will be violated. This demonstration shall be signed, dated and sealed by a professional engineer registered under 471, F.S., or a professional geologist registered under Chapter 492, F.S. Upon such a demonstration, the owner and operator of the facility shall have no further financial assurance obligations pursuant to Rule 62-713.600(6), F.A.C.

(6) Financial assurance.

(a) The owner or operator of a soil treatment facility shall provide the Department with proof of financial assurance issued in favor of the State of Florida in the amount of the closing and long-term care cost estimates for the facility. This proof, along with the closing and long-term care cost estimates, shall be submitted to the Department as part of the permit application for the facility. Proof of financial assurance shall consist of one or more of the following financial instruments which comply with the requirements of Rule 62-701.630(6), F.A.C.: trust fund; surety bond guaranteeing payment; surety bond guaranteeing performance; irrevocable letter of credit; insurance; and financial test and corporate guarantee. If the owner or operator of the facility is a local government, an escrow account which complies with the requirements of Rule 62-701.630(5), F.A.C., may be used to provide proof of financial assurance. Financial documents shall be submitted on Form 62-701.900(5)(a), (b), (c), (d), (e), (f), (g), or (h), as appropriate.

- (b) For the purposes of determining the amount of proof of financial assurance that is required, the owner or operator shall estimate the total cost of closure for the facility. The annual cost of long-term care shall be estimated and listed separately and multiplied by 5 years. The owner or operator shall submit the estimates to the Department along with the proof of financial assurance. The costs shall be estimated by a professional engineer registered under Chapter 471, F.S. for a third party performing the work, on a per unit basis, with the source of estimates indicated.
- 1. Closing costs shall include the estimated costs of compliance with subsection (1) above, assuming that the maximum amount of treated and untreated soils specified in the permit are stored at the facility.
- 2. Long-term care costs shall include the costs of ground water monitoring, collection and analysis.
- (c) Closure cost estimates shall be updated annually in accordance with the provisions of Rules 62-701.630(4)(a) through (d), F.A.C.

Specific Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.707 FS. History–New _____.

62-713.800 Mobile Soil Treatment Facilities.

A general permit is hereby granted to any person for the operation of a mobile soil treatment facility for thermal treatment of petroleum contaminated soil that will be operated in accordance with the standards and criteria set forth in Part III of Chapter 62-4, F.A.C., and this rule. The owner or operator of the mobile soil treatment facility shall notify the Department on Form 62-713.900(2) of the intent to use this general permit, and shall comply with the following requirements:

- (1) A mobile soil treatment facility owner or operator who intends to thermally treat petroleum contaminated soil shall notify the appropriate District office of the Department by registered mail at least three days prior to initiating operation at a contaminated site. The Department recommends, but does not require, that the owner or operator also provide at least three days notice to the local City and County governments and local environmental agency.
- (2) Any owner or operator of a permitted mobile soil treatment facility shall take appropriate measures to assure protection of the general public including the following:
- (a) A security fence shall surround all areas where contaminated soil is being processed, including stockpiling, handling, and treatment areas. The fence shall extend at least six feet above ground surface. In lieu of a security fence, surveillance personnel on-site at all times is an acceptable alternative;
- (b) Gate access shall be locked when no attendant is present; and
- (c) Appropriate warning notices shall be clearly posted; for example, notices should warn of the presence of contaminated soil, the presence of excavations, or the presence of equipment.

- (3) Mobile soil treatment facilities shall be operated only at sites with confirmed contaminated soil and shall treat only soil native to the site.
- (4) Unless transported off-site to a permitted Class I landfill, stationary soil treatment facility or Waste-to-Energy facility, soil which is excavated shall remain on-site and within the area of suspected ground water contamination until the soil has been treated so that it meets the criteria as cleaned soil in Rule 62-713.520(2)-(4), F.A.C.
- (5) Excavated soil shall be stockpiled on an impermeable surface or a liner with a minimum thickness of five mils. The stockpile shall be covered by a secured plastic cover with a minimum thickness of five mils until treatment in the soil treatment unit commences.
- (6) The Department recommends, but does not require, that soil treated by mobile facilities should be returned to the original excavation pit.
- (7) The stockpile area for untreated soil shall be graded to direct leachate flow to return to the original excavation pit.
- (8) The treatment of any non-petroleum contaminated soil is prohibited at mobile soil treatment facilities.
- (9) The treatment of soil contaminated with polychlorinated biphenyls (PCBs) is prohibited at mobile soil treatment facilities.
- (10) For thermal treatment technologies other than rotary kiln thermal treatment units, the results of studies from pilot projects or actual operating facilities which demonstrate the feasibility of the technology proposed for treating the petroleum contaminated soil shall be included as part of the notification to use this general permit.

<u>Specific Authority 403.061, 403.704, 403.814 FS. Law Implemented 403.707, 403.814 FS. History–New</u>

62-713.900 Forms.

The forms used by the Department for soil treatment facilities are adopted and incorporated by reference in this section. The form is listed by rule number, which is also the form number, and with the title, subject and effective date. Copies of forms may be obtained from a local District Office or by writing to the Florida Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Form 62-713.900(1): Application to Construct or Operate a Stationary Soil Treatment Facility, effective

<u>(2)</u>	Form 62	<u>-71</u>	3.900(2): N	otif	ication of	ln	itent to U	Jse a
General	Permit	to	Construct	or	Operate	a	Mobile	Soil
Treatme	nt Facilit	y, e	ffective		<u>.</u>			

(3) Form 62-713.900(3): Soil Testing Reporting Form, effective .

Specific Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.707 FS. History–New

Table A. Minimum Number of Soil Samples Required

Amount of Soil by Volume,	Amount of Soil by Weight, tons	Number of Discrete Samples	Number of Composite Samples Required for
<u>yd³</u>	tons	Required for Volatile Organics	non-Volatile <u>Organics</u>
<u><100</u>	<u><140</u>	<u>1</u>	<u>1</u>
<u>100 to <500</u>	<u>140 to <700</u>	<u>3</u>	<u>3</u>
500 to <1000	700 to <1400	<u>5</u>	<u>5</u>
For each additional 500 yd ³	For each additional 700 tons	<u>1</u>	1

Table B. Total Metals Analysis and TCLP Test Requirements

<u>If</u>	Exceeds	TCLP Test Criteria
<u>Total Arsenic</u>	100 mg/kg	5.0 mg/L
<u>Total Barium</u>	2000 mg/kg	<u>100.0 mg/L</u>
<u>Total Cadmium</u>	<u>20 mg/kg</u>	1.0 mg/L
<u>Total Chromium</u>	<u>100 mg/kg</u>	<u>5.0 mg/L</u>
Total Lead	<u>100 mg/kg</u>	<u>5.0 mg/L</u>
Total Mercury	<u>4 mg/kg</u>	<u>0.2 mg/L</u>
<u>Total Selenium</u>	<u>20 mg/kg</u>	<u>1.0 mg/L</u>
<u>Total Silver</u>	100 mg/kg	<u>5.0 mg/L</u>

NAME OF PERSON ORIGINATING PROPOSED RULE: Bill Hinkley, Chief, Bureau of Solid and Hazardous Waste NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: John Ruddell, Director, Division of Waste Management

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 5, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: December 11, 1998

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 98-75R

RULE CHAPTER TITLE: RULE CHAPTER NO.:

Petroleum Contamination Site

62-770
RULE NOS:
62-770.140
62-770.160
62-770.200
62-770.250
62-770.300
62-770.400
62-770.490
62-770.600
62-770.610
62-770.650
62-770.680
62-770.690
62-770.700
62-770.750
62-770.800
62-770.830
62-770.890
62-770.900

PURPOSE AND EFFECT: The Department is proposing amendments to the Petroleum Contamination Site Cleanup Criteria rules, Chapter 62-770, Florida Administrative Code (F.A.C.), to make clarifications to the rules, to update the rule chapter due to emerging science, and to address a concern raised by the Joint Administrative Procedures Committee regarding approval criteria for groundwater fate and transport models proposed under the rule chapter. The Department is also proposing to delete obsolete EPA analytical test methods from the rule and to add new EPA test methods.

SUMMARY: The proposed amendments would repeal Tables IV through IX, which set forth certain contaminant cleanup target levels applicable to the cleanup of petroleum contaminated sites. Simultaneously with the proposed repeal, the Department is proposing to create a new rule chapter, Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, to establish certain cleanup target levels applicable to the rehabilitation of brownfields, petroleum and drycleaning sites and to contaminated soil treated at soil treatment facilities. The

proposed new rule chapter would also set forth methodologies for use in establishing alternate cleanup target levels for petroleum products chemicals of concern. Proposed amendments to the petroleum contaminated site cleanup rule chapter will reference the Chapter 62-777, F.A.C., cleanup target levels and figures applicable to rehabilitation of petroleum contaminated sites. It is anticipated that some of the cleanup target levels now contained in Chapter 62-770, F.A.C., will change when they are included in the proposed new Chapter 62-777, F.A.C. The proposed cleanup target levels were recalculated to refine the numbers based on rounding conventions and to emerging science. The proposed amendments to Chapter 62-770, F.A.C., and simultaneous adoption of proposed rule Chapter 62-777, F.A.C., are intended to result in a structural change in the way the rules are applied to cleanup of petroleum contaminated sites. Additionally, the proposed amendments to Chapter 62-770, F.A.C., will address a concern raised by the Joint Administrative Procedures Committee regarding approval criteria for groundwater fate and transport models that may be proposed for conducting risk assessments, and proposals for natural attenuation and no further action at petroleum sites. Certain obsolete EPA analytical test methods will be deleted and new test methods will be added to the rule chapter.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST:

The Department has in accordance with the requirements of Chapter 120, F.S., prepared a Statement of Economic Cost, which is summarized as follows:

The cleanup target levels now contained in Chapter 62-770, F.A.C., that change after inclusion in Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, are not expected to provide adverse economic impacts either to the Department or stakeholders of the regulated community (please see the Statement of Estimated Regulatory Cost for Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria dated May 1997). Some of the cleanup target levels are more stringent and some are less stringent. Nevertheless, the changes do not seem sufficient enough to offset the significant estimated net savings from the previous inclusion of Risk-Based Corrective Action principles and the application of natural attenuation with monitoring.

The estimated net savings for Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria, utilizing a discount rate of 8% over ten (10) years were estimated at: (1) sites eligible for a cleanup program, estimated net savings of one (1) billion dollars; and (2) sites not eligible for a cleanup program, estimated net savings in excess of one hundred (100) million dollars.

A copy of the Statement of Estimated Regulatory cost may be obtained by contacting the person designated below as the proposed rule contact. Any person who wishes to provide

information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice. RISK IMPACT STATEMENT: A Risk Impact Statement prepared in accordance with 120.81, F.S., is available. A copy may be obtained by contacting the Bureau of Petroleum Storage Systems.

SPECIFIC AUTHORITY: 376.3071 FS.

LAW IMPLEMENTED: 376,3071 FS.

HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME. DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Room 609, Twin Towers Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel, (850)488-2996 or 1(800)955-8771 (TDD), Florida 32399-2400 at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Guillermo Wibmer, Department of Environmental Protection, Bureau of Petroleum Storage Systems, Mail Station 4520, Twin Towers, 2600 Blair Stone Road, Tallahassee, (850)921-0891 or at the e-mail address: "wibmer_g@dep.state.fl.us"

THE FULL TEXT OF THE PROPOSED RULES IS:

62-770.140 Referenced Guidelines.

Specific references to the guidelines listed below are made within this chapter. The 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) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999.
- (2) Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994.
- (3) RBCA Fate and Transport Models: Compendium and Selection Guidance, dated 1999.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071 FS. History-New

- 62-770.160 Applicability.
- (1) through (1)(b) No change.
- (c) To any discharge of petroleum or petroleum products of less than 25 gallons onto a pervious surface, as long as the discharge is removed and properly treated or properly disposed, or otherwise remediated, so that no contamination from the discharge remains on-site.

- (2) through (5) No change.
- (6) Petroleum products' contaminants of concern are listed in Table A of this chapter. Chapter 62-777, F.A.C., provides soil, surface water and groundwater cleanup target levels, as well as natural attenuation default concentrations, a listing of soil properties and test methods, a listing of site-specific conditions and geochemical parameters, and default parameters and equations that may be used to establish alternative soil and groundwater cleanup target levels for identified petroleum products' contaminants of concern listed in Table A.

(7)(6) Cleanup target levels for petroleum products' contaminants of concern found in groundwater, as specified in Chapter 62-777, F.A.C., Table I, or alternative cleanup target levels that may be established pursuant to Rules 62-770.650 or 62-770.680, F.A.C., are enforceable under this chapter and apply only in the rehabilitation of sites contaminated with petroleum or petroleum products. Cleanup target levels for petroleum products' contaminants ehemicals of concern found in groundwater shall be the applicable State water quality standards, except where alternative cleanup target levels are have been established pursuant to this chapter. This chapter is not intended to create any new water quality standards pursuant to Chapters 62-520 or 62-550, F.A.C. The eurrent numerical standards promulgated in Chapters 62-520 and 62-550, F.A.C., or cleanup target levels based on the minimum criteria specified in Chapters 62-520 or 62-550, F.A.C., are the cleanup target levels referenced utilized in Chapter 62-777, F.A.C., Table I Tables V and VI, as applicable. In establishing the applicable minimum criteria for groundwater, the following factors were considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient index of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and or nuisance, organoleptic, and or aesthetic considerations. Site-specific groundwater cleanup target levels may be justified based on background concentrations. Where groundwater contaminated with petroleum or petroleum products' contaminants ehemicals of concern is discharging into surface water or when available information (for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling) indicates that it may discharge into surface water in the future, the cleanup target levels for the petroleum products' contaminants ehemicals of concern shall also be based on the surface water standards and criteria. The eurrent numerical standards promulgated in Chapter 62-302, F.A.C., or cleanup target levels based on the toxicity criteria specified in Chapter 62-302, F.A.C., are referenced utilized in Chapter 62-777, F.A.C., Table I Tables VI and VII, as applicable.

(8)(7) Cleanup target levels for petroleum products' contaminants ehemicals of concern found in soil, as specified in Chapter 62-777, F.A.C., Table II Table IV, or alternative cleanup target levels that may be established pursuant to Rules 62-770.650 or 62-770.680, F.A.C. this chapter, are enforceable under this chapter and apply only in the rehabilitation of a sites contaminated with petroleum or petroleum products. In establishing soil cleanup target levels, the methodology presented in the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, was utilized. In establishing soil cleanup target levels for human exposure to each petroleum products' contaminant of concern found in soil, the following factors were considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient of 1 or less; and the best achievable detection limits. Site-specific soil cleanup target levels may be justified based on background concentrations. In establishing leachability-based soil cleanup target levels for protection of the groundwater, the soil cleanup target levels shall be based on the groundwater cleanup target levels or the alternative cleanup target levels for groundwater established pursuant to Rules 62-770.650 or 62-770.680, F.A.C., as appropriate.

(9) This chapter is established for the purposes of protecting the public health and the environment and for determining, on a site-specific basis, the rehabilitation program tasks that comprise a site rehabilitation program and the levels at which a rehabilitation program task and site rehabilitation program may be deemed complete. In establishing this chapter, risk-based corrective action principles were incorporated to the maximum extent feasible, to achieve protection of human health, public safety and the environment in a cost-effective manner. Therefore, this chapter references both default cleanup target levels and a process for the derivation of site-specific alternative cleanup target levels that are protective of human health, public safety and the environment.

(10)(8) For sites where a Site Rehabilitation Completion Order was issued for every known discharge prior to [the effective date of this chapter September 23, 1997, the cleanup target levels for petroleum products' contaminants ehemicals of concern shall be those that were in effect at the time of issuance of the Order(s). If a subsequent discharge of petroleum or petroleum products occurs at the site after issuance of the Order(s), site rehabilitation may be required under applicable provisions of this chapter, to reduce concentrations of petroleum products' contaminants ehemicals of concern resulting from the subsequent discharge, to the cleanup target levels specified in Chapter 62-770, F.A.C., subject to the provisions of Rule 62-770.160(4), F.A.C.

(11) Receipt of approval under this chapter does not relieve the responsible party from the obligation to comply with other Department rules (for example, Chapters 62-701, 62-713, 62-730, 62-782 and 62-785, F.A.C.) regarding off-site disposal, relocation or treatment of contaminated media. Responsible parties are advised that other federal or local requirements may apply to these activities.

Specific Authority 376,303, 376,3071 FS, Law Implemented 376,3071 FS. Tistory–New 11-1-87, Formerly 17-70.004, Amended 2-21-90, Formerly 17-70.160, Amended 7-30-96, 9-23-97._____.

62-770.200 Definitions.

All words and phrases defined in Section 376.301, F.S., shall have the same meaning when used in this chapter unless the context clearly indicates otherwise. The following words and phrases used in this chapter shall, unless the context clearly indicates otherwise, have the following meanings:

- (1) "Action levels" means a specified concentrations of a petroleum products' contaminant ehemicals of concern that, if when exceeded during natural attenuation monitoring or post active remediation monitoring, may require initiation of additional site assessment or active remediation. Action levels are established during the approval process for Natural Attenuation Monitoring Plans pursuant to Rule 62-770.690, F.A.C., and Post Active Remediation Monitoring Plans pursuant to Rule 62-770.750, F.A.C., and are not equivalent to cleanup target levels.
- (2) "Additive effect" means a scientific principle that the toxicity that occurs as a result of exposure is the sum of the toxicities of the individual chemicals to which an individual is exposed.
- (3) "Antagonistic effect" means a scientific principle that the toxicity that occurs as a result of exposure is less than the sum of the toxicities of the individual chemicals to which an individual is exposed.
- (4)(2) "Background concentrations" means concentrations of petroleum products' contaminants ehemicals of concern that are naturally occurring in the groundwater, surface water, soil or sediment in the vicinity of the site.
- (5) "Contaminated" means the presence of petroleum or petroleum products or their chemical constituents in surface water, groundwater, soil, sediment, or upon the land, in quantities or concentrations that may result in exceedances of the applicable cleanup target levels specified in Chapter 62-777, F.A.C., or water quality standards in Chapters 62-3, 62-302, 62-520 or 62-550, F.A.C., or in quantities or concentrations that may result in contaminated sediment.
- (6)(3) "Contaminated sediment" means sediment that is contaminated with petroleum or petroleum products or their chemical constituents to the extent that contamination may be harmful to human health or the environment result in an adverse human health or biological effect as determined by the concentrations of the petroleum or petroleum products' contaminants ehemicals of concern, actual circumstances of exposure, diversity studies, or toxicity testing or other evidence of harmful effects, as applicable. (Refer to the Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994, for guidance on the evaluation of concentrations of petroleum products' contaminants of concern and sediment quality conditions.)

(7)(4) "Contaminated soil" means soil that is contaminated with petroleum or petroleum products or their chemical constituents to the extent that applicable soil cleanup target levels specified in Chapter 62-777, F.A.C., in this chapter are exceeded.

(8)(5) "Contamination" refer to the definition for or "contaminated" means the presence of petroleum or petroleum products or their chemical constituents in surface water, groundwater, soil, sediment, or upon the land, in quantities that may result in exceedances of the applicable cleanup target levels in this chapter or water quality standards in Chapters 62-3, 62-302, 62-520 or 62-550, F.A.C., or in quantities that may result in contaminated sediment.

(9)(6) No change.

(10)(7) No change.

- (a) through (c) No change.
- (d) Results of analytical test on a groundwater sample that exceed the cleanup target levels referenced utilized in Chapter 62-777, F.A.C., Table I, groundwater criteria column Table V;
- (e) Results of analytical test on a soil sample that exceed the lower of the direct exposure residential cleanup target levels I and leachability based on groundwater criteria Table V cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV.
- (11) "Engineering control" means a modification to a site to reduce or eliminate the potential for migration of, and exposure to, petroleum products' contaminants of concern. Examples of modifications include physical or hydraulic control measures, capping, point-of-use treatments, or slurry walls.

(12)(8) "Excessively contaminated soil" for the purposes of Section 376.3071(11)(b)2., F.S. (unless laboratory results verify that the organic vapor analysis data are not relevant), means soil saturated with petroleum or petroleum products or soil that causes a total corrected hydrocarbon measurement of 500 parts per million (ppm) or higher for Gasoline Analytical Group or 50 ppm or higher for Kerosene Analytical Group. Readings shall be obtained at the site on an organic vapor analysis instrument with a flame ionization detector in the survey mode upon sampling the headspace in half-filled, eight-ounce or 16-ounce jars. Each soil sample shall be split into two jars, the two samples shall be brought to a temperature of between 20°C. (68°F.) and 32°C. (90°F.) and the readings shall be obtained five minutes thereafter. One of the readings shall be obtained with the use of an activated charcoal filter unless the unfiltered reading is non-detect. The total corrected hydrocarbon measurement shall be determined by subtracting the filtered reading from the unfiltered reading. Instruments with a photo ionization detector may be used after a determination is made of that instrument's equivalent response to an instrument with a flame ionization detector. Photo ionization detectors shall not be used in situations where

humidity will interfere with the instruments' sensitivity (including periods of rain, measuring wet or moist soil). Analytical instruments shall be calibrated in accordance with the manufacturer's instructions.

(13)(9) No change.

(14)(10) No change.

(15)(11) No change.

(16) "Innovative technology" means a process that has been tested and used as a treatment for contamination, but lacks an established history of full-scale use and information about its cost and how well it works sufficient to support prediction of its performance under a variety of operating conditions. An innovative technology is one that is undergoing pilot-scale treatability studies, which usually are performed in the field or the laboratory and require installation of the technology, and which provide performance, cost, and design objectives for the technology prior to full scale use.

(17) "Institutional control" means a restriction on use of, or access to, a site to eliminate or minimize exposure to petroleum products' contaminants of concern. Examples of institutional controls include deed restrictions, use restrictions, or restrictive zoning.

(18)(12) No change.

(19)(13) No change.

(20)(14) No change.

- (21) "Natural attenuation" means an approach to site rehabilitation that allows natural processes to contain the spread of contamination and reduce the concentrations of petroleum products' contaminants of concern in contaminated groundwater and soil. Natural attenuation processes may include the following: sorption, biodegradation, chemical reactions with subsurface materials, diffusion, dispersion, and volatilization.
- (22) "Petroleum contamination site" means any contiguous land, surface water, and groundwater areas upon or into which a discharge of petroleum or petroleum products has occurred or for which evidence exists that such a discharge has occurred.

(23)(15) "Petroleum products' contaminants ehemicals of concern" means the contaminants listed in Table A of this chapter constituents of petroleum or petroleum products, including, but not limited to, Benzene, Ethylbenzene, Toluene, Xylenes, Naphthalene, and similar chemicals, and constituents in petroleum products, including, but not limited to, Methyl Tert-Butyl Ether (MTBE), Lead, and similar chemicals found in additives, provided the contaminants ehemicals of concern are present as a result of a discharge of petroleum or petroleum products.

(24)(16) "Piezometer" means a permanent or temporary well that may not be designed and constructed without the surface sealing or sand filter pack requirements of a monitoring well. This type of well is primarily used to detect the presence of free product or collect water-level elevation data to aid in determining the direction of groundwater flow.

(25)(17) "Plume" means the portion of an the aguifer or aquifers in which groundwater contamination by petroleum products' contaminants ehemicals of concern above applicable cleanup target levels and background concentrations has been detected.

(26)(18) No change.

(27)(19) No change.

(28)(20) "Quiescent sampling technique" is a sampling method for groundwater that consists of a low flow purge (less than or equal to one liter per minute) and collection of samples at the same low flow within six hours of purging. The purging and sampling shall be performed with pumps that cause the least disturbance to the groundwater during installation, use and removal (for example, bladder pumps, peristaltic or variable speed submersible pumps).

(29)(21) No change.

(30)(22) No change.

(31)(23) No change.

(32)(24) "Site" refer to the definition for or "petroleum contamination site" means any contiguous land, surface water, and groundwater areas upon or into which a discharge of petroleum or petroleum products has occurred or for which evidence exists that such a discharge has occurred.

(33) "Site rehabilitation" means the assessment of site contamination and the remediation activities that reduce the levels of contaminants of concern at a site through accepted treatment methods to meet the cleanup target levels established for that site.

(34)(25) No change.

(35)(26) "Surface water" shall includes rivers, lakes, streams, springs, impoundments, canals and all other water upon the surface of the earth, whether contained in bounds created naturally or artificially, or diffused. Stormwater and wastewater process water retention or treatment facilities, and canals and trenches that are integral to such facilities, that are not connected to other surface water, are shall not be included in the definition of surface water.

(36) "Synergistic effect" means a scientific principle that the toxicity that occurs as a result of exposure is more than the sum of the toxicities of the individual chemicals to which an individual is exposed.

(37) "Temporary point of compliance" is the boundary represented by one or more designated monitoring wells at which groundwater cleanup target levels may not be exceeded while site rehabilitation under an approved Natural Attenuation Monitoring Plan is proceeding.

(38)(27) No change.

(39)(28) No change.

(40)(29) No change.

Specific Authority 376,303, 376,3071 FS, Law Implemented 376,3071 FS. History-New 11-1-87, Formerly 17-70.003, Amended 2-21-90, Formerly 17-770.200, Amended 9-23-97,

62-770.250 Contamination Reporting.

- (1) Upon discovery of contamination (unless the contamination is the result of a previously reported discharge for which site rehabilitation completion has not been achieved or the contamination is known to be from a non-petroleum product source) or upon a discharge of petroleum or petroleum products, notification shall be submitted using the Discharge Report Form [(Form Number 62-761.900(1)]).
- (a) If the discharge was from a storage tank system regulated pursuant to Chapters 62-761 or 62-762, F.A.C., the discharge must be reported by the facility owner or operator pursuant to the applicable requirements of Chapters 62-761 and 62-762, F.A.C.; or
- (b) For all other discharges of petroleum or petroleum products, the discharge must be reported within one week of discovery. However, discharges to the surface of lands or to surface waters must be reported to the State Warning Point as soon as possible but no later than 24 hours after occurrence. The discharge must be reported by:
 - 1. through 2. No change.

Specific Authority 376.303, 376.3071 FS. Law Implemented <u>376.305</u>, 376.3071 FS. History–New 2-21-90, Formerly 17-770.250, Amended <u>9-23-97</u>.

62-770.300 Source Removal.

(1) No change.

(a) Except for those sites described in paragraph (1)(g) of this rule, within three days of discovery of free product the responsible party shall take steps to obtain cleanup services for product recovery or initiate product recovery. Product recovery shall be performed in accordance with Rule 62-770.300(1)(b), F.A.C. The county tank compliance program must be contacted by the responsible party within 24 hours of the discovery of free product from a new discharge. If state funding assistance from the Inland Protection Trust Fund will be sought, product recovery authorized under this paragraph and in accordance with the Department's preapproval program procedures established pursuant to Section 376.30711, F.S., may only be performed for up to five days from the date of commencement of product recovery of the new discharge. If product recovery is not complete pursuant to Rule 62-770.300(1)(d), F.A.C., at the end of the five days, or the scope of activities specified in Rule 62-770.300(1)(b), F.A.C., will be exceeded, the responsible party shall request written authorization for additional product recovery from the Department or from the local program, in accordance with the Department's preapproval program procedures. The responsible party is required to complete product recovery (applicable federal, state, or local authorization, certification or permits may need to be obtained before product recovery) provided that:

- 1. No change.
- 2. product recovery does not spread contamination into previously uncontaminated or less contaminated areas through untreated discharges, improper treatment, improper disposal or improper storage;
 - 3. No change.
- 4. all sampling and analyses are performed in accordance with Rule 62-770.400 Chapter 62-160, F.A.C.
- (b) The following passive and active methods of product recovery may be implemented without requesting approval from the Department or local program approval:
 - 1. through 3. No change.
- 4. fluid vacuum techniques (for example, vacuum pump trucks) or total fluid displacement pumps, as long as: when
- a. the technique used does not smear or spread free product or result in contaminating previously uncontaminated media; and

b. the volume of groundwater recovered is not greater than two times the volume of free product recovered, except that the first 1,000 gallons of the total fluid recovered per discharge are exempt from meeting the required ratio of groundwater to free product.

- (c) In addition to the recovery methods specified in Rule 62-770.300(1)(b), F.A.C., other product recovery methods may be evaluated, proposed and submitted by the responsible party to the Department or to the local program for approval pursuant to Rule 62-770.890, F.A.C., prior to implementation. During the submittal and approval process, implementation of one or more of the collection methods specified in Rule 62-770.300(1)(b), F.A.C., is required. The submittal must include the results of the evaluation performed to determine the potential for product spreading or smearing, and the potential for air emissions, and a justification as to the environmental and economical benefits of the selected recovery method. The product recovery methods proposed may include:
- 1. excavation of soil saturated with petroleum or petroleum products' contaminants ehemicals of concern into or below the water table;
 - 2. through (e) No change.
- (f) Unless a different reporting period is approved under the provisions of Rule 62-770.800(5), F.A.C., an annual status report documenting the recovery progress and summarizing all the recovery activities shall be submitted by the responsible party to the Department or to the local program for review.
- (g) At petroleum contamination sites eligible for state funding assistance under the Inland Protection Trust Fund where the discharge occurred prior to March 29, 1995, product recovery shall commence in accordance with the ranking established pursuant to Chapter 62-771, F.A.C., and shall be performed in accordance with Rules 62-770.300(1)(b) and (c), F.A.C., and pursuant to Section 376.30711, F.S.
 - (2) through (a) No change.

- 1. contamination is not spread into previously uncontaminated or less contaminated areas through untreated discharges, improper treatment, improper disposal or improper storage;
 - 2. No change.
- 3. when a soil vacuum extraction system is necessary to abate an imminent threat to human life, health, safety or welfare within a structure or utility conduit, then the vacuum extraction system must be designed and operated only to abate the imminent threat. The Department or the local program must be notified, within 24 hours, of the imminent threat and the intent to use a soil vacuum extraction system. The air emissions monitoring and frequency of monitoring shall be performed in accordance with Rule 62-770.700(10)(9)(i), F.A.C.;
- 4. when excavated soil is temporarily stored or stockpiled on_site, the soil shall be secured in a manner that prevents human exposure to contaminated soil and prevents soil exposure to precipitation that may cause surface runoff, and any excavation shall be secured to prevent accidental or intentional entry by the public. Excavated contaminated soil (including excessively contaminated soil) may be returned to the original excavation when petroleum storage tank systems have been removed or replaced, or if contaminated soil was encountered during construction activities; and
- 5. excavated contaminated soil (including excessively contaminated soil) is not stored or stockpiled on-site for more than 60 days, unless it is stockpiled on a right-of-way, in which case it must be removed for proper treatment or proper disposal as soon as practical but no later than 30 days after excavation, or unless it is being land farmed in accordance with Rule 62-770.300(2)(b), F.A.C., at which time the soil must be returned to the original excavation or removed and properly treated or properly disposed. Contaminated soil (including excessively contaminated soil) may be containerized in water tight drums and stored on-site for 90 days, after which time proper treatment or proper disposal of the contaminated soil shall occur in accordance with applicable rules of the Department, or land farmed as specified in Rule 62-770.300(2)(b), F.A.C.
 - (b) through 9. No change.
- 10. land farmed soil that does not exceed the lower of the direct exposure residential cleanup target levels I and leachability based on groundwater criteria Table V cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV may be disposed on_site or off_site, as appropriate. Responsible parties are advised that other federal or local requirements may apply to these activities. Land farmed soil that exceeds the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV may not be disposed or returned to the original excavation without obtaining approval from the Department or from the local program, pursuant to the provisions of Rule 62-770.890, F.A.C.

- (c) through (d) No change.
- (3) Authorizations.

Authorization or receipt of approval under Rule 62-770.300, F.A.C., does not relieve the responsible party from the obligation to comply with other Department rules (for example, Chapters 62-701 and 62-730, F.A.C.) for product recovery, product disposal, or the handling, storage, disposal or treatment of contaminated media. Responsible parties are advised that other federal or local requirements may apply to these activities.

(4)(3) No change.

- (a) through (b)4. No change.
- 5. the disposal methods for other contaminated media <u>and</u> <u>any investigation-derived waste;</u>
 - 6. through 7. No change.
- 8. the type of field screening instrument, <u>analytical</u> <u>methods</u> or <u>other</u> method used;
 - 9. through 10. No change.
- 11. a table indicating the identification, depth and field soil screening results or laboratory analyses of each sample collected;
 - 12. through (c) No change.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071, 376.30711 FS. History–New 11-1-87, Formerly 17-70.006, Amended 2-21-90, Formerly 17-770.300, Amended 9-3-96, 9-23-97.

- 62-770.400 Quality Assurance Requirements.
- (1) through (2)(a) No change.
- (b) Copies of the completed chain of custody record form(s) [(Form 62-770.900(2)]);
- (c) Copies of the completed water sampling log form(s) [(Form 62-770.900(3)]); and
- (d) Results from screening tests or on-site analyses performed pursuant to this chapter.

Specific Authority 376.303, 376.3071, 403.0877 FS. Law Implemented 376.3071 FS. History–New 11-1-87, Formerly 17-70.007, Amended 2-21-90, Formerly 17-770.400, Amended 9-23-97.________.

62-770.490 Professional Certifications.

Applicable portions of technical documents submitted to the Department or to the local program shall be signed and sealed by a Professional Engineer registered under Chapter 471, F.S., or a Professional Geologist registered under Chapter 492, F.S., certifying that the applicable portions of the technical document and associated work comply with standard professional practices, the rules of the Department and any other laws and rules governing the profession. If a laboratory report is submitted separately from any other technical document submittal, this requirement shall not apply to the laboratory report.

Specific Authority 403.0877 FS. Law Implemented 376.3071, 403.0877 FS. History-New______

- 62-770.600 Site Assessment.
- (1) through (2) No change.
- (a) To determine or confirm the source(s) of contamination to the extent practicable and to estimate the volume of petroleum or petroleum products that was released. That confirmation may include a determination of the structural integrity, in accordance with the testing procedures specified in Chapters 62-761 or 62-762, F.A.C., of any petroleum storage tank system that exists at the site and is likely to be the source of the contamination;
- (b) To establish the horizontal extent and thickness of free product. If the soil concentration of a petroleum products' contaminant of concern is above its soil saturation concentration (Csat), free product may be present [refer to the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for a discussion of Csat methodologyl;
 - (c) through (h) No change.
- (i) To describe geologic and hydrogeologic characteristics of the site that influence migration and transport of petroleum products' contaminants ehemicals of concern, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C.;
- (j) To determine the rate and direction of groundwater flow (at all affected depths, as appropriate), to determine the extent of water table fluctuation, to evaluate the potential effect of seasonal variations on the rate and direction of groundwater flow, and to determine whether there are any tidal effects in sites located near marine surface water, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C.;
- (k) To determine other mechanisms of transport of petroleum products' <u>contaminants</u> <u>chemicals</u> of concern in the immediate vicinity of the site, including rate and direction of movement of petroleum products' <u>contaminants</u> <u>chemicals</u> of concern in sewer lines, subsurface utility conduits or vaults, soil and surface water, as applicable, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C.;
- (l) To determine by means of a well survey whether any municipal or public water supply wells are present within a 1/2 mile radius of the site, whether or the site is located within the regulated wellhead protection zone of a municipal wellfield or public water supply well, and whether any private water supply wells (including potable, irrigation and industrial) water supply wells are present within a 1/4 mile radius of the site, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C.;
 - (m) No change.
- (n) If non-petroleum products' <u>contaminants</u> ehemicals of concern are detected during the assessment, to identify the general location of the source in relation to the site and to evaluate whether the non-petroleum products' <u>contaminants</u> ehemicals of concern may have an effect on future rehabilitation activities of the petroleum contamination;

- (o) To report any off-site activities (for example, dewatering, active remediation, or flood control pumping) in the immediate vicinity of the site that may have an effect on the groundwater flow at the site (for example, dewatering, active remediation, or flood control pumping), unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C.;
 - (p) through (q) No change.
- (r) To Unless No Further Action is deemed appropriate under the provisions of Rule 62-770.680, F.A.C., to facilitate the selection of the most cost-effective remediation strategy for the site that is protective of human health and the environment, unless No Further Action is deemed appropriate under the provisions of Rule 62-770.680, F.A.C.
- (3) The site assessment shall include tasks that are necessary to achieve objectives described in Rules 62-770.600(2)(a)-(r), F.A.C., and may include the following:
 - (a) through (b) No change.
- (c) Sampling of undisturbed soil above and below the water table using hand-augering, drilling or direct push technology to obtain information on site stratigraphy and on product entrapped below the water table, to determine for geotechnical parameters determination and to for assessing the appropriateness of monitoring natural attenuation;
 - (d) No change.
- (e) Use of field soil screening techniques that must be demonstrated to be appropriate for the site conditions, to determine the optimal locations for collection of samples for laboratory analyses. The laboratory analyses specified in Table <u>B</u> I shall be performed to confirm the screening results. These analyses shall be performed on a minimum of three grab samples with high, medium and low screening results for the site. These analyses shall be performed per source area and per sampling event, except that only one representative sample shall be sufficient if the field screening results indicate that contaminated soil is not present. The actual number of laboratory samples shall be based on the horizontal and vertical extent of contamination and the degree of correlation between field soil screening and laboratory results;
- (f) Use of visual observations to determine whether soil contaminated or saturated with used oil is present. If the presence of soil contaminated or saturated with used oil is identified, at least one sample from the most visibly stained area shall be collected for analyses for the used oil parameters as listed in Table C H. If soil visually stained or saturated with used oil is excavated in accordance with 62-770.300(2)(a), F.A.C., at least one sample from the bottom of the excavation, if the water table was not reached, and at least one sample from the wall of the excavation at an equivalent depth of the soil visually stained or saturated with used oil that was removed, shall be collected for analyses for contaminants ehemicals of concern detected in the sample collected in the most visibly stained area or during pre-burn analyses, to confirm that all contaminated soil was removed;

- (g) No change.
- (h) Use of monitoring wells, piezometers or other sampling and measurement techniques to obtain a three-dimensional evaluation of the source of contamination, of the migration of petroleum products' contaminants ehemicals of concern below the water table, of groundwater flow and of relevant hydrologic parameters;
 - (i) through (j) No change.
- (k) Use of field screening techniques (for example, use of temporary wells, piezometers or direct push technology to obtain groundwater samples for on-site analyses using gas chromatography), to optimize monitoring well placement;
 - (1) No change.
- 1. drill cuttings and drilling mud generated during monitoring well installation shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated or less contaminated areas; and
- 2. development water and purge water shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated or less contaminated areas:
 - (m) through (n) No change.
- (o) If the possibility exists that the contamination may have impacted public or private water supply wells, sampling of the well or wells for the appropriate laboratory analyses, with the consent of the owner(s), to determine whether any contamination is present;
- (p) Performance of slug tests or a pumping test, if appropriate, on different strata of the surficial aquifer or of different aquifers, if applicable, using water-table monitoring wells, intermediate depth monitoring wells and vertical extent monitoring wells, or a pump test, if appropriate. Performance of a pumping pump test may be deferred until the Remedial Action Plan phase if groundwater extraction is proposed in accordance with the provisions of Rule 62-770.700, F.A.C. If a pumping test is performed within the plume, at least one sample of the groundwater withdrawn during the test shall be collected at the end of the pumping test and analyzed for the appropriate petroleum products' contaminants of concern and physical properties (for example, Hardness, Iron, Total Dissolved Solids and Total Suspended Solids) that may affect the treatment system and disposal options;
- (q) Use of available and appropriate literature in conjunction with site-specific lithologic logs to identify aquifers present beneath the site. An analysis for Total Dissolved Solids shall be used if it is chosen to demonstrate that the natural background quality of the groundwater on-site would allow it to be classified as an area of G-III groundwater;
- (r) Review of historical land use records and existing aerial photographs;
- (s) Sampling of soil for USEPA Test Method 1312, Synthetic Precipitation Leaching Procedure (SPLP) analyses, or for USEPA Test Method 1311, Toxicity Characteristic

Leaching Procedure (TCLP) analyses if the (except for contamination is derived from used oil or similar petroleum products or if the information available indicates that the soil has the potential to be a hazardous waste.) or for the analyses of the physical parameters listed in Chapter 62-777, F.A.C., Table III, (see Tables I, II or III, as appropriate) required to support a recommendation for performing a risk assessment; and

(t) No change.

- (4) The analyses for petroleum products' <u>contaminants</u> ehemicals of concern in surface water, groundwater, soil and sediment samples, as applicable, shall be performed using the analytical procedures listed in Tables <u>B, C and D</u> I, II and III. The type of petroleum or petroleum products causing the contamination will determine which table is appropriate. Equivalent methods may be used if approved through protocols described in Rules 62-160.400(6), (7) and (8), F.A.C.
- (a) If petroleum product discharges are from the Gasoline or Kerosene Analytical Groups, analyses shall be performed as described in Table \underline{B} \underline{I} , except that:
- 1. if the site is anticipated to meet the No Further Action criteria in Rule 62-770.680, F.A.C., and the site is contaminated by products solely from the Gasoline Analytical Group, analytical screening of the monitoring wells for Benzene, Ethylbenzene, Toluene, total Xylenes, MTBE and Polycyclic Aromatic Hydrocarbons (PAHs) (using applicable methods in Table \underline{B} H) may be performed; or
- 2. if the site is anticipated to meet the No Further Action criteria in Rule 62-770.680, F.A.C., and the site is contaminated by products from the Kerosene Analytical Group, analytical screening of the monitoring wells for Benzene, Ethylbenzene, Toluene, total Xylenes, MTBE, PAHs and Total Recoverable Petroleum Hydrocarbons (TRPHs) (using applicable methods in Table B I) may be performed.
- (b) If petroleum product discharges are from used oil, from an identified product not listed in the Gasoline or Kerosene Analytical Groups, or $\frac{1}{8}$ from a product for which the specific identity is unknown, analyses shall be performed as described in Table $\frac{1}{8}$ H.
- (c) If the contamination is derived from petroleum as defined in Section 376.301, F.S., analyses shall be performed as described in Table \underline{D} HH.
- (5) If initial testing of representative monitoring well(s), performed pursuant to Rule 62-770.600(4), F.A.C., does not indicate the presence of any petroleum products' contaminants chemicals of concern within a specific analytical procedure, or indicates that the presence of a contaminant chemical of concern is due to a background concentration, subsequent testing at the site need not include that analytical procedure.
- (6) Within 270 days of discovery of contamination, two copies of a Site Assessment Report (that may reference previously submitted documents) shall be submitted by the responsible party to the Department or to the local program for

review. Applicable portions of the Site Assessment Report shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S.

(7) No change.

- (a) Summarize all tasks that were implemented pursuant to Rules 62-770.600(2) and (3), F.A.C., and summarize the results obtained. All maps shall be in black and white, except the topographic map required by Rule 62-770.600(7)(a)2., F.A.C. (if a color map is submitted, a duplicate black and white map is required), and all site maps shall indicate the North direction, be drawn to scale and include a graphical representation of the scale used. The following shall be included when applicable:
 - 1. through 2. No change.
- 3. a vicinity map showing pertinent features, particularly any potential sources of petroleum or petroleum products contamination (such as former or current gas stations), and non-petroleum product sources (such as former or current dry cleaners) if non-petroleum products' contaminants ehemicals of concern were detected during the assessment. The FDEP facility identification numbers shall be provided if available. If the subject site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C., a vicinity map is not required;
 - 4. through 8. No change.
- 9. site maps illustrating the water-level elevations calculated at each monitoring well or piezometer, and depicting the estimated elevation contours and an interpretation of groundwater flow direction. If different strata of the <u>same</u> aquifer(s), or if different aquifers, are affected, separate figures must be submitted for each date on which measurements were recorded, depicting flow in each stratum or aquifer; if the site's groundwater is tidally-influenced, separate figures must be submitted depicting flow at high and low tide;
 - 10. through 11. No change.
- 12. the results from slug tests performed on a minimum of three monitoring wells or from a <u>pumping pump</u> test, performed to determine aquifer properties, including <u>a description of methods used, assumptions made,</u> field data and calculations, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C., or the Natural Attenuation criteria in Rule<u>s</u> 62-770.690(1)(a)-(<u>f</u>)(e), F.A.C. If a pump test is performed within the plume, at least one sample of the groundwater withdrawn during the test shall be collected and analyzed for the appropriate parameters, including aquifer characterization of parameters that may affect the treatment system (for example, Hardness, Iron, Total Dissolved Solids and Total Suspended Solids);
- 13. the result of a calculation of horizontal groundwater flow velocity (v) for the site, using the formula v=KI/n, where K is the average hydraulic conductivity, I is the average horizontal hydraulic gradient, and n is the estimated effective

soil porosity, unless the site meets the No Further Action criteria in Rule 62-770.680(1), F.A.C., or the Natural Attenuation criteria in Rules 62-770.690(1)(a)-(f)(e), F.A.C.;

- 14. No change.
- 15. a description of the site-specific stratigraphy, based on the <u>lithologic</u> boring logs prepared during monitoring well installation and during drilling of standard penetration test borings (including composition, thickness and continuity of various lithologic units);
- 16. at least one cross-section illustrating the site-specific stratigraphy and approximate concentrations of applicable petroleum products' contaminants ehemicals of concern;
 - 17. No change.
- 18. a table summarizing the field soil screening results obtained at each sampling location and depth, and listing the date(s) the work was performed, as well as a summary of the results of any laboratory analyses performed and a listing of the date(s) the work was performed;
 - 19. No change.
- 20. piezometer, monitoring well and recovery well construction details and construction diagrams, including methods and materials (information may be summarized in the form of schematic diagrams), field sampling data sheets, lithologic boring logs and volumes of groundwater removed during well development;
 - 21. through 24. No change.
- 25. at least one table summarizing the groundwater and surface water analytical results (with the most recent sampling of representative monitoring wells having occurred within 270 days of Site Assessment Report submittal), detection limits used, and analyses performed (listing all contaminants ehemicals of concern detected and their corresponding cleanup target levels); and
- 26. one or more site maps showing any areas excavated, and all groundwater and surface water sampling locations, and illustrating the degree and extent of groundwater and surface water contamination (separate maps for Benzene, for Total Volatile Aromatics, for all other Organic and significant/widespread petroleum products' contaminants chemicals of concern).
- (b) Summarize conclusions regarding site assessment objectives outlined in Rules 62-770.600(2)(a)-(r), F.A.C., and include one of the following:
- 1. a No Further Action Proposal without conditions shall be included if the site meets the applicable No Further Action criteria in Rule 62-770.680(1), F.A.C., or and a No Further Action Proposal with conditions such as institutional and engineering controls may be included if the site meets the applicable No Further Action criteria in Rule 62-770.680(2), F.A.C.;
- 2. a Monitoring Only Proposal for Natural Attenuation Monitoring Plan may shall be included if the site meets the Natural Attenuation criteria in Rule 62-770.690, F.A.C.;

- 3. No change.
- 4. a recommendation to prepare a Remedial Action Plan pursuant to Rule 62-770.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-770.680(1), F.A.C., unless a proposal for a No Further Action with conditions such as institutional and engineering controls pursuant to Rule 62-770.680(2), F.A.C., or a the Natural Attenuation Monitoring Plan pursuant to eriteria in Rule 62-770.690, F.A.C., or unless a recommendation to prepare a risk assessment pursuant to Rule 62-770.650, F.A.C., or a proposal for a No Further Action with conditions pursuant to Rule 62-770.680(2), F.A.C., is included.
 - (8) No change.
- (a) Provide the responsible party with written approval of Approve the Site Assessment Report and the proposal or recommendation submitted pursuant to Rule 62-770.600(7)(b), F.A.C.:, or
 - (b) Notify the responsible party in writing, stating:
- 1. the reason(s) why that the Site Assessment Report does not contain information adequate to support the conclusions regarding the site assessment objectives outlined in Rules 62-770.600(2)(a)-(r), F.A.C.; or
- 2. the reason(s) why that the information provided in the proposal or recommendation submitted pursuant to Rule 62-770.600(7)(b), F.A.C., is not supported by the applicable criteria.
 - (c) No change.

Specific Authority 376.303, 376.3071, 403.0877 FS. Law Implemented 376.3071, 403.0877 FS. History-New 11-1-87, Amended 2-4-88, Formerly 17-70.008, Amended 2-21-90, Formerly 17-770.600, Amended 9-3-96,

62-770.610 Fate and Transport Model Requirements.

(1) A model used to support an evaluation in accordance with the provisions of Rules 62-770.650, 62-770.680 or 62-770.690, F.A.C., must be a fate and transport model with the ability to adequately simulate movement and degradation of petroleum products' contaminants of concern in the aquifer over time and distance, taking into account attenuation mechanisms including biological, physical, and chemical processes. The model must be appropriate for site conditions and selected from the ASTM RBCA Fate and Transport Modeling Guidance, or from the list of approved models maintained by the Department, a copy of which is available upon request. Models not listed in the ASTM RBCA Fate and Transport Modeling Guidance or in the list of approved models maintained by the Department may be submitted to the Department for approval and for inclusion on the list of approved models maintained by the Department. To be considered for approval by the Department, documentation which adequately demonstrates that the above criteria have been met must be submitted to the Bureau of Petroleum Storage Systems. Any such request for Department approval shall set forth at a minimum the following information:

- (a) The model type:
- (b) The name and address of the developer;
- (c) The model description;
- (d) A list of input parameters;
- (e) The applicable boundary conditions and limitations on the appropriate use of the model;
- (f) A description of the methods available for model calibration and examples with empirical evidence of calibration of the model with measured site data;
- (g) Documentation of code testing that has been done (for example, hand calculations to demonstrate the model formulas were programmed without mistakes);
- (h) At least one independent reference knowledgeable with the theory, or experienced in the use, of fate and transport models, which must be a Professional Engineer registered under Chapter 471, F.S., or a Professional Geologist registered under Chapter 492, F.S.; and
- (i) Any approvals or denials of the model received from other states.
- (2) Within 60 days of the receipt of a request for approval of a model, the Department shall issue an Order:
 - (a) Providing the requester with approval of the model; or
- (b) Notifying the requester, stating the reason(s) why the request does not adequately demonstrate that the requirements of Rule 62-770.610(1), F.A.C., have been met.
- (3) The Department's Order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071 FS. History—New

- 62-770.650 Risk Assessment.
- (1) No change.
- (2) The following are potential risk assessment task elements may be performed, as appropriate:
- (a) An exposure assessment that identifies pathways and routes by which <u>human and environmental</u> receptors may be exposed to petroleum products' <u>contaminants</u> <u>ehemicals</u> of concern and determines levels of these to which receptors may be exposed. The exposure assessment <u>shall</u> may:
- 1. identify concentrations of petroleum products' contaminants ehemicals of concern found at the site in all contaminated media Irefer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for guidance on the derivation of alternative cleanup levels for TRPHs based on a sub-classification methodology];
- 2. identify background concentrations of petroleum products' <u>contaminants</u> <u>ehemicals</u> of concern found at the site and in the aquifer as a whole;
- 3. determine soil properties (for example, texture, moisture content, dry bulk density, organic carbon content and infiltration rate) using methods listed in Chapter 62-777,

- <u>F.A.C.</u>, <u>Table III</u> <u>Tables I, II or III</u>, <u>as appropriate</u>, or leaching potential as determined using a test such as USEPA Test Method 1312 (SPLP) in which leachate concentrations are compared with applicable groundwater cleanup target levels;
- 4. identify <u>actual and</u> potential exposure pathways and routes:
- 5. identify actual <u>and</u> or potential <u>human and</u> <u>environmental</u> receptors for each exposure <u>pathway</u>, <u>and any</u> <u>sensitive</u> sub-populations route;
- 6. determine expected concentrations of petroleum products' contaminants ehemicals of concern to which actual and or potential human and environmental receptors may be exposed;
- 7. determine exposure factors (exposure duration and frequency) <u>based on site-specific characteristics, including consideration of</u>. <u>Site-specific factors protective under both current and plausible future land uses</u>. <u>Institutional and engineering controls may be proposed in order to ensure that exposure factors do not change may be used with appropriate documentation and institutional controls in place</u>; and
- 8. identify established health-based values for all petroleum products' contaminants ehemicals of concern found at the site.
- (b) A toxicity assessment that determines human health and environmental criteria for petroleum products' contaminants ehemicals of concern found at the site. The criteria, taking into consideration acute and chronic health effects associated with short-term and long-term exposure, may be developed for applicable exposure pathways and routes identified in the exposure assessment and shall may include:
 - 1. No change.
- 2. non-potable domestic water exposure from dermal contact, inhalation of vapors and mists, ingestion of food crops irrigated with such water, lawn watering, <u>and other related exposures</u>, and exposures to ingestion by pets and livestock from ingestion, and other related exposures;
 - 3. No change.
- 4. non-potable surface water exposure from ingestion, dermal contact, and inhalation of vapors and mists. Adverse effects on freshwater or marine biota (including any bio-accumulative effects in the food chain), and on humans (for example, through incidental ingestion and dermal contact while using the resource for recreational purposes or fish consumption) should be considered.
- (c) A risk characterization that utilizes the results of the exposure assessment and the toxicity assessment to characterize cumulative risks to the affected population(s) and the environment from petroleum products' contaminants ehemicals of concern found at the site, to the affected population(s) and the environment. Based on the concentrations of petroleum products' contaminants ehemicals of concern found at the site, the characterization shall include may consider:

- 1. risks to human health and safety from exposure to the contamination:
- 2. effects on the public welfare from exposure to the contamination: and
- 2.3. risks from the contamination to non-human species and ecosystems; and.
- 3. derivation of alternative cleanup target levels such that: for non-carcinogenic petroleum products' contaminants of concern that affect the same organ(s), the hazard index (sum of the hazard quotients) is 1 or less; and for carcinogens, the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable [refer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for guidance on the derivation of alternative cleanup target levels for TRPHs based on a sub-classification methodology; and to Chapter 62-777, F.A.C., Table III for methods to be used in determining soil properties for the derivation of alternative <u>cleanup target levels based on site-specific soil characteristics].</u> In developing alternative cleanup target levels, when scientific data are available, the potential for additive, synergistic, or antagonistic interactions among petroleum products' contaminants of concern and the potential for exposure to petroleum products' contaminants of concern via multiple pathways shall be considered based on target organ(s) affected, mechanism(s) of toxicity, and empirical observations from clinical and laboratory studies. The default assumptions shall be that non-carcinogenic chemicals affecting the same target organ(s) have additive effects and that carcinogenic risk, regardless of target organ, is additive.
- (d) A justification for alternative cleanup target levels for groundwater or soil. The justification for the alternative cleanup target levels shall be based upon the conditions affecting the site and the degree to which the desired cleanup target levels are achievable and can be cost-effectively implemented within available technologies or engineering and institutional control strategies. In establishing the alternative cleanup target levels for groundwater or soil, the following factors shall be used, as applicable: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard index of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and (for groundwater only) or nuisance, organoleptic, and aesthetic considerations.
 - 1. through 1.b. No change.
 - c. individual site soil characteristics; and
 - d. No change.
- 2. fate and transport models for petroleum products' contaminants ehemicals of concern may be employed, in accordance with Rule 62-770.610, F.A.C., to document that human health and environmental risks from the establishment of alternative cleanup target levels are acceptable. If a fate and transport models for petroleum products' contaminants

- ehemicals of concern is are utilized, the model shall be validated, and adjusted refined accordingly, using empirical data as the data are obtained during subsequent monitoring to validate a No Further Action Proposal or during natural attenuation monitoring or active remediation monitoring.
- (3) The Risk Assessment Report shall contain a description of the task elements undertaken, and summarize the conclusions obtained, and include one of the following:
- (a) A No Further Action Proposal without conditions shall be included if the site meets the applicable No Further Action criteria in Rule 62-770.680(1), F.A.C., or and a No Further Action Proposal with conditions, such as institutional and engineering controls, may be included if the site meets the applicable No Further Action criteria in Rule 62-770.680(2),
- (b) A Monitoring Only Proposal for Natural Attenuation Monitoring Plan may shall be included if the site meets the Natural Attenuation criteria in Rule 62-770.690, F.A.C.: or
- (c) A recommendation to prepare a Remedial Action Plan pursuant to Rule 62-770.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-770.680(1), F.A.C., unless a proposal for a No Further Action with conditions such as institutional and engineering controls pursuant to Rule 62-770.680(2), F.A.C., or a Natural Attenuation Monitoring Plan pursuant to Rule 62-770.690, F.A.C., is included requirements for No Further Action or Natural Attenuation.
 - (4) No change.
- (a) Provide the responsible party with written approval of Approve the Risk Assessment Report and the proposal or recommendation submitted by the responsible party pursuant to Rule 62-770.650(3), F.A.C.; or
 - (b) Notify the responsible party in writing, stating:
- 1. the reason(s) why that the Risk Assessment Report does not contain information adequate to support the proposed alternative cleanup target levels; or
- 2. the reason(s) why that the proposal or recommendation submitted pursuant to Rule 62-770.650(3), F.A.C., is not supported by the applicable criteria.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.3071, 403.021, 403.061, 403.062 FS. History–New Amended

- 62-770.680 No Further Action.
- (1) A No Further Action without conditions or restrictions shall apply if:
 - (a) through (b) No change.
- (c) Contaminated soil is not present in the unsaturated zone, as demonstrated by the analyses of soil samples collected from representative sampling locations that show that concentrations of all of the applicable petroleum products' <u>contaminants</u> chemicals of concern <u>do not exceed</u> are less than:
 - 1. the background concentrations; or

- 2. the lower of the direct exposure residential cleanup target levels I or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV or, if only leachability cleanup target levels are exceeded, then direct leachability testing results may be used to demonstrate that does not result in leachate concentrations do not that exceed the applicable groundwater cleanup target levels. Leachability testing pursuant to USEPA Test Method 1312 (SPLP), or USEPA Test Method 1311 (TCLP) if the (except for contamination is derived from used oil or similar petroleum products.) must be performed on a minimum of three representative grab soil samples from each source area that exceed leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV, with the actual number of samples based on the horizontal and vertical extent of contamination and the site-specific stratigraphy: or
- 3. alternative cleanup target levels for TRPHs established in accordance with Rules 62-770.650(2)(a)1. and 62-770.650(2)(c)3., F.A.C.; or
- <u>4.3.</u> alternative cleanup target levels established using appropriate site-specific soil parameters of the contaminated soil in accordance with Rule 62-770.650(2)(a)3., F.A.C.;
- (d) Concentrations of All the petroleum products' contaminants ehemicals of concern analyzed for in groundwater samples do not exceed are less than the higher of the background concentrations or less than the applicable cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I, groundwater criteria column Table V, except that if the site's groundwater contamination is affecting or may potentially affect a freshwater surface water body based on monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I, freshwater surface water criteria column Table VI shall also apply to groundwater; and
- (e) <u>Concentrations of All the</u> petroleum products' <u>contaminants chemicals</u> of concern <u>analyzed for</u> in surface water samples <u>do not exceed</u> are less than the <u>higher of the</u> background concentrations or less than the applicable cleanup target levels <u>referenced</u> specified in <u>Chapter 62-777</u>, F.A.C., <u>Table I, freshwater surface water criteria column or marine surface water criteria column, as applicable Table VII.</u>
- (2) A No Further Action with conditions or restrictions such as institutional and or engineering controls strategies shall apply if the conditions or restrictions are protective of human health, <u>public</u> safety and the environment in a cost-effective manner and are agreed to by the real property owner(s) of all affected properties. Fate and transport models as defined in Rule 62-770.610, F.A.C., may be utilized to demonstrate that conditions are protective., and the The following conditions must be are met:

- (a) through (b) No change.
- (c) Alternative soil cleanup target levels <u>have been</u> <u>established</u> <u>may be justified</u> by the real property owner(s) by agreeing to:
- 1. the enactment of an institutional control, in which case the concentrations of the petroleum products' contaminants ehemicals of concern must not exceed be less than the lower of background concentrations or less than the direct exposure commercial/industrial H cleanup target levels or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV, as applicable. The soil leachability cleanup target levels may be exceeded if it is ean be demonstrated to the Department, based upon individual site characteristics and the restrictions specified in the institutional control, that petroleum products' contaminants ehemicals of concern will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I Table V. (If soil that exceeds direct exposure <u>residential cleanup</u> target levels I or applicable leachability Table V cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-770.300(2) and (3), F.A.C., shall apply if the contaminated soil is later excavated);
- 2. the enactment of an institutional control, in which case the concentrations of the petroleum products' contaminants ehemicals of concern in soil below two feet below land surface may exceed the direct exposure residential I cleanup target levels but may not exceed the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV. The leachability cleanup target levels may be exceeded if it is ean be demonstrated to the Department, based upon individual site characteristics and the restrictions specified in the institutional control, that petroleum products' contaminants ehemicals of concern will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I Table V. (If soil that exceeds direct exposure residential cleanup target levels I or leachability Table V cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-770.300(2) and (3), F.A.C., shall apply if the contaminated soil is later excavated, or exposed due to a change in site conditions);
- 3. the enactment of an institutional control, in which case the concentrations of the petroleum products' contaminants ehemicals of concern must not exceed be less than the alternative soil cleanup target levels justified pursuant to Rule 62-770.650, F.A.C. If soil that exceeds direct exposure residential cleanup target levels or leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal

criteria in Rules 62-770.300(2) and (3), F.A.C., shall apply if the contaminated soil is later excavated. The enactment of an institutional control is not necessary if the alternative soil cleanup target levels were justified solely using appropriate site-specific soil parameters of the contaminated soil in accordance with Rule 62-770.650(2)(a)3., F.A.C.; or

- 4. the implementation of engineering controls, such as permanent cover material, that prevents human exposure and limits water infiltration, in conjunction with institutional controls. If soil that exceeds direct exposure residential cleanup target levels or leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-770.300(2) and (3), F.A.C., shall apply if the contaminated soil is later excavated, or exposed due to a change in site conditions; and
- (d) Alternative groundwater cleanup target levels have been established may be justified by the real property owner(s) depending on the current or projected use of groundwater and <u>surface water</u> in the vicinity of the site and by agreeing to:
- 1. the enactment of an institutional control to ensure that the contaminated groundwater will not be utilized consumed, in accordance with the following:
- a. for contamination of groundwater of low yield (average hydraulic conductivity of less than one foot per day, determined by performing slug tests on a minimum of three monitoring wells; and a maximum yield of 80 gallons per day, determined by pumping a four inch well screened across the cross-section of the plume, for a minimum of two hours) or with background concentrations that exceed Florida's Primary and Secondary Drinking Water Standards, then the cleanup target levels referenced listed in Chapter 62-777, F.A.C., Table I, groundwater of low yield/poor quality criteria column Table VIII shall apply to groundwater;
- b. for groundwater contamination that is affecting or may potentially affect a marine surface water body with no other property or properties located between the source property boundary and the marine surface water body, then the applicable cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I, marine surface water criteria column Table VII shall apply to groundwater;
- c. for groundwater contamination that is limited to the immediate vicinity of the source area and the area of groundwater contamination is less than 1/4 acre, where it has been demonstrated by a minimum of one year of groundwater monitoring that the groundwater contamination is not migrating away from such localized source area, then the alternative cleanup target levels shall be established through a scientific evaluation. The scientific evaluation (historical data or modeling results, as applicable; the model used must be appropriate for the site conditions and selected from a list maintained by the Department) must demonstrate that the concentrations of petroleum products' contaminants ehemicals

- of concern in groundwater at the property boundary of the real property on which the petroleum contamination originates shall not exceed the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I Tables V, VI or VIII; or
- d. if alternative cleanup target levels have been justified pursuant to Rule 62-770.650, F.A.C., the concentrations of petroleum products' contaminants ehemicals of concern do not exceed those alternative cleanup target levels; or
- 2. the implementation of engineering controls, such as a permanent containment (for example, a slurry wall), that prevents migration of the plume, in conjunction with institutional controls.
- (3) Unless the No Further Action Proposal is included in a Site Assessment Report pursuant to Rule 62-770.600(7)(b)1., F.A.C., two copies of the No Further Action Proposal shall be submitted by the responsible party to the Department or to the local program for review when the criteria for No Further Action have been met. If applicable, documentation of the agreement with the real property owner(s) for a No Further Action with conditions or restrictions shall be attached. Applicable portions of the No Further Action Proposal shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S.
- (4) Within 60 days of receipt of a No Further Action Proposal or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program shall:
- (a) Provide the responsible party with a Site Rehabilitation Completion Order approving approve the No Further Action Proposal; or
- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the No Further Action Proposal does not contain information adequate to support the conclusion that the applicable No Further Action criteria in Rule 62-770.680, F.A.C., have been met.
- (5) The If the No Further Action Proposal meets the eriteria in Rule 62-770.680, F.A.C., then a Site Rehabilitation Completion Order shall be issued. This Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.303, 376.3071, 403.061, 403.0877 FS. Law Implemented 376.3071, 403.0877 FS. History-New

62-770.690 Natural Attenuation.

(1) Depending on the <u>individual site characteristics</u> eurrent or projected use of groundwater in the vicinity of the site, monitoring of natural attenuation is an appropriate strategy for site rehabilitation, provided human health, public safety and the environment are protected. The individual site characteristics may include the current and projected use of the affected groundwater and surface water in the vicinity of the

site, the current and projected land use of the area affected by the contamination, the exposed population, the location of the plume, the degree and extent of contamination, the rate of migration of the plume, the apparent or potential rate of degradation of petroleum products' contaminants of concern through natural attenuation, and the potential for further migration in relation to the site's property boundary. Fate and transport models as defined in Rule 62-770.610, F.A.C., may be utilized to support the appropriateness of natural attenuation monitoring. Monitoring of natural Natural attenuation is appropriate if the following criteria are met:

- (a) No change.
- (b) Contaminated soil is not present, except that applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II Table IV may be exceeded if it is demonstrated to the Department or to the local program that the soil does not constitute a continuing source of contamination to the groundwater at concentrations that pose a threat to human health, public safety or the environment, and it is demonstrated that the rate of natural attenuation of contaminants of concern in the groundwater exceeds the rate at which contaminants of concern are leaching from the soil, and that the presence of contaminated soil will not to the extent that it may result in increased cleanup cost. The determination shall be based upon individual site characteristics and, as demonstrated by USEPA Test Method 1312 (SPLP), or USEPA Test Method 1311 (TCLP) if the (except for contamination is derived from used oil or similar petroleum products), and based upon groundwater modeling, site stratigraphy or site assessment results;
- (c) Petroleum products' contaminants ehemicals of concern present in the groundwater above background concentrations or applicable cleanup target levels are not migrating beyond the temporary point of compliance, or migrating vertically that may contaminate other aquifers or surface water resources or result in increased cleanup cost;
- (d) The physical, chemical and biological characteristics of each petroleum products' contaminant of concern are conducive to natural attenuation;

(e)(d) No change.

(f)(e) The site is anticipated to meet achieve the applicable No Further Action criteria in Rule 62-770.680, F.A.C., as a result of natural attenuation in five years or less, the background concentrations or the applicable cleanup target levels are not exceeded at the temporary point of compliance as established pursuant to Rules 62-770.690(2) or (3), F.A.C., and the concentrations of petroleum products' contaminants ehemicals of concern do not exceed the criteria specified listed in Chapter 62-777, F.A.C., Table V Table IX; or

(g)(f) If the criteria in Rule 62-770.690(1)(f)(e), F.A.C., are not met, the cost-effectiveness of natural attenuation monitoring may be demonstrated, based on:

- 1. a technical evaluation of groundwater and soil characteristics, chemistry, and biological activity that verifies that the petroleum products' contaminants of concern have the capacity to degrade under the site-specific conditions;
- 2. a scientific evaluation (historical data or modeling results, as appropriate; the model used must be demonstrated to be appropriate for the site conditions and selected from a list maintained by the Department) of the plume migration in relation to the temporary point of compliance as established pursuant to Rules 62-770.690(2) or (3), F.A.C., an estimation of annual milestone reductions of concentrations of petroleum products' contaminants of concern in monitoring wells, and an estimation of the time required to achieve the applicable No Further Action criteria in Rule 62-770.680, F.A.C. Available technical information (including historical water quality data) shall be used for model calibration; and
 - 3. a <u>life-cycle</u> cost analysis of remedial alternatives.
- (2) Provided human health, public safety and the environment are protected, the point of compliance may be temporarily moved to the property boundary, to the edge of the plume when the plume is within the property boundary, or beyond the property boundary if such extension is needed to facilitate monitoring of natural attenuation or to address the current conditions of the plume. The responsible party shall identify to the Department the owners of any property into which the point of compliance is allowed to temporarily extend and any county or municipality having jurisdiction over the area. Prior to extending the point of compliance beyond the property boundary, notice shall be provided to the identified local governments and to the real property owners of any property into which the point of compliance is allowed to extend. Such notice shall be in the format specified in Rule 62-103.150(3), F.A.C. The location of the temporary point of compliance shall be based on the individual site characteristics listed in Rule 62-770.690(1), F.A.C.:
- a. the current and projected use of the affected groundwater in the vicinity of the site;
- b. the current and projected land use of the area affected by the contamination;
 - e. the exposed population;
 - d. the location of the plume;
 - e. the degree and extent of contamination;
 - f. the rate of migration of the plume;
- g. the apparent or potential rate of degradation of petroleum products' chemicals of concern through natural attenuation: and
- h. the potential for further migration in relation to the site's property boundary.
- (3) Where surface water is or may be exposed to groundwater contaminated with petroleum products' contaminants ehemicals of concern (based on monitoring well data, groundwater flow rate and direction, or fate and transport

modeling), the point of measuring compliance with the surface water standards shall be in the groundwater from the landward side immediately adjacent to the surface water body.

- (4) Unless the Monitoring Only Proposal for Natural Attenuation Monitoring Plan is included in a Site Assessment Report pursuant to Rule 62-770.600(7)(b)2., F.A.C., two copies of the Monitoring Only Proposal for Natural Attenuation Monitoring Plan shall be submitted by the responsible party to the Department or to the local program for review when the criteria for Natural Attenuation have been met. Applicable portions of the Natural Attenuation Monitoring Plan Only Proposal shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S.
- (5) Within 60 days of receipt of a Monitoring Only Proposal for Natural Attenuation Monitoring Plan or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program shall:
- (a) Provide the responsible party with written approval of approve the Natural Attenuation Monitoring Plan Only Proposal: or
- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the Natural Attenuation Monitoring Plan Only Proposal does not contain information adequate to support the conclusion that the applicable Natural Attenuation criteria in Rule 62-770.690, F.A.C., have been met.
- (6) If the Monitoring Only Proposal for Natural Attenuation meets the criteria in Rule 62-770.690(1), F.A.C., then a Monitoring Only Plan approval shall be issued. The objective of the monitoring program shall be to meet achieve the applicable No Further Action criteria in Rule 62-770.680, F.A.C.
- (7) The monitoring program shall be performed as specified in the Natural Attenuation Monitoring Only Plan approval, as follows:
 - (a) A minimum of two monitoring wells are is required:
- 1. at least one well shall be located at the downgradient edge of the plume downgradient from the area(s) of maximum concentrations of petroleum products' chemicals of concern; and
- 2. at least one well shall be located in the area(s) of maximum concentrations of petroleum products' contaminants ehemicals of concern or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure);
- (b) The monitoring period shall be a minimum of one year, unless two consecutive quarterly sampling events have indicated that applicable cleanup target levels have been met, in which case the requirements of paragraph (8) shall apply;

- (c) The designated monitoring wells shall be sampled for analyses of applicable petroleum products' contaminants ehemicals of concern at a frequency specified in the Natural Attenuation Monitoring Only Plan approval;
- (d) Water-level measurements in all designated wells shall be made immediately prior to each sampling event;
- (e) The analytical results (laboratory report), chain of custody record form [Form 62-770.900(2)], table summarizing the analytical results, site map(s) illustrating the analytical results, and the water-level elevation information (summary table and flow map), shall be reported by the responsible party to the Department or to the local program in a Natural Attenuation Monitoring Report within 60 days of sample collection;
- (f) If analyses of groundwater samples indicate that concentrations of applicable petroleum products' contaminants ehemicals of concern exceed any action levels specified in the Natural Attenuation Monitoring Only Plan approval, the well or wells shall be resampled no later than 30 days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the responsible party to the Department or to the local program to:
 - 1. through 3. No change.
- (g) The annual milestone reductions of concentrations of petroleum products' contaminants ehemicals of concern in monitoring wells, that shall be used to verify annual progress of site rehabilitation eleanup by natural attenuation, shall be achieved during the monitoring program. If the annual rate of expected cleanup progress is not achieved, then the Natural Attenuation Monitoring Report monitoring report described in Rule 62-770.690(7)(e), F.A.C., shall include a proposal to:
 - 1. through 3. No change.
- (8) Following completion of natural attenuation monitoring, two copies of a Site Rehabilitation Completion Report shall be submitted by the responsible party to the Department or to the local program for review when the criteria for No Further Action pursuant to Rule 62-770.680, F.A.C., have been met. Applicable portions of the Site Rehabilitation Completion Report shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S. The Site Rehabilitation Completion Report shall contain documentation adequate to support supporting the opinion that site cleanup objectives have been achieved.
- (9) Within 60 days of receipt of the Site Rehabilitation Completion Report or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program shall:
- (a) Provide the responsible party with a Site Rehabilitation Completion Order approving approve the Site Rehabilitation Completion Report: or

- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the Site Rehabilitation Completion Report does not contain information adequate to support the opinion that cleanup objectives have been achieved.
- (10) The Upon approval of the Site Rehabilitation Completion Report, the Department shall issue a Site Rehabilitation Completion Order. This Order shall constitute final agency action regarding cleanup activities at the site.

 Specific
 Authority
 376.303,
 376.3071,
 403.061,
 403.0877
 FS. Law

 Implemented
 376.3071,
 403.0877
 FS. History–New
 9-23-97,

 Amended
 ...
 ...
 ...

62-770.700 Active Remediation.

- (1) Within 90 days of approval of a Site Assessment Report (unless a No Further Action Proposal, a Monitoring Only Proposal for Natural Attenuation Monitoring Plan or a recommendation to prepare a risk assessment was approved), two copies of a Remedial Action Plan shall be submitted by the responsible party to the Department or to the local program for review. Applicable portions of the Remedial Action Plan shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S. The objective of the active remediation shall be to meet achieve the applicable No Further Action criteria in Rule 62-770.680, F.A.C., or the Natural Attenuation criteria in Rule 62-770.690, F.A.C. The Remedial Action Plan must provide a design that addresses cleanup of all soil, sediment, groundwater or surface water found to be contaminated. If one or more of the contaminated media is not addressed, a recommendation and justification for that decision must be included.
 - (2) through (3)(a) No change.
- (b) Summarize the Site Assessment Report conclusions and any additional data obtained <u>subsequent to Site</u> Assessment Report approval <u>since that time</u>;
- (c) If groundwater contamination is present, include results from a round of groundwater sampling and analyses from a number of monitoring wells adequate to determine the highest concentrations of petroleum products' contaminants chemicals of concern, to verify the horizontal and vertical extent perimeter of the plume and to provide design data for the Remedial Action Plan. The sampling and analyses shall be performed after approval of the Site Assessment Report, unless the most recent groundwater analytical results submitted in the complete Site Assessment Report are from a round of groundwater sampling and analyses performed less than 270 days before submittal of the Remedial Action Plan. If the results from the confirmatory round of sampling contradict earlier results, then supplemental site assessment shall be required;
 - (d) through (e)2. No change.
- a. long-term and short-term <u>human health and</u> environmental impacts;

- b. through (g)1. No change.
- 2. the expected concentrations of petroleum products' contaminants ehemicals of concern in the effluent;
- 3. the method of air emissions treatment and the expected quantities in pounds per day of any petroleum products' contaminants ehemicals of concern discharged into air as a result of all on-site active remediation systems. A separate air permit will not be required if the mass of total petroleum hydrocarbons in the air emissions from all on-site remediation equipment system(s) does not exceed 13.7 pounds per day. For on-site remediation equipment system(s) located at a facility that is a Title V source pursuant to Chapter 62-213, F.A.C., a separate permit under that chapter may be required; and
 - 4. No change.
- (h) If groundwater contamination is present, include a list of petroleum products' contaminants ehemicals of concern to be monitored in the recovery well(s) and in the effluent from the treatment system (based on the type of treatment employed and disposition of the effluent) or other chemical indicators to aid in the evaluation of the appropriateness of natural attenuation monitoring pursuant to Rule 62-770.690(1)(g)(f)1., F.A.C., or an in situ method of site rehabilitation. Contaminants After three consecutive quarters in which monitoring data indicate that any chemical(s) of concern that do not exceed is less than the background concentrations or the applicable cleanup target levels in samples from the recovery wells or monitoring wells for three consecutive quarters, such ehemical(s) of concern may be excluded from subsequent monitoring events;
- (i) If groundwater contamination is present, include the designation of a number of monitoring wells and a proposal for their sampling frequency adequate to monitor the cleanup progress during active remediation, and the description of the methodology proposed to evaluate the effectiveness and efficiency of the remediation system. The designated wells shall include at least one well located at the a downgradient edge of the plume well and one a well in the area(s) of maximum concentrations of petroleum products' contaminants of concern highest groundwater contamination or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure). Consideration shall be given to the expected duration of cleanup when specifying monitoring frequency. For cleanups expected to last greater than two years, wells shall be sampled quarterly for the first year and semiannually thereafter. For cleanups expected to last less than two years, wells shall be sampled quarterly. A representative number of previously contaminated monitoring wells shall be sampled once a year, and the samples analyzed for the applicable petroleum products' contaminants ehemicals of concern, in order to redefine the plume and fully evaluate the effectiveness and efficiency of the remedial system. The selection of the representative monitoring wells shall be included in the Remedial Action Plan; and

- (j) Provide the details of any proposed treatment or disposition of contaminated soil or sediment. If contaminated soil exists at the site and active remediation does not include treatment or removal of such soil, the basis for the decision to forego treatment or removal shall be provided and the Remedial Action Plan shall may include a proposal to implement the enactment of an engineering or institutional control, or both an institutional and when an engineering control, pursuant to Rule 62-770.680(2), F.A.C. is included.
- (4) The remedial action plan summary form [(Form 62-770.900(4)], shall be completed and submitted as part of the Remedial Action Plan. The information provided in the remedial action plan summary form shall be resubmitted to be consistent eoincide with the final approved Remedial Action Plan and any subsequent modifications to the approved Remedial Action Plan.
- (5) Other requirements to be included in the Remedial Action Plan, if applicable, include the following:
- (a) Vacuum extraction systems shall be equipped with a means of air emissions treatment for at least the first 30 days of system operation. Air emissions treatment may be discontinued after the first 30 days of system operation if the mass of total petroleum hydrocarbons volatile organic compounds in the emissions from all on-site the remediation equipment does not exceed on site is less than 13.7 pounds per day;
- (b) Bioventing systems shall be equipped with a means of air emissions treatment unless the Remedial Action Plan design is based on respiration rates and optimum optimal air flow that result in soil remediation primarily by bioremediation with minimal volatilization of hydrocarbons. This objective shall be confirmed by a pilot study or by emissions sampling during startup;
- (c) In situ air sparging systems shall be designed and operated in conjunction with air emissions treatment system(s) unless the Remedial Action Plan design is based on sparging rates and optimum air flow with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup, where applicable. If a vacuum extraction system is used, the vacuum extraction system shall operate at an air flow rate at least 50% greater than the sparging air flow rate, and the vacuum extraction system shall be provided with air emissions control as described in Rule 62-770.700(5)(a), F.A.C.;
- (d) Biosparging systems shall be equipped with a means of air emissions control unless the Remedial Action Plan design is based on the optimum air sparging rates that promote biological activity with minimal minimum volatilization of hydrocarbons. This objective shall be confirmed by a pilot study or by emissions sampling during startup;
- (e) Multi-phase extraction systems shall be equipped with a means of air emissions treatment during system operation. Air emissions system operation may be discontinued if the mass of total petroleum hydrocarbons volatile organie

- eompounds in the emissions from all on-site the remediation equipment does not exceed on site is less than 13.7 pounds per
 - (f) through (g) No change.
- (6) The most cost-effective and appropriate strategy for some sites may be active remediation followed by the monitoring of natural attenuation. The active remediation may consist solely of soil remediation, short-term or intermittent groundwater remediation, or other remedial enhancements, or combinations of these. The discontinuation of active remediation may be appropriate at any time depending on the site-specific characteristics and conditions. The Remedial Action Plan shall include a discussion of when the active remediation will be discontinued. When the natural attenuation criteria in Rule 62-770.690, F.A.C., have been met achieved, natural attenuation monitoring shall be performed pursuant to Rule 62-770.690(7), F.A.C.
- (7) The Remedial Action Plan may propose the use of new and innovative technologies or strategies that meet the criteria in Rule 62-770.700, F.A.C., and that are cost-effective in meeting the No Further Action criteria in Rule 62-770.680, F.A.C., or the Natural Attenuation criteria in Rule 62-770.690, F.A.C. These technologies or strategies may include low-cost enhancements to natural attenuation.
- (8) Within 60 days of receipt of a Remedial Action Plan or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program shall:
- (a) Provide the responsible party with written approval of approve the Remedial Action Plan; or
- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the Remedial Action Plan does not contain information adequate to support the conclusions that the active remediation will be cost-effective and will comply with all applicable requirements in Rule 62-770.700, F.A.C.
- (9) Active remediation activities shall not be implemented until the Remedial Action Plan is approved. The approval of the Remedial Action Plan shall constitute all necessary Departmental approvals, except that separate permits such as underground injection of treated water, National Pollutant Discharge Elimination System or air emissions are required if not included in the Remedial Action Plan approval.

(10)(9) No change.

- (a) Water-level data collected each time monitoring wells and recovery wells are sampled. If operational parameters remain unchanged, the responsible party may propose, pursuant to Rule 62-770.700(12)(11), F.A.C., that the requirement be modified or discontinued;
 - (b) through (c) No change.
- (d) Concentrations of applicable petroleum products' contaminants ehemicals of concern based on analyses performed on the effluent from the treatment system, daily for

the first three days with a 24 hour turnaround on analytical results, monthly for the next two months, and quarterly thereafter;

- (e) Concentrations of applicable petroleum products' contaminants ehemicals of concern based upon analyses performed on the untreated groundwater from the individual recovery well(s) as proposed in the approved Remedial Action Plan, daily for the first three days, monthly for the next two months, first six months and quarterly thereafter;
 - (f) through (h) No change.
- (i) Concentrations of recovered vapors from a vacuum extraction system, and post-treatment air emissions if air emissions treatment is provided, weekly for the first month, monthly for the next two months, and quarterly thereafter (for activated carbon off-gas treatment, additional sampling events may be performed based on the estimated time of breakthrough), unless two consecutive monthly or quarterly sampling events do not show exceedances of applicable air quality standards, as follows:
- 1. concentrations of recovered vapors from individual wells shall be determined using an organic vapor analyzer with a flame ionization detector, or other <u>applicable</u> field detection device, in order to optimize the air flow rate and hydrocarbon recovery;
 - 2. through 6. No change.
- (j) Percentage of system <u>operation time</u> runtime and treatment efficiency for all operating treatment systems; and
- (k) Results of analyses of soil samples taken to verify that the applicable No Further Action criteria in Rule 62-770.680, F.A.C., or the applicable Natural Attenuation criteria in Rule 62-770.690, F.A.C., have been met achieved, based on one of the following:
- 1. when both field screening and laboratory results <u>using</u> the most sensitive method for the constituent(s) being analyzed for vacuum extraction systems indicate no detectable concentrations <u>of contaminants of concern</u> in the recovered vapors;
 - 2. No change.
- 3. if alternative soil cleanup target levels were established pursuant to Rule 62-770.650, F.A.C., when system performance or monitoring <u>using the applicable analytical methods for the appropriate constituents</u> indicates that the alternative soil cleanup target levels have been achieved.

(11)(10) No change.

(12)(11) During implementation of the Remedial Action Plan, status reports of remedial action shall be submitted by the responsible party to the Department or to the local program, annually unless a greater frequency is specified in the approved Remedial Action Plan. The status reports shall be submitted within 60 days after the anniversary date of initiating operation of the active remediation system and shall contain the following information, as applicable:

- (a) A summary of the data requested in Rules 62-770.700(10)(9)(a)-(k), F.A.C.;
- (b) Concentrations of petroleum products' <u>contaminants</u> ehemicals of concern as specified in Rule 62-770.700(16)(15), F.A.C., if applicable;
- (c) A summary of the estimated mass of petroleum hydrocarbons recovered in all phases, including free product, dissolved and vapors, by all <u>on-site</u> remediation equipment on site, and a comparison to the original estimate of mass of petroleum products' <u>contaminants</u> <u>ehemicals</u> of concern on-site;
 - (d) through (f) No change.

(13)(12) If effluent concentrations or air emissions exceeding those in the approved Remedial Action Plan, or excessive plume migration, occurs during remediation system startup or during operation of the treatment system, corrective actions shall be taken and the Department or the local program shall be notified by the responsible party within seven days. If the condition may represent a threat to human health, <u>public</u> safety or the environment, the Department or the local program shall be notified within 24 hours. Details of all such incidents shall be included in the annual status report described in Rule 62-770.700(12)(11), F.A.C.

(14)(13) No change.

- (a) <u>Supplemental</u> <u>Further</u> assessment to determine alternative cleanup target levels pursuant to Rule 62-770.650, F.A.C. During <u>the supplemental</u> <u>such</u> assessment, active remediation shall continue;
- (b) Modifications to existing treatment or recovery system(s) pursuant to Rule 62-770.700(12)(11), F.A.C.; or
- (c) Alternative technologies pursuant to Rule 62-770.700(7), F.A.C.

(15)(14) No change.

(16)(15) No change.

- (a) Contaminated soil has been properly removed and disposed, or treated in situ, so that the applicable soil cleanup target levels are met or addressed by the enactment and implementation of institutional <u>controls</u> or <u>both institutional and</u> engineering controls.
- (b) After a minimum of one year of groundwater treatment, concentrations of petroleum products' contaminants ehemicals of concern in designated monitoring wells and recovery wells have leveled off. This demonstration must be based on subsequent monthly sampling results obtained for a minimum of 180 days, unless an alternative frequency has been approved. "Leveling off" shall mean that the graph of Total Volatile Organic Aromatics versus time generally fits a curve defined by the equation $C=C_f+C_oe^{-kt}$, that the lower limb of the curve is substantially linear, and that the slope of the final portion of the curve approaches zero. If the petroleum contamination does not contain a representative amount of Total Volatile Organic Aromatics, then an alternative

petroleum products' contaminant ehemical of concern shall be designated for application to the curve. Applicable statistical methods shall be applied to demonstrate this conclusion.

- 1. No change.
- a. C: concentration of the applicable petroleum products' contaminant ehemical of concern at time t;
 - b. through d. No change.
- e. k: coefficient representing the exponential factor that indicates how fast the concentration approaches C_f;
 - f. No change.
- 2. the one year minimum treatment period may be shortened if, based on the criteria in Section 376.3071, F.S., it is ean be demonstrated to the Department or to the local program that a shorter time period is appropriate.
 - (c) No change.
- 1. the technical feasibility of other proven groundwater or soil treatment techniques to further reduce the concentrations of applicable petroleum products' contaminants ehemicals of concern at the site;
- 2. the costs and time frames involved to further reduce the concentrations of applicable petroleum products' contaminants ehemicals of concern employing the alternative method(s)
- 3. the effects on the designated or potential use of the water resource if petroleum products' contaminants ehemicals of concern remain at existing concentrations;
- 4. the effect on, and any protection that may be required of, surface water resources;
- 5. the effect on human health, public safety health and the environment if petroleum products' contaminants ehemicals of concern remain at existing concentrations;
 - 6. No change.
- 7. institutional controls or both institutional and engineering controls that may be necessary to ensure protection of the public and the environment from future use of contaminated groundwater.
 - (d) No change.

(17)(16) The results of the demonstration and analyses described in Rules 62-770.700(16)(15)(a), (b) and (c), F.A.C., shall be compiled in a report and submitted by the responsible party to the Department or to the local program for review. The Department or the local program shall determine, using the criteria specified in Rule 62-770.700(16)(15)(c), F.A.C., whether modifications to the Remedial Action Plan are required pursuant to paragraph (14) alternative methods should be employed to effect further treatment; however, if alternative methods are not required, active remediation shall be deemed complete.

(18)(17) A Post Active Remediation Monitoring Plan shall be submitted by the responsible party to the Department or to the local program pursuant to the Post Active Remediation Monitoring described in Rule 62-770.750, F.A.C., when the

No Further Action criteria in Rule 62-770.680, F.A.C., or the leveling off criteria in Rule 62-770.700(16)(15), F.A.C., have been met achieved.

Specific Authority 376.303, 376.3071, 403.0877 FS. Law Implemented 376.3071, 403.0877 FS. History–New 11-1-87, Formerly 17-70.010, Amended 2-4-88, 2-21-90, Formerly 17-770.700, Amended 9-3-96, 9-23-97.

62-770.750 Post Active Remediation Monitoring.

- (1) Groundwater monitoring shall be performed following the completion of active groundwater remediation or soil remediation as described in Rule 62-770.700, F.A.C. When active groundwater remediation has met achieved the No Further Action criteria in Rule 62-770.680, F.A.C., or the leveling off criteria in Rule 62-770.700(16)(15), F.A.C., a Post Active Remediation Monitoring Plan using the provisions of Rule 62-770.750(4)(5), F.A.C., and including analytical results demonstrating this conclusion, shall be submitted by the responsible party to the Department or to the local program for review.
- (2) Applicable portions of the Post Active Remediation Monitoring Plan shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S.
- (3) Within 60 days of receipt of a Post Active Remediation Monitoring Plan or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program
- (a) Provide the responsible party with written approval of approve the Post Active Remediation Monitoring Plan; or
- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the Post Active Remediation Monitoring Plan does not contain information adequate to support the conclusion, pursuant to Rule 62-770.700, F.A.C., that the applicable cleanup target levels shall be achieved at the end of the monitoring period.
- (4) If the Post Active Remediation Monitoring Plan meets the applicable criteria in Rule 62-770.700, F.A.C., then a Post Active Remediation Monitoring Plan approval shall be issued.
 - (4) $\frac{(5)}{(5)}$ No change.
 - (a) A minimum of two monitoring wells are is required:
- 1. at least one well shall be located at the downgradient edge of the plume downgradient from the area(s) of maximum concentrations of petroleum products' chemicals of concern;
- 2. at least one well shall be located in the area(s) of maximum concentrations of petroleum products' contaminants ehemicals of concern or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure);

- (b) The monitoring period shall be a minimum of one year. However, if If no groundwater contamination was only present in the unsaturated zone during the site assessment and active remediation tasks, only one round of groundwater sampling is required;
- (c) The designated monitoring wells shall be sampled quarterly for analyses of applicable petroleum products' contaminants ehemicals of concern that were present prior to the initiation of active remediation specified in the Post Active Remediation Monitoring Plan approval;
- (d) The analytical results (laboratory report), chain of custody record form [Form 62-770.900(2)], table summarizing the analytical results and site map(s) illustrating the analytical results shall be reported by the responsible party to the Department or to the local program in a Post Active Remediation Monitoring Report within 60 days of sample collection; and
- (e) If analyses of groundwater samples indicate that concentrations of applicable petroleum products' contaminants chemicals of concern exceed any action levels specified in the Post Active Remediation Monitoring Plan approval, the well or wells shall be resampled no later than 30 days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the responsible party to the Department or to the local program to:
 - 1. through 3. No change.
- (5)(6) The remediation equipment shall be maintained in an <u>inactive but</u> operational status during the duration of post active remediation monitoring.
- (6)(7) Following completion of monitoring pursuant to Rule 62-770.750, F.A.C., two copies of a Site Rehabilitation Completion Report shall be submitted by the responsible party to the Department or to the local program for review when the criteria for No Further Action pursuant to Rule 62-770.680, F.A.C., have been met. Applicable portions of the Site Rehabilitation Completion Report shall be signed and sealed by an appropriate registered professional pursuant to Rule 62-770.490, F.A.C. a registered Professional Engineer or a registered Professional Geologist authorized by Chapters 471 or 492, F.S. The Site Rehabilitation Completion Report shall contain documentation adequate to support the opinion that site cleanup objectives have been achieved.
- (7)(8) Within 60 days of receipt of a Site Rehabilitation Completion Report or of additional information pursuant to Rule 62-770.800(4), F.A.C., the Department or the local program shall:
- (a) Provide the responsible party with a Site Rehabilitation Completion Order approving approve the Site Rehabilitation Completion Report; or
- (b) Notify notify the responsible party in writing, stating the reasons(s) why that the Site Rehabilitation Completion Report does not contain information adequate to support the

opinion that <u>the</u> cleanup objectives have been achieved. Site rehabilitation activities shall not be deemed complete until such time as a Site Rehabilitation Completion Report is approved.

(8)(9) The Upon approval of the Site Rehabilitation Completion Report, the Department shall issue a Site Rehabilitation Completion Order. This Order shall constitute final agency action regarding cleanup activities at the site.

- 62-770.800 Time Schedules.
- (1) through (4) No change.
- (5) A modification of the time frame may be obtained by the responsible party for any action set forth in this chapter for good cause shown by requesting in writing that the Department or the local program make such a modification. The request shall specify which time frame(s) is to be modified, the amount of additional time required, and provide documentation supporting the request. The request shall be received by the Department or by the local program at least 20 days prior to the time the action is to be initiated. If emergency situations at a site do not allow for a full 20 days notice, the request shall detail such emergency situation. Within 20 days of receipt of a request for modification, the Department or the local program shall notify the responsible party if additional information regarding the request is needed. The Department or the local program shall notify the responsible party in writing within 20 days of receipt of the request or of the additional information as to whether modification of the time frame(s) will be allowed. For purposes of this paragraph, good cause shall mean unanticipated events outside the control of the responsible party.
 - (6) through (7) No change.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071, 376.30711 FS. History–New 11-1-87, Formerly 17-70.013, Amended 2-21-90, Formerly 17-770.800, Amended 9-23-97.______.

62-770.830 Notices.

(1) When requested in writing by the Department or by the local program, written notification shall be provided by the responsible party to the Department or to the local program at least three days prior to performing field activities such as installing monitoring or recovery well(s), performing sampling, installing remediation equipment, or performing soil source removal activities, except as provided in Rule 62-770.300, F.A.C. Personnel from the Department or from the local program shall be allowed the opportunity to observe these field activities and to or take split samples. Raw data shall be exchanged as soon as data are available. If the Department or the local program chooses to be present when the field activities are being performed, it shall be the Department's or

the local program's responsibility to confirm the field activities are being performed in accordance with the written notification.

(2) The Department or the local program shall issue notice of its intent to either approve or reject any plan or report within 30 days of receipt of the complete plan or report, unless otherwise specified in this chapter. The notice shall be in substantially the same form as described in Rule 62-103.150(3) F.A.C.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071 FS. History-New 11-1-87, Formerly 17-70.014, Amended 2-21-90, Formerly 17-770.830, Amended 9-23-97,

- 62-770.890 Alternative Procedures and Requirements.
- (1) through (2)(f) No change.
- (3) Within 60 days of receipt of a request for approval of an alternative procedure, the Department shall issue an Order:
 - (a) Approving approve the request; or
- (b) Notifying notify the responsible party, stating the reasons(s) why in writing that the request does not make an adequate demonstration that the requirements of Rule 62-770.890(2), F.A.C., have been are met.
- (4) The Secretary or the Secretary's designee shall specify by order each alternative procedure or requirement approved for an individual site in accordance with this rule or shall issue an order denying the request for such approval. The Department's Order order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S.
 - (5) No change.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071 FS. History–New 11-1-87, Formerly 17-70.016, Amended 2-21-90, Formerly 17-770.890, Amended 9-23-97.

62-770.900 Forms.

The forms used by the Department or by the local program in the Petroleum Contamination Cleanup Program are adopted and incorporated by reference in this rule. Each form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Bureau of Petroleum Storage Systems, 2600 Blair Stone Road, Tallahassee, FL 32399-2400.

Form 62-770.900(1), Free Product Removal Notification Form for Petroleum or Petroleum Products, (effective September 23, 1997).

- (2) Form 62-770.900(2), Chain of Custody Record Form, (effective September 23, 1997).
- (3) Form 62-770.900(3), Petroleum or Petroleum Products Water Sampling Log Form, (effective September 23, 1997).
- (4) Form 62-770.900(4), Remedial Action Plan Summary Form, (effective September 23, 1997).
- (5) Form 62-770.900(5), Active Remediation Annual Status Report Summary Form, (effective September 23, 1997).

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.3071 FS. History-New 2-21-90, Formerly 17-770.900, Amended 9-23-97.

TABLE A Petroleum Products' Contaminants of Concern

retroleum Floddets Contaminants of Concern
<u>Acenaphthene</u>
<u>Acenaphthylene</u>
<u>Anthracene</u>
<u>Arsenic</u>
Benzene Benzene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
<u>Cadmium</u>
<u>Chloride</u>
<u>Chromium</u>
Chrysene
Dibenz(a,h)anthracene
Dibromoethane, 1,2- (EDB)
Dichloroethane, 1,2-
<u>Ethylbenzene</u>
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Lead
Methyl tert-butyl ether (MTBE)
Methylnaphthalene, 1-
Methylnaphthalene, 2-
Naphthalene Naphthalene
<u>Phenanthrene</u>
Pyrene
Sulfate
Toluene
Total Dissolved Solids (TDS)
TRPHs
Xylenes, total

The following tables have been deleted:

TABLE IV. Selected Soil Cleanup Target Levels.

TABLE V. Groundwater Cleanup Target Levels for Resource Protection/Recovery.

TABLE VI. Lower of Table V and Freshwater Surface Water Criteria.

TABLE VII. Surface Water Criteria for Resource Protection/Recovery.

TABLE VIII. Low Yield/Poor Quality.

TABLE IX. Natural Attenuation Default Source Concentrations.

NAME OF PERSON ORIGINATING PROPOSED RULE: John M. Ruddell

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Kirby B. Green, III

DATE PROPOSED RULE APPROVED: April 2, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: August 28, 1998 and December 11, 1998

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 96-92R **RULE CHAPTER TITLE:** RULE CHAPTER NO.: Soil Thermal Treatment Facilities 62 - 775**RULE TITLES:** RULE NOS.: Intent 62-775.100 **Definitions** 62-775.200 Reference Standards 62-775.210 **General Permits** 62-775.300 Criteria for Clean Soil 62-775.400 Soil Sampling and Analysis 62-775.410 Approval of Alternate Procedures 62-775.500 Security 62-775.600 62-775.610 Ground Water Monitoring Receiving, Handling, and Stockpiling 62-775.620 Notices and Security 62-775.700 Excavating, Handling, and Stockpiling 62-775.710 62-775.900 Forms

PURPOSE, EFFECT AND SUMMARY: The Department is proposing to repeal Chapter 62-775, F.A.C., which regulates facilities which thermally treat petroleum-contaminated soil. In its place, the Department is proposing to create in a separate rulemaking procedure Chapter 62-713, F.A.C., Soil Treatment Facilities, which will regulate these same facilities as well as facilities which use different technologies to treat soils contaminated with different constituents. At the same time, the Department is proposing to create in a separate rulemaking procedure Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, to establish certain cleanup target levels applicable to the rehabilitation of brownfields, petroleum and drycleaning sites and at soil treatment facilities.

Any person who wishes to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 376.303, 376.3071, 403.061, 403.087, 403.0877 FS.

LAW IMPLEMENTED: 376.303, 376.3071, 403.031, 403.061, 403.062, 403.087 FS.

A HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Department of Environmental Protection, Twin Towers Building, 2600 Blair Stone Road, Room 609, Tallahassee, Florida

If an accommodation is needed for a disability in order to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel, (850)488-2996 or 1(800)955-8771 (TDD), at least seven days prior to the event. THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: Mary Jean Yon, Solid Waste Section, Mail Station 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)488-0300

THE FULL TEXT OF THE PROPOSED RULES IS:

62-775.100 Intent.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.3071 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.100, Repealed _______.

62-775.200 Definitions.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.3071, 403.031, 403.061, 403.062 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.200, Repealed

62-775.210 Reference Standards.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.3071, 403.061, 403.062 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.210, Repealed

62-775.300 General Permits.

Specific Authority 376.303, 376.3071, 403.0877 FS. Law Implemented 376.3071 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.300, Repealed ...

62-775.400 Criteria for Clean Soil.

Specific Authority 376.303, 376.3071, 403.087 FS. Law Implemented 376.3071, 403.087 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.400, Repealed ______.

62-775.410 Soil Sampling and Analysis.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.3071, 403.061, 403.062 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.410, Repealed

62-775.500 Approval of Alternate Procedures.

Specific Authority 376.303, 376.3071 FS. Law Implemented 376.303, 376.3071 FS. History—12-10-90, Amended 11-30-92, Formerly 17-775.500, Repealed _______.

62-775.600 Security.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.303, 376.3071 FS. History-12-10-90, Formerly 17-775.600, Repealed

62-775.610 Ground Water Monitoring.

Specific Authority 376.303, 376.3071, 403.061, 403.0877 FS. Law Implemented 376.303, 376.3071 FS. History–New 12-10-90, 11-30-92, Formerly 17-775.610, Repealed

62-775.620 Receiving, Handling, and Stockpiling.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.303, 376.3071 FS. History-New 12-10-90, Amended 11-30-92, Formerly 17-775.620, Repealed

62-775.700 Notices and Security.

Specific Authority 376.303, 376.3071, 403.061 FS. Law Implemented 376.303, 376.3071 FS. History-New 12-10-90, Formerly 17-775.700, Repealed

62-775.710 Excavating, Handling, and Stockpiling.

Specific Authority 376.303, 376.3071, 403.061, 403.0877 FS. Law Implemented 376.303, 376.3071 FS. History-New 12-10-90, Amended 11-30-92, Formerly 17-775.710, Repealed

62-775.900 Forms.

Specific Authority 376.303, 376.3071, 403.061, 403.087 FS. Law Implemented 376.303, 376.3071 FS. History–New 12-10-90, Amended 11-30-92, Formerly 17-775.900, Repealed _______.

NAME OF PERSON ORIGINATING PROPOSED RULE: Bill Hinkley, Chief, Bureau of Solid and Hazardous Waste NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: John Ruddell, Director, Division of Waste Management

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 5, 1999

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 98-76R

RULE CHAPTER TITLE: RULE CHAPTER NO.: Contaminant Cleanup Target Levels 62-777 **RULE NOS.:** RULE TITLES: Referenced Guidelines 62-777.100 **Applicability** 62-777.150 **Derivation of Cleanup Target Levels** 62-777.170

PURPOSE AND EFFECT: The Department is proposing to adopt a new rule chapter, Contaminant Cleanup Target Levels, Chapter 62-777, Florida Administrative Code (F.A.C.), to set forth certain default cleanup target levels to be used for cleanup of contamination at petroleum, drycleaning solvent and brownfield sites, and by soil treatment facilities for the treatment of contaminated soils. Methodologies would also be established for derivation of alternate cleanup target levels.

SUMMARY: The Department of Environmental Protection is proposing to adopt a new rule chapter, Contaminant Cleanup Target Levels, Chapter 62-777, F.A.C. The proposed rule chapter would set forth certain contaminant cleanup target

levels applicable to the cleanup of contamination at petroleum, drycleaning solvent and brownfield sites, and would also establish cleanup target levels for treatment of contaminated soils by soil treatment facilities. Methodologies would also be established for derivation of alternate cleanup target levels. Simultaneously with the proposed adoption of Chapter 62-777, the Department is proposing to amend Rule Chapters 62-770, F.A.C., (Petroleum Contamination Site Cleanup Criteria) and 62-785, F.A.C., (Brownfields Cleanup Criteria) to delete the tables containing the cleanup target levels and the figures, if applicable, containing the methodologies for deriving alternative cleanup target levels from those rules and instead refer to the applicable cleanup target levels tables and figures proposed for Chapter 62-777, F.A.C. The proposed Drycleaning Solvent Cleanup Criteria rules (Chapter 62-782, F.A.C.) and Soil Thermal Treatment rules (Chapter 62-713, F.A.C.) will also refer to those applicable cleanup target levels and methodologies set forth in Chapter 62-777, F.A.C. It is anticipated that some of the cleanup target levels now contained in Chapter 62-770, F.A.C., and Chapter 62-785, F.A.C., will change when they are included in the proposed new Chapter 62-777, F.A.C. The proposed cleanup target levels were recalculated to refine the numbers based on rounding conventions and to emerging science. The proposed amendments to Chapters 62-770, F.A.C., and 62-785, F.A.C., and the simultaneous adoption of proposed new rule Chapter 62-777, F.A.C., are intended to result in a structural change in the way the rules are applied to cleanup of petroleum contaminated and brownfields sites.

STATEMENT OF **ESTIMATED** SUMMARY OF REGULATORY COST: The Department has in accordance with the requirements of Chapter 120, F.S., prepared a Statement of Economic Cost, which is summarized as follows: The cleanup target levels that change after inclusion in Chapter 62-777, F.A.C., Contaminant Cleanup Criteria are not expected to provide adverse impacts either to the Department or stakeholders of the regulated community. Some of the cleanup target levels are more stringent and some are less stringent. Nevertheless, the changes do not seem sufficient enough to offset the significant estimated net savings from the Departments adoption of Risk-Based Corrective Action principles and the application of natural attenuation with monitoring in the applicable rule chapters.

A copy of the Statement of Estimated Regulatory cost may be obtained by contacting the person designated below as the proposed rule contact. Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice. RISK IMPACT STATEMENT: A Risk Impact Statement prepared in accordance with 120.81, F.S., is available. A copy may be obtained by contacting the Bureau of Waste Cleanup.

SPECIFIC AUTHORITY: 376.3071, 376.81, 376.3078 FS. LAW IMPLEMENTED: 376.3071, 376.81, 376.3078 FS.

A HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Room 609, Twin Towers Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel, (850)488-2996 or 1(800)955-8771 (TDD), at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: Roger B. Register, Department of Environmental Protection, Bureau of Waste Cleanup, Mail Station 4505, Twin Towers, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)488-0190 or at the e-mail address: "register_r@dep.state.fl.us"

THE FULL TEXT OF THE PROPOSED RULES IS:

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) Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994.
- (2) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999.

Specific Authority 376.303, 376.3071, 376.3078(4), 376.81, 403.061, 403.704 FS. Law Implemented 376.3071, 376.3078(4), 376.81, 403.707 FS. History–New

62-777.150 Applicability.

- (1) This chapter provides criteria in tables and figures that apply only to the cleanup of contamination at sites that are governed by the terms of a brownfield site rehabilitation agreement pursuant to Chapter 62-785, F.A.C., and to the program specific contaminants of concern for sites being addressed under 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) 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.
- (4) 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.
- (5) 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.
- (6) As further provided in substantive provisions of the above-referenced rule chapters, contaminant cleanup target levels 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, 62-770, 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 cleanup target levels.

<u>Specific Authority 376.303, 376.3071, 376.3078(4), 376.81, 403.061, 403.704</u>
<u>FS. Law Implemented 376.3071, 376.3078(4) 376.81, 403.707</u> <u>FS. History–New</u>

62-777.170 Derivation of Cleanup Target Levels.

(1) Groundwater and Surface Water.

(a) Cleanup target levels for contaminants found in groundwater are provided in Table I. The cleanup target levels 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 in Chapters 62-520 and 62-550, F.A.C., or cleanup target levels derived using the minimum criteria specified in Chapter 62-520, F.A.C., are the cleanup target levels referenced in Table I. In deriving groundwater cleanup target levels 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; a hazard quotient of 1 or less; the best achievable detection limits; and nuisance, organoleptic, and aesthetic considerations. For contaminants not listed in Table I, the equations provided in Figures 1 and 2 may be used to calculate cleanup target levels for contaminants found in groundwater for sites or facilities subject to Chapters 62-713 or 62-785, F.A.C.

(b) Cleanup target levels 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 cleanup target levels 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., or cleanup target levels derived using the toxicity criteria specified in Chapter 62-302, F.A.C., are the cleanup target levels referenced in Table I. For contaminants not listed in Table I, the equations provided in Figures 3A and 3B may be used to calculate cleanup target levels for contaminants found in surface water, or groundwater that is discharging into surface water for sites or facilities subject to Chapters 62-713 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.

(a) Cleanup target levels for contaminants found in soil are provided in Table II. As further provided in other substantive provisions of those rule chapters, the soil cleanup target levels 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, 62-770, 62-782, and 62-785, F.A.C. In deriving soil cleanup target

levels, the methodology presented in the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, was utilized. In deriving soil cleanup target levels 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; a hazard quotient of 1 or less; and the best achievable detection limits. The leachability-based soil cleanup target levels for protection of the groundwater were derived based on the groundwater cleanup target levels provided in Table I. The equations provided in Figures 4, 5, 6, 7, and 8 may be used to calculate cleanup target levels for contaminants found in soil not listed in Table II for sites or facilities subject to Chapters 62-713 or 62-785, F.A.C.

(b) Table III provides soil properties, and test methods that may be used for determining soil properties, for the derivation of alternative cleanup target levels based on site-specific soil characteristics [refer to the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for guidance on the derivation of alternative cleanup target levels].

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

Specific Authority 376.303, 376.3071, 376.3078(4), 376.81, 403.061, 403.704 FS. Law Implemented 376.3071, 376.3078(4), 376.81, 403.707 FS. History-New

NAME OF PERSON ORIGINATING PROPOSED RULE: John M. Ruddell

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Kirby B. Green, III

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 2, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: December 11, 1998

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 98-42R

RULE CHAPTER TITLE:	RULE CHAPTER NO.:
Drycleaning Solvent Cleanup Criteria	62-782
RULE TITLES:	RULE NOS:
Referenced Guidelines	62-782.100
Applicability	62-782.150
Definitions	62-782.200
Quality Assurance Requirements	62-782.300
Professional Certifications	62-782.400
Combined Document	62-782.450
Interim Source Removal	62-782.500
Site Assessment	62-782.600
Risk Assessment	62-782.650
No Further Action Criteria	62-782.680
Natural Attenuation With Monitoring	Criteria 62-782.690
Active Remediation	62-782.700
Post Active Remediation Monitoring	62-782.750
Time Schedules	62-782.790
Notices	62-782.800
Forms	62-782.900

PURPOSE AND EFFECT: The proposed rule chapter will establish cleanup criteria for drycleaning solvent contaminated sites for the purposes of protecting human health and the environment under actual circumstances of exposure. Section 376.3078(4), Florida Statutes (F.S.), requires the Department to establish criteria by rule for the purpose of determining, on a site-specific basis, the program tasks that comprise a site rehabilitation program and the point at which a program task and a site rehabilitation program may be deemed complete. The Department is further directed to incorporate, to the maximum extent feasible, risk-based corrective action principles to achieve protection of human health and safety and the environment in a cost-effect manner. Simultaneously with the proposed adoption of Chapter 62-782, Florida Administrative Code (F.A.C.), the Department is proposing to create a new rule chapter, Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, to establish certain default cleanup target levels applicable to the rehabilitation of brownfields, petroleum and drycleaning sites and to contaminated soil treated at soil treatment facilities. The proposed new rule Chapter 62-777, F.A.C., would also set forth methodologies for use in establishing alternate cleanup target levels for contaminants listed in the drycleaning rule chapter. Proposed rule Chapter 62-782, F.A.C., will reference the Chapter 62-777, F.A.C., cleanup target levels and figures applicable to rehabilitation of drycleaning solvent contaminated sites.

SUMMARY: The 1998 Florida legislation directed the Department to establish by rule the cleanup criteria and the rehabilitation program tasks for drycleaning solvent contaminated sites pursuant to Section 376.3078(4), F.S. In establishing the rule, the Department was directed to:

- (1) include risk-based corrective action principles to the maximum extent feasible to achieve protection of public health and safety and of the environment in a cost-effective manner;
- (2) consider the current exposure and potential risk of exposure to humans and the environment, including multiple pathways of exposure;
- (3) establish the point of compliance at the source of contamination or to temporarily move the point of compliance within the property boundary, while cleanup is proceeding. The Department may also temporarily extend the point of compliance beyond the property boundary with appropriate monitoring to facilitate natural attenuation processes;
- (4) allow the use of institutional or engineering controls, where appropriate, to eliminate or control the potential exposure;
- (5) consider the additive effects of contaminants, and the synergistic and antagonistic effects when the scientific data become available;
- (6) establish cleanup target levels for groundwater based on the applicable state water quality standards; where such standards do not exist, establish cleanup target levels for groundwater based on the minimum criteria specified in the Department's rule for state water quality standards;
- (7) establish a point of measuring compliance in the groundwater immediately adjacent to the surface water body where surface waters are exposed to contaminated groundwater;
- (8) establish appropriate cleanup target levels for human exposure for each contaminant found in soils from the land surface to 2 feet below the land surface; and
- (9) establish appropriate leachability-based soil cleanup target levels based on protection of the groundwater cleanup target levels or the derived alternate cleanup target levels for groundwater.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST: Elements of the Statement of Estimated Regulatory Cost:

The issues of economic concern for the proposed rule, Chapter 62-782, F.A.C., Drycleaning Solvent Cleanup Criteria essentially encompass areas where the economist anticipates economic issues directly bearing on cost. There has been drycleaning solvent site remediation in Florida. Therefore, the discussion concerning economic impacts and associated costs will focus on those areas that will influence cost in accordance with the Administrative Procedure Act.

A. Economic Cost of Natural Attenuation as a Remedial Option:

Natural attenuation with monitoring of drycleaning solvent contaminated sites is a permissible option under the proposed rule. Monitoring of natural attenuation may be an appropriate strategy for site rehabilitation depending on the current use of groundwater in the vicinity of the site and the individual site characteristics, provided human health, public safety and the environment are protected.

B. Economic Impact on Local Governments:

Less than 1% of the confirmed drycleaning contaminated sites impacts small cities or counties.

C. Cost to the Agency and Others Implementing and Enforcing the Proposed Rule:

The Department does not anticipate substantial costs to the agency and others implementing and enforcing the proposed rule chapter.

D. Economic Impact on the Private Sector:

Direct costs will be felt by the private sector as these costs pertain to the expenditure of private capital for remediation of drycleaning contaminated sites under voluntary cleanup agreements with the Department. Analyses of the preceding produced an environment absence of sufficient data from which to draw conclusions or develop reasonable assumptions, due to the large number of variables associated with the cleanup process and the lack of a definitive baseline of cost data for active cleanup and natural attenuation.

E. Good Faith Estimate of Individuals and Entities Required to Comply, Together With a General Description of the Types of Individuals Likely to be Affected by the Rule:

Entities that would be potentially affected by the rule include the following: persons cleaning up drycleaning solvent contaminated sites under voluntary cleanup agreements with the Department, financial institutions, local governments and populations living and working near a drycleaning solvent contaminated site. The total number of estimated drycleaning contaminated sites state-wide that may potentially need cleanup is 2,800. Of that number, 1,063 are currently eligible for state-funded cleanup.

Outcome of the Analysis:

The results of the analyses indicated that cleanup of contaminated sites is a site specific issue. Contaminated sites are different in many aspects and are impacted by associated variables that may have dramatic influence on the cost of the remediation effort.

A copy of the Statement of Estimated Regulatory cost may be obtained by contacting the person designated below as the proposed rule contact. Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RISK IMPACT STATEMENT: A Risk Impact Statement prepared in accordance with 120.81, F.S., is available. A copy may be obtained by contacting the Bureau of Waste Cleanup. SPECIFIC AUTHORITY: 376.3078(4) FS.

LAW IMPLEMENTED: 376.3078(4) FS.

A HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Room 609, Twin Towers Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel at (850)488-2996 or (800)955-8771 (TDD), at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: William E. Burns, Jr., Department of Environmental Protection, Bureau of Waste Cleanup, Mail Station 4520, Twin Towers, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)488-0190 or at the e-mail address: "burns_b@dep.state.fl.us"

THE FULL TEXT OF THE PROPOSED RULES IS:

62-782.100 Referenced Guidelines.

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

- (1) Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994.
- (2) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

62-782.150 Applicability.

(1) The cleanup criteria contained in this rule shall apply to all sites contaminated with drycleaning solvents (including site rehabilitation at drycleaning facilities or wholesale supply facilities governed by the terms of a voluntary cleanup agreement executed by the participant and the Department pursuant to Section 376.3078(11), F.S. This chapter is established for the purposes of protecting the human health, public safety and the environment under actual circumstances of exposure and for determining, on a site-specific basis, the rehabilitation program tasks that comprise a site rehabilitation program and the levels at which a rehabilitation program task and site rehabilitation program may be deemed complete. In establishing this chapter, risk-based corrective action principles were incorporated to the maximum extent feasible, to achieve protection of human health, public safety and the

environment in a cost-effective manner. Therefore, this chapter provides both default cleanup target levels and a process for the derivation of site-specific alternative cleanup target levels that are protective of human health, public safety and the environment.

(2) Drycleaning solvent contaminants of concern are listed in Table A of this chapter. Chapter 62-777, F.A.C., provides groundwater, surface water and soil cleanup target levels, as well as natural attenuation default concentrations for groundwater, a listing of soil properties and test methods, a listing of site-specific conditions and geochemical parameters, and default parameters and equations that may be used to establish cleanup target levels for contaminants not listed in Chapter 62-777, F.A.C., or alternative groundwater and soil cleanup target levels for listed contaminants and shall apply only to those contaminants chemicals of concern listed in Table A of this chapter, unless there is confirmation that another chemical listed in the tables of Chapter 62-777, F.A.C., is known to be present.

(3) Cleanup target levels for each contaminant found in groundwater, as specified in Chapter 62-777, F.A.C., Table I, or derived pursuant to paragraphs (4) or (5), or alternative cleanup target levels that may be established pursuant to Chapter 62-782.650, F.A.C. or Chapter 62-782.680, F.A.C., are enforceable under this chapter. Cleanup target levels for each contaminant found in groundwater shall be the applicable state water quality standards, except where alternative cleanup target levels are established pursuant to this chapter. This chapter is not intended to create any new water quality standards pursuant to Chapters 62-520 or 62-550, F.A.C. The numerical standards promulgated in Chapters 62-520 and 62-550, F.A.C., or cleanup target levels based on the minimum criteria specified in Chapters 62-520 or 62-550, F.A.C., are the cleanup target levels referenced in Chapter 62-777, F.A.C., Table I. In establishing the applicable minimum criteria for groundwater, the following factors were considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient of 1 or less; the best achievable detection limits; and nuisance, organoleptic, and aesthetic considerations. Site-specific groundwater cleanup target levels may be justified based on background concentrations. Where contaminated groundwater is discharging into surface water, or when available information (for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling) indicates that it may discharge into surface water in the future, the cleanup target levels for the contaminants shall also be based on the surface water standards and criteria. The numerical standards promulgated in Chapter 62-302, F.A.C., or cleanup target levels based on the toxicity criteria specified in Chapter 62-302, F.A.C., are referenced in Chapter 62-777, F.A.C., Table I.

(4) For contaminants found in groundwater not listed in Chapter 62-777, F.A.C., Table I, the cleanup target levels shall be derived based on:

(a) The minimum criteria specified in Chapters 62-520 or 62-550, F.A.C., and the equations provided Chapter 62-777, F.A.C., Figures 1 and 2. In establishing the applicable minimum criteria for groundwater, the following factors are to be considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and nuisance, organoleptic, and aesthetic considerations; and

(b) The toxicity criteria specified in Chapter 62-302, F.A.C., and the equations provided in Chapter 62-777, F.A.C., Figures 3A and 3B, if contaminated groundwater is discharging into surface water, or when available information (for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling) indicates that it may discharge into surface water in the future.

(5) For contaminants found in groundwater that affect the same target organ(s), except for those with numerical standards promulgated in Chapters 62-520 or 62-550, F.A.C., the cleanup target levels referenced in Chapter 62-777, F.A.C., Table I, or those derived pursuant to paragraph (3), shall be adjusted accordingly, such that for non-carcinogenic contaminants that affect the same organ(s) the hazard index (sum of the hazard quotients) is 1 or less, and for carcinogens the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable. The synergistic and antagonistic effects of contaminants found in groundwater shall also be considered when the scientific data are available.

(6) Cleanup target levels for contaminants found in soil, as specified in Chapter 62-777, F.A.C., Table II, or derived pursuant to paragraphs (7) or (8), or alternative cleanup target levels that may be established pursuant to this chapter, are enforceable under this chapter. In establishing soil cleanup target levels, the methodology presented in the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, was utilized. In establishing soil cleanup target levels 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; a hazard quotient of 1 or less; and the best achievable detection limits. Site-specific soil cleanup target levels may be justified based on background concentrations. In establishing leachability-based soil cleanup target levels for protection of the groundwater, the soil cleanup target levels shall be based on the groundwater cleanup target levels or the alternative cleanup target levels for groundwater established pursuant to Rule 62-782.650, F.A.C., as appropriate.

- (7) For contaminants found in soil not listed in Chapter 62-777, F.A.C., Table II, the cleanup target levels shall be derived based on the following:
- (a) For human exposure, the following factors are to be considered: calculations using a lifetime excess cancer risk level of 1.0E-6, a hazard quotient of 1 or less, the best achievable detection limits, and the naturally occurring background concentrations; and the equations provided in Chapter 62-777, F.A.C., Figures 4, 5, 6, 7, and 8 must be utilized; and
- (b) For leachability, the soil cleanup target levels for protection of groundwater shall be based on the groundwater cleanup target levels or the alternative cleanup target levels for groundwater established pursuant to Rule 62-782.650, F.A.C., as appropriate, and the equation provided in Chapter 62-777, F.A.C., Figure 9.
- (8) For contaminants found in soil that affect the same target organ(s), the cleanup target levels specified in Chapter 62-777, F.A.C., Table II, or those derived pursuant to paragraph (7), shall be adjusted accordingly, such that for non-carcinogenic contaminants that affect the same organ(s) the hazard index (sum of the hazard quotients) is 1 or less, and for carcinogens the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable. The synergistic and antagonistic effects shall also be considered when the scientific data are available.
- (9) For contaminants found at the site about which information regarding the actual circumstances of exposure has been provided to the participant by the Department, local government or the public, the cleanup target levels for the affected medium or media, except where a state water quality standard is applicable, shall be adjusted accordingly to take into account the site-specific exposure conditions including multiple pathways of exposure that affect the same individual or sub-population.
- (10) Receipt of approval under this chapter does not relieve the Participant from the obligation to comply with other Department rules (for example, Chapters 62-701, 62-713, 62-730 and 62-770, F.A.C.) regarding off-site disposal, relocation or treatment of contaminated media. Participants are advised that other federal or local requirements may apply to these activities.
- (11) Final Orders related to the review of plans, reports, or any other submittals made by a person under the provisions of this chapter shall be undertaken by the Department and shall be subject to the provisions of Chapter 120, F.S.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

62-782.200 Definitions.

- All words and phrases defined in Section 376.301, F.S., shall have the same meaning when used in this chapter unless specifically stated otherwise in this chapter. The following words and phrases used in this chapter shall, unless the context clearly indicates otherwise, have the following meanings:
- (1) "Action level" means a specified concentration of a contaminant that, if exceeded during natural attenuation with monitoring or post active remediation monitoring, may require additional site assessment or active remediation. Action levels is established during the approval process for proposals for Natural Attenuation with Monitoring pursuant to 62-785.690, F.A.C. or Post Active Remediation Monitoring pursuant to 62-785.750, F.A.C.. "Action levels" are not equivalent to "cleanup target levels."
- (2) "Additive effect" means a scientific principle that the toxicity that occurs as a result of exposure is the sum of the toxicities of the individual chemicals to which the individual is exposed.
- (3) "Antagonistic effect" means a scientific principle that the toxicity that occurs as a result of exposure is less than the sum of the toxicities of the individual chemicals to which the individual is exposed.
- (4) "Background concentrations" means concentrations of contaminants that are naturally occurring in the groundwater, surface water, soil or sediment in the vicinity of the site.
- (5) "Cleanup target level" means the concentration for each contaminant identified by the applicable analytical test method in the medium of concern at which a site rehabilitation program is deemed complete.
- (6) "Contaminant" means any physical, chemical, biological, or radiological substance present in any medium that may result in adverse effects to human health or the environment, or that creates an adverse nuisance, organoleptic or aesthetic condition in groundwater.
- (7) "Contaminated" means the presence of free product or any contaminant in surface water, groundwater, soil, sediment, or upon the land, in quantities or concentrations that may result in exceedances of the applicable cleanup target levels in Chapter 62-777, F.A.C., or water quality standards in Chapters 62-3, 62-302, 62-520, or 62-550, F.A.C., or in quantities or concentrations that may result in contaminated sediment.
- (8) "Contaminated sediment" means sediment that is contaminated with free product or contaminants to the extent that contamination may be harmful to human health or the environment as determined by the concentrations of the contaminants, actual circumstances of exposure, diversity studies, toxicity testing or other evidence of harmful effects, as applicable. (Refer to the Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994, for guidance on the evaluation of contaminant concentrations, sediment quality conditions and testing methods.)

- (9) "Contaminated site" means any contiguous land, sediment, surface water, or groundwater area that contains contaminants that may be harmful to human health or the environment, or that creates an adverse nuisance, organoleptic or aesthetic condition in groundwater.
- (10) "Contaminated soil" means soil that is contaminated with free product or contaminants to the extent that applicable soil cleanup target levels specified in Chapter 62-777, F.A.C., are exceeded.
- (11) "Contamination" refers to the definition for "contaminated."
- (12) "Drycleaning facility" means a commercial establishment that operates, or has at some time in the past operated, for the primary purpose of drycleaning clothing and other fabrics utilizing a process that involves any use of drycleaning solvents. The term "drycleaning facility" includes laundry facilities that use drycleaning solvents as part of their cleaning process. The term does not include a facility that operates, or has at some time in the past operated, as a uniform rental company or a linen supply company regardless of whether the facility operates as, or was previously operated as, a drycleaning facility.
- (13) "Drycleaning solvents" means any and all nonaqueous solvents used in the cleaning of clothing and other fabrics and includes perchloroethylene (also known as tetrachloroethylene) and petroleum-based solvents, and their breakdown products. For purposes of this definition, "drycleaning solvents" only includes those drycleaning solvents originating from use at a drycleaning facility or by a wholesale supply facility.
- (14) "Engineering control" means modifications to a site to reduce or eliminate the potential for contaminant migration and exposure to contaminants. Examples of modifications include physical or hydraulic control measures, capping, point-of-use treatments, or slurry walls.
- (15) "Free product" means the presence of a non-aqueous phase liquid in the environment in excess of 0.01 foot in thickness, measured at its thickest point.
- (16) "Groundwater" means water beneath the surface of the ground within a zone of saturation, whether or not flowing through known or definite channels.
- (17) "Innovative technology" means a process that has been tested and used as a treatment for contamination, but lacks an established history of full-scale use and information about its cost and how well it works sufficient to support prediction of its performance under a variety of operating conditions. An innovative technology is one that is undergoing pilot-scale treatability studies, which usually are performed in the field or the laboratory and require installation of the technology, and which provide performance, cost, and design objectives for the technology prior to full-scale use.

- (18) "Institutional control" means the restriction on use of, or access to, a site to eliminate or minimize exposure to contaminants. Examples of restrictions include deed restrictions, use restrictions, or restrictive zoning.
- (19) "Monitoring well" means a well constructed with a surface seal and a sand filter pack in order to provide for the collection of representative groundwater samples for laboratory analyses. Such wells may also be used to detect the presence of free product or collect water-level elevation data to aid in determining the direction of groundwater flow.
- (20) "Natural attenuation" means an approach to site rehabilitation that allows natural processes to contain the spread of contamination and reduce the concentrations of contaminants in contaminated groundwater and soil. Natural attenuation processes may include the following: sorption, biodegradation, chemical reactions with subsurface materials, diffusion, dispersion, and volatilization.
- (21) "Participant" means the Department, a responsible party, or a real property owner or any individual or entity that has entered into a voluntary cleanup agreement with the Department pursuant to Section 376.3078(11)(b), F.S., that is conducting site rehabilitation at a drycleaning solvent contaminated site pursuant to this chapter. If the participant is other than the real property owner, then that individual or entity has to demonstrate they have the consent of the real property owner.
- (22) "Piezometer" means a permanent or temporary well that may be designed and constructed without the surface sealing or sand filter pack requirements of a monitoring well. This type of well is primarily used to detect the presence of free product or collect water-level elevation data to aid in determining the direction of groundwater flow.
- (23) "Plume" means the portion of an aquifer or aquifers in which groundwater contamination above applicable cleanup target levels and background concentrations has been detected.
- (24) "Product recovery" means the removal of free product.
- (25) "Real property owner" means the individual or entity that is vested with ownership, dominion, or legal or rightful title to the real property, or which has a ground lease interest in the real property, on which a drycleaning facility or wholesale supply facility is or has ever been located.
- (26) "Responsible party" means the facility owner, the facility operator or the discharger.
- (27) "Sediment" means the unconsolidated solid matrix occurring immediately beneath any surface water body. The surface water body may be present part or all of the time.
 - (28) "Site" refers to the definition for "contaminated site."
- (29) "Site rehabilitation" means the assessment of site contamination and the remediation activities that reduce the levels of contaminants at a site through accepted treatment methods to meet the cleanup target levels established for that site.

- (30) "Source removal" means the removal of free product. or the removal of contaminants from soil or sediment that has been contaminated to the extent that leaching to groundwater or surface water has occurred or is occurring.
- (31) "Surface water" includes rivers, lakes, streams, springs, impoundments, canals and all other water upon the surface of the earth, whether contained in bounds, created naturally or artificially, or diffused. Stormwater and wastewater process water retention or treatment facilities, and canals and trenches that are integral to such facilities, that are not connected to other surface water are not included in the definition of surface water.
- (32) "Synergistic effect" means a scientific principle that the toxicity that occurs as a result of exposure is more than the sum of the toxicities of the individual chemicals to which the individual is exposed.
- (33) "Temporary point of compliance" is the boundary represented by one or more designated monitoring wells at which groundwater cleanup target levels may not be exceeded while site rehabilitation under an approved Natural Attenuation with Monitoring plan is proceeding.
- (34) "Voluntary Cleanup Agreement (VCA)" means an agreement entered into between a participant and the Department. The voluntary cleanup agreement shall at a minimum establish the time frames, schedules, and milestones for completion of site rehabilitation tasks and submission of technical reports, and other commitments or provisions pursuant to Section 376.3078(11), F.S., and this chapter.
- (35) "Waters" or "waters of the State" means waters as defined in Section 403.031, F.S.
- (36) "Wholesale supply facility" means a commercial establishment that supplies drycleaning solvents to drycleaning facilities.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

62-782.300 Quality Assurance Requirements.

- (1) Organizations performing sampling and analysis under this chapter shall comply with the Category 3 requirements specified in Chapter 62-160, F.A.C., Quality Assurance.
- (2) Unless otherwise specified in this chapter, reports that are submitted to the Department and that contain analytical data shall include the following forms and information:
- (a) Laboratory reports that include all information specified in Rule 62-160.670, F.A.C.;
- (b) Copies of the completed chain of custody record form(s) [Form 62-782.900(2)];
- (c) Copies of the completed water sampling log form(s) (Form <u>62-782.900(3))</u>; and
- (d) Results from screening tests or on-site analyses performed pursuant to this chapter.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

62-782.400 Professional Certifications.

- (1) Applicable portions of technical documents submitted by the participant to the Department must be signed and sealed by a professional engineer registered under Chapter 471, F.S., or a professional geologist registered under Chapter 492, F.S., certifying that the applicable portions of the technical document and associated work comply with standard professional practices, the rules of the Department and any other laws and rules governing the profession. If a laboratory report is submitted separately from any other technical document submittal, this requirement shall not apply to that laboratory report.
- (2) Upon completion of the approved remedial action, the Department shall require a professional engineer registered under Chapter 471, F.S., or a professional geologist registered under Chapter 492, F.S., to certify that the applicable portions of the remedial action were, to the best of his or her knowledge and ability, completed in accordance with this chapter and in conformance with the plans and specifications approved by the Department.

Specific Authority 403.061 FS. Law Implemented 403.0877 FS. History-

62-782.450 Combined Document.

- (1) The Site Assessment Report, the Risk Assessment Report, and the Remedial Action Plan, as applicable, may be submitted by the participant to the Department for review either separately as each program task is completed, or as a combined document. Other individual program task documents may be included in a combined document if agreed to in the VCA.
- (2) The combined document may incorporate, as applicable, the required content for the Site Assessment Report, Risk Assessment Report and Remedial Action Plan program tasks pursuant to Rules 62-782.600, 62-782.650 and 62-782.700, F.A.C., including a No Further Action Proposal or a Natural Attenuation with Monitoring Proposal associated with the Site Assessment Report or the Risk Assessment Report.
- (3) If the participant elects to prepare a combined document in lieu of individual program task documents, the decision shall be documented in the VCA, with applicable time frames for submittal and review of the combined document recorded in the VCA.
- (4) The participant shall submit copies of the combined document to the Department for review in accordance with the VCA, including all applicable professional certifications as required pursuant to Rule 62-782.400, F.A.C.
- (5) Within the time frames specified in the VCA, the Department shall:
- (a) Provide the Participant with written approval of the individual program task or the combined document; or
 - (b) Notify the participant in writing, stating:

- 1. the reason(s) why one or more individual program tasks or the combined document does not conform with the requirements of the applicable criteria in Rules 62-782.600, 62-782.650 or 62-782.700, F.A.C.; or
- 2. the reason(s) why a No Further Action Proposal or a Proposal for Natural Attenuation with Monitoring does not meet the applicable criteria pursuant to Rules 62-782.680 or 62-782.690, F.A.C.

<u>Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New</u>

62-782.500 Interim Source Removal.

- (1) Interim source removal includes removal of free product or contaminated soil, or removal of the source(s) of contamination. The objectives of the interim source removal are to remove specific known contaminant source(s), and provide temporary control to prevent or minimize contaminant migration, and to protect human health and the environment prior to the approval of a Remedial Action Plan prepared and submitted in accordance with Rule 62-782.700, F.A.C.
 - (2) Free Product Removal and Disposal.
- (a) The participant may perform product recovery provided that:
- 1. product recovery does not spread contamination into previously uncontaminated or less contaminated areas through untreated discharges, improper treatment, improper disposal or improper storage;
 - 2. flammable products are handled in a safe manner;
- 3. the recovered product is characterized and properly disposed; and
- 4. all sampling and analyses are performed in accordance with Rule 62-782.300, F.A.C.
- (b) The following passive and active methods of product recovery may be implemented without requesting approval from the Department:
 - 1. absorbent pads;
- 2. skimmer pumps that include pumps with mechanical, electrical, or hand-bailed purging operations;
 - 3. hand or mechanical bailing; and
- 4. fluid vacuum techniques (for example, vacuum pump trucks) or total fluid displacement pumps, as long as the technique used does not smear or spread free product or result in contaminating previously uncontaminated or less contaminated media.
- (c) In addition to the product recovery methods specified in Rule 62-782.500(2)(b), F.A.C., the participant may evaluate, propose and submit other product recovery methods to the Department for approval prior to implementation. The submittal, as an Interim Source Removal Proposal, must include the results of the evaluation performed to determine the potential for product smearing or spreading and the potential for air emissions. The product recovery methods proposed may include:

- 1. dewatering or groundwater extraction that may influence the depth to the water table; or
 - 2. air/fluid extraction.
- (d) Within the time frames specified in the VCA or Rule 62-782.790, F.A.C., the Department shall:
- 1. provide the participant with written approval of the Interim Source Removal Proposal; or
- 2. notify the participant in writing, stating the reason(s) why the Interim Source Removal Proposal does not contain information adequate to support a product recovery method pursuant to Rule 62-782.500(2)(c), F.A.C.
- (e) Product recovery shall be deemed complete when the objectives in Rule 62-782.500(1), F.A.C., have been met.
- (f) Within 10 days after initiation of product recovery, written notification shall be provided by the participant to the Department on Form 62-782.900(1).
- (g) Within the time frames and frequencies specified in the VCA or Rule 62-782.790, F.A.C., an Interim Source Removal Status Report documenting the recovery progress and summarizing all recovery activities for a specified period shall be submitted by the participant to the Department for review.
 - (3) Short-term Groundwater Recovery.
- (a) The participant may perform a short-term groundwater recovery strategy as a source removal activity. The use of a pumping test or overdeveloping of shallow aquifer well(s) within the plume as an Interim Source Removal strategy may be implemented without requesting approval from the Department provided the following criteria are met:
- 1. the groundwater contamination is of limited extent, such that the pumping of shallow aquifer well(s) within the plume may result in the site achieving the criteria for No Further Action in Rule 62-782.680, F.A.C., or the criteria for Natural Attenuation with Monitoring in Rule 62-782.690, F.A.C.;
 - 2. free product is not present;
- 3. the duration of the groundwater recovery does not exceed three days, unless the participant demonstrates to the Department that extended groundwater recovery will not result in the spread of contamination;
- 4. the recovered groundwater is properly disposed at a publicly owned treatment works or at a permitted Hazardous Waste Treatment, Storage or Disposal facility, if the recovered groundwater is a hazardous waste; and
- 5. the groundwater recovery is limited to one pumping event.
- (b) Within the time frames and frequencies specified in the VCA or Rule 62-782.790, F.A.C., an Interim Source Removal Status Report documenting the recovery progress and summarizing all recovery activities for a specified period shall be submitted by the participant to the Department for review.
 - (4) Groundwater Recovery, Treatment and Disposal.

- (a) The participant may perform groundwater recovery prior to the approval of a Remedial Action Plan prepared and submitted in accordance with Rule 62-782.700, F.A.C., provided the Participant submits a proposal that includes the same level of engineering detail as a Remedial Action Plan pursuant to Rule 62-782.700, F.A.C. Applicable sections must be signed and sealed in accordance with Rule 62-782.400, F.A.C.
- (b) Within the time frames specified in the VCA or Rule 62-782.790, F.A.C., the Department shall:
- 1. provide the participant with written approval of the proposal; or
- 2. notify the participant in writing, stating the reason(s) why the proposal does not contain information adequate to perform groundwater recovery prior to the approval of a Remedial Action Plan pursuant to Rule 62-782.500(4), F.A.C.
- (c) Within the time frames and frequencies specified in the VCA or Rule 62-782.790, F.A.C., an Interim Source Removal Status Report documenting the recovery progress and summarizing all recovery activities for a specified period shall be submitted by the participant to the Department for review.
 - (5) Soil and Sediment Removal, Treatment and Disposal.
- (a) The participant may excavate contaminated soil or contaminated sediment for proper treatment or proper disposal as an interim source removal activity provided the following criteria are met:
- 1. contamination is not spread into previously uncontaminated areas or less contaminated areas through untreated discharges, improper treatment, improper disposal or improper storage;
 - 2. flammable products are handled in a safe manner;
- 3. when a soil vacuum extraction system is necessary to abate an imminent threat to human life, health, or safety within a structure or utility conduit, then the vacuum extraction system must be designed and operated only to abate the imminent threat. The Department must be notified, within 24 hours, of the imminent threat and the intent to use a soil vacuum extraction system. The air emissions monitoring and frequency of monitoring shall be performed in accordance with Rules 62-782.700(5)(a) and (12)(i), F.A.C.;
- 4. USEPA Test Method 1311, Toxicity Characteristic Leaching Procedure (TCLP), must be performed on a number of samples sufficient to verify that the contaminated soil or sediment does not exceed the applicable criteria for a hazardous waste unless the soil or sediment is known to be contaminated by a known listed hazardous waste; and
- 5. when excavated soil or sediment is temporarily stored or stockpiled on-site, the soil shall be secured in a manner that prevents human exposure to contaminated soil or sediment and prevents soil or sediment exposure to precipitation that may cause surface runoff, and any excavation shall be secured to prevent entry by the public. The temporary storage or stockpiling of excavated contaminated soil or sediment shall

- not exceed 60 days, or 90 days if the excavated contaminated soil or sediment is stored in accordance with Chapter 62-730, F.A.C. Participants are advised that other federal or local requirements may apply to these activities.
- (b) Consistent with the goals set forth in Section 403.061(34), F.S., the Department encourages treatment over disposal options to address contaminated soil.
- (c) Soil or sediment treatment or disposal techniques not authorized by applicable rules of the Department require approval in an Interim Source Removal Proposal or in a Remedial Action Plan submitted pursuant to Rule 62-782.700, F.A.C. The Interim Source Removal Proposal shall include the information outlined in Rules 62-782.700(4) and (5), F.A.C., as applicable.
- (d) Within the time frames specified in the VCA or Rule 62-782.790, F.A.C., the Department shall:
- 1. provide the participant with written approval of the Interim Source Removal Proposal submitted pursuant to Rule 62-782.500(5)(c), F.A.C.; or
- 2. notify the participant in writing, stating the reason(s) why the Interim Source Removal Proposal does not contain information adequate to support the selection of an alternative soil treatment or disposal technique.
 - (6) Authorizations.
- Authorization or receipt of approval under Rule 62-782.500, F.A.C., does not relieve the Participant from the obligation to comply with other Department rules (for example, Chapters 62-701 and 62-730, F.A.C.) for product recovery, product disposal, groundwater recovery, or the handling, storage, disposal or treatment of contaminated media. Participants are advised that other federal or local requirements may apply to these activities.
 - (7) Interim Source Removal Report.
- (a) Within the time frames specified in the VCA or Rule 62-782.790, F.A.C., two copies of an Interim Source Removal Report shall be submitted by the participant to the Department for review. The report shall contain the following information in detail, as applicable:
- 1. the type and an estimated volume of non-aqueous phase liquids that were discharged to the environment, if known;
- 2. the volume of non-aqueous phase liquids and the volume of groundwater recovered;
- 3. the volume of contaminated soil or sediment excavated and treated or properly disposed;
- 4. the disposal or recycling methods for non-aqueous phase liquids and contaminated soil or sediment;
- 5. the disposal methods for other contaminated media and any investigation-derived waste;
- 6. a scaled site map (including a graphical representation of the scale used) showing location(s) of all on-site structures (including any buildings, locations of underground storage

- tanks, storm drain systems, and septic tanks), locations where free product was recovered and the area of soil removal or treatment, and the approximate locations of all samples made;
- 7. a table summarizing free product thickness in each monitoring well or piezometer and the dates the measurements were made;
- 8. the type of field screening instrument, analytical methods or other methods used;
- 9. the dimensions of the excavation(s) and location(s), integrity, capacities and last known contents of storage tanks, integral piping, dispensers, or appurtenances removed;
- 10. a table indicating the identification, depth, and field soil screening results or laboratory analyses of each sample collected;
- 11. depth to groundwater at the time of each excavation, measurement locations and method used to obtain that information; and
- 12. documentation confirming the proper treatment or proper disposal of the non-aqueous phase liquids, contaminated soil or sediment, including disposal manifests for non-aqueous phase liquids or hazardous waste, a copy of the documentation of treatment or acceptance of the contaminated soil or sediment, and results of analyses.
- (b) Within the time frames specified in the VCA or Rule 62-782.790, F.A.C., the Department shall:
- 1. provide the participant with written approval of the Interim Source Removal Report submitted pursuant to the criteria in Rule 62-782.500(7), F.A.C.; or
- 2. notify the participant in writing, stating the reason(s) why the Interim Source Removal Report does not conform with the applicable Interim Source Removal criteria pursuant to Rule 62-782.500(7), F.A.C.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New

62-782.600 Site Assessment.

- (1) Because site assessment may have already been completed at a site, a participant may choose to submit the associated assessment documents as its Site Assessment Report pursuant to Rule 62-782.600(7), F.A.C., for review by the Department. If site assessment work is necessary to define the nature and extent of contamination at a site, the site assessment shall be completed in accordance with the time frames specified in the VCA or in Rule 62-782.790, F.A.C.
- (2) The objectives of the site assessment shall be the following, as applicable:
- (a) To evaluate the current exposure and potential risk of exposure to humans and the environment, including multiple pathways of exposure. The physical, chemical, and biological characteristics of each contaminant and the individual site characteristics must be considered. The individual site characteristics include:

- 1. the current and projected use of the affected groundwater and surface water in the vicinity of the site;
- 2. the current and projected land use of the area affected by the contamination;
 - 3. the exposed population;
 - 4. the location of the plume;
 - 5. the degree and extent of contamination;
 - 6. the rate and direction of migration of the plume;
- 7. the apparent or potential rate of degradation of contaminants through natural attenuation; and
- 8. the potential for further migration in relation to the site's property boundary;
- (b) To determine whether contamination is present and the types of contaminants present, and to determine the horizontal and vertical extent of contamination in every medium found to be contaminated, such as: for soil, to the lower of the direct exposure residential cleanup target levels and the applicable leachability cleanup target levels provided in Chapter 62-777, F.A.C., Table II; and for groundwater, to the groundwater cleanup target levels or to the Surface Water Criteria provided in Chapter 62-777, F.A.C., Table I, as applicable;
- (c) To determine or confirm the origin(s) of the source(s) of contamination, if technologically possible. If the soil concentration of a contaminant is above its soil saturation concentration (Csat), free product may be present [refer to the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for development of SCTLs based on Csat].
- (d) To establish the horizontal extent and thickness of free product, if technologically possible;
- (e) To determine whether source removal, in addition to any interim source removal already performed in accordance with Rule 62-782.500, F.A.C., is warranted;
- (f) To identify the aquifer or aquifers expected to be affected by the site and their groundwater classification, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- (g) To describe geologic and hydrogeologic characteristics of the site that influence migration and transport of contaminants, including the identification and characterization of any perched zones that are present, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- (h) To determine the rate and direction of groundwater flow (at all affected depths, as appropriate), to determine the extent of water table fluctuation, to evaluate the potential effect of seasonal variations on the rate and direction of groundwater flow, to determine the hydraulic interaction between groundwater and any surface water within the vicinity of the site, and to determine whether there are any tidal effects in sites located near marine surface water, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;

- (i) To determine other mechanisms of transport of contaminants in the immediate vicinity of the site, including rate and direction of movement of contaminants in sewer lines, subsurface utility conduits or vaults, soil and surface water, as applicable, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- (i) To determine by means of a well survey whether any municipal or public water supply wells are present within a 1/2 mile radius of the site, whether the site is located within the regulated wellhead protection zone of a municipal wellfield or public water supply well, and whether any private water supply wells (including potable, irrigation and industrial) are present within a 1/4 mile radius of the site, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- (k) To determine whether any surface water will be exposed to contamination originating from the site;
- (1) To report any off-site activities (for example, dewatering, active remediation, or flood control pumping) in the immediate vicinity of the site that may have an effect on the groundwater flow at the site, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.; and
- (m) To facilitate the selection of a remediation strategy for the site that is protective of human health and the environment, unless No Further Action is deemed appropriate under the provisions of Rule 62-782.680, F.A.C.
- (3) The analyses for contaminants in surface water, groundwater, soil and sediment samples, as applicable, shall be performed using the appropriate analytical procedures referenced or listed in an approved comprehensive quality assurance plan pursuant to Chapter 62-160, F.A.C. The initial analyses of contaminants, including their reaction and degradation products, shall be based on the site history and the contaminants of concern listed in Table A of this chapter.
- (4) The site assessment shall include tasks that are necessary to achieve objectives described in Rules 62-782.600(2)(a)-(m), F.A.C., and may include the following:
- (a) Use of geophysical equipment such as magnetometers, ground penetrating radar or metal detectors to detect storage tank system(s);
- (b) Use of borehole geophysical methods to determine geologic and hydrogeologic characteristics of affected and potentially affected hydrogeologic zones;
- (c) Sampling of undisturbed soil above and below the water table using hand augering, drilling or direct push technology to obtain information on site stratigraphy and non-aqueous phase liquids entrapped below the water table, to determine geotechnical parameters, and to assess the appropriateness of natural attenuation with monitoring;
- (d) Use of fracture trace analysis to discover linear zones in which discrete flow could take place;
- (e) Use of field soil screening techniques, which must be demonstrated to be appropriate for the site conditions and the physical and chemical characteristics of the contaminants, to

- determine the optimal locations for collection of samples for laboratory analyses. These analyses shall be performed on a minimum of three grab samples with high, medium and low screening results. These analyses shall be performed per source area and per sampling event, except that only one representative sample shall be sufficient if the field screening results indicate that contaminated soil is not present. The actual number of laboratory samples shall be based on the horizontal and vertical extent of contamination and the degree of correlation between field soil screening and laboratory results:
- (f) Use of piezometers or monitoring wells to determine the frequency of occurrence, horizontal and vertical extent, and thickness of free product;
- (g) Use of monitoring wells, piezometers, or other sampling and measurement techniques to obtain a three-dimensional evaluation of the source of contamination, of the migration of contaminants below the water table, of groundwater flow, and of relevant hydrologic parameters;
- (h) Use of piezometers or monitoring wells to determine horizontal direction(s) of groundwater flow and horizontal and vertical hydraulic gradients, as applicable;
- (i) Survey of every top-of-casing to either the National Geodetic Vertical Datum (NGVD) of 1929 or to the North American Vertical Datum (NAVD88) of 1988;
- (j) Use of field screening techniques (for example, use of temporary wells, piezometers, or direct push technology to obtain groundwater samples for on-site analyses using gas chromatography) to optimize monitoring well placement;
- (k) Sampling of monitoring wells for the appropriate laboratory analyses to determine the degree and extent of groundwater contamination, if applicable, such that:
- 1. drill cuttings and drilling mud generated during monitoring well installation shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated media or less contaminated media. Authorization or receipt of approval under Rule 62-782.600, F.A.C., does not relieve the Participant from the obligation to comply with other Department rules (for example, Chapters 62-701 and 62-730, F.A.C.) for product recovery, product disposal, groundwater recovery, or the handling, storage, disposal or treatment of contaminated media. Participants are advised that other federal or local requirements may apply to these activities; and
- 2. development water and purge water shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated media. Authorization or receipt of approval under Rule 62-782.600, F.A.C., does not relieve the Participant from the obligation to comply with other Department rules (for example, Chapters 62-701 and 62-730, F.A.C.) for product recovery, product disposal, groundwater recovery, or the handling, storage, disposal or treatment of contaminated media. Participants are advised that other federal or local requirements may apply to these activities;

- (1) Sampling of surface water and sediment for the appropriate laboratory analyses to determine the degree and extent of surface water and sediment contamination, if applicable;
- (m) Inspection of public records (such as those at the local Department of Health office, at the appropriate Water Management District office, and at local municipalities) and performance of a field reconnaissance, as appropriate, to locate all water supply wells (including potable, irrigation and industrial wells) in accordance with Rule 62-782.600(2)(j), F.A.C., and injection wells or drainage wells as defined in Chapter 62-528, F.A.C.;
- (n) If the possibility exists that the contamination may have affected public or private water supply wells, sampling of the well or wells for the appropriate laboratory analyses, with the consent of the owner(s), to determine whether any contamination is present;
- (o) Use of available and appropriate literature in conjunction with site-specific lithologic logs to identify aquifers present beneath the site. An analysis for Total Dissolved Solids shall be used if the participant chooses to demonstrate that the natural background quality of the groundwater on-site would allow it to be classified as an area of G-III groundwater:
- (p) Performance of slug tests or a pumping test, if appropriate, on different strata of the surficial aquifer or of different aquifers, if applicable, using water-table monitoring wells, intermediate depth monitoring wells, and vertical extent monitoring wells. Performance of a pumping test may be deferred until the Remedial Action Plan phase if groundwater extraction is proposed in accordance with the provisions of Rule 62-782.700, F.A.C. If a pumping test is performed within the plume, at least two samples of the groundwater withdrawn during the test shall be collected and analyzed for the appropriate contaminants and physical properties (for example, Hardness, Iron, Total Dissolved Solids and Total Suspended Solids) that may affect the treatment system and disposal options. At a minimum, one sample shall be collected at the mid-point of the pumping test and one at the end of the pumping test;
- (q) Review of historical land use records and existing aerial photographs;
- (r) Sampling of soil for USEPA Test Method 1312. Synthetic Precipitation Leaching Procedure (SPLP) analyses, or the information available indicates that the soil has the potential to be a hazardous waste, or for the analyses of the physical parameters listed in Chapter 62-777, F.A.C., Table III; and
- (s) Establishment of the parameters or exposure assumptions that will be used to develop the alternative cleanup target levels pursuant to Rule 62-782.650, F.A.C., if the participant chooses this option.

- (5) If there is no historical evidence of certain contaminants being used within the site and if initial testing of representative monitoring well(s), performed pursuant to Rule 62-782.600(4), F.A.C., does not indicate the presence of any contaminants within a specific analytical procedure, or indicates that the presence of a contaminant is due to a background concentration, subsequent testing at the site need not include that analytical procedure.
- (6) Two copies of a Site Assessment Report (that may reference previously submitted documents) shall be submitted by the participant to the Department for review within the time frames specified in the VCA or in Rule 62-782,790, F.A.C.
 - (7) The Site Assessment Report shall:

contaminant sources;

- (a) Summarize all tasks that were completed pursuant to Rules 62-782.600(2)-(4), F.A.C., and summarize the results obtained. All maps shall indicate the North direction, be drawn to scale, and include a graphical representation of the scale used. The following shall be included when applicable:
- 1. a detailed summary of site history and operations, including:
- a. an identification of present property and facility owners; b. a description of past and present operations, including those that involve the storage, treatment, use, disposal, processing or manufacture of materials that may be potential
- <u>c. a description of all products used or manufactured and of all by-products and wastes (including waste constituents) generated during the life of the facility:</u>
- d. a summary of current and past environmental permits and enforcement actions; and
- e. a summary of known spills or releases of materials, including permitted releases, that may be potential contaminant sources;
- 2. a copy of the portion of the most recent USGS topographic map, including quadrangle name and scale, that clearly identifies the site in relation to the surrounding area;
- 3. a vicinity map showing pertinent site features, such as utilities, above and underground structures, storage areas, local drainage features, land cover, property boundaries, and particularly, any potential sources of contamination identified during the assessment. If the subject site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C., a vicinity map is not required;
- 4. one or more scaled site maps showing all pertinent surface, subsurface and geological features present in the immediate vicinity of the contamination;
- 5. details of any preliminary assessment or interim source removal activities performed at the site, such as product recovery and contaminated soil removal (summarized in graphical and tabular form);
- 6. data and calculations used to determine the top-of-casing elevations and the accuracy of the survey performed in accordance with Rule 62-782.600(4)(i), F.A.C.;

- 7. tables listing the top-of-casing elevations, depths to groundwater, water-level elevations obtained at least twice, at least one month apart, and the dates the data were collected;
- 8. scaled site maps illustrating the water-level elevations calculated at each monitoring well, piezometer, and staff gauge where surface water is a concern, and depicting the estimated elevation contours and an interpretation of groundwater flow direction. If different strata of the same aquifer, or if different aquifers, are affected, separate figures must be submitted for each date on which measurements were recorded, depicting flow in each stratum or aquifer. If the site's groundwater is tidally-influenced, separate figures must be submitted depicting flow at high and low tide. If the site is known to be affected by seasonal groundwater variations, separate figures should be submitted depicting the seasonal changes in the groundwater flow direction;
- 9. a table summarizing the use and well construction details, if available, of all the water supply wells identified during the well survey performed in accordance with Rule 62-782.600(2)(j), F.A.C.;
- 10. a map showing the approximate location(s) of the water supply well(s) identified during the well survey performed in accordance with Rule 62-782.600(2)(j), F.A.C., in relation to the subject site;
- 11. the results from slug tests performed on a minimum of three monitoring wells, or from a pumping test in each affected aquifer zone monitored, to determine aquifer properties, and including a description of methods used, assumptions made, field data and calculations, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- 12. the result of a calculation of horizontal groundwater flow velocity (v) for the site, using the formula v=KI/n, where K is the average hydraulic conductivity, I is the average horizontal hydraulic gradient, and n is the estimated effective soil porosity, unless the site meets the No Further Action criteria in Rule 62-782.680(1), F.A.C.;
- 13. a description of any geophysical methods used for the project;
- 14. a description of the site-specific stratigraphy, based on the lithologic logs prepared during monitoring well installation and on standard penetration test borings (including composition, thickness and continuity of various lithologic units):
- 15. at least two cross-sections illustrating the site-specific stratigraphy and approximate concentrations of applicable contaminants;
- 16. details of any other assessment methodology used at the site, including any field screening techniques and measures of biological activity (for example, dissolved oxygen or nutrient levels);

- 17. a table summarizing the field soil screening results obtained at each sampling location and depth, as well as a summary of the results of any laboratory analyses performed and a listing of the date(s) the work was performed;
- 18. one or more scaled site maps showing all soil sampling locations for field screening or laboratory analyses and illustrating the horizontal and vertical extent of vadose zone soil contamination when soil contamination is detected;
- 19. piezometer, monitoring well and recovery well construction details and construction diagrams, including methods and materials, field sampling data sheets, lithologic logs, and volumes of groundwater removed during well development;
- 20. a description of the treatment or disposal methods of any investigation-derived waste generated during the assessment phase and any documentation confirming the proper treatment or disposal of the waste, as applicable;
- 21. a table that is updated any time additional piezometers, monitoring wells, or recovery wells are installed and that summarizes the well construction details (including the top-of-casing elevation referenced to NGVD of 1929 or NAVD88, depth of the top of the screen below land surface, total depth and screen length, and ground surface elevation referenced to NGVD of 1929 or NAVD88) of all monitoring wells (including storage tank compliance wells or other compliance wells required by permit), piezometers, and recovery wells;
- 22. a current table that summarizes free product thickness measured, volumes recovered, and date(s) measurements were recorded, if applicable;
- 23. a scaled site map showing the estimated horizontal extent of free product;
- 24. all information required by Rule 62-782.300(2), F.A.C.;
- 25. at least one table summarizing the groundwater and surface water analytical results (with the most recent sampling of representative monitoring wells having occurred within 270 days of Site Assessment Report submittal), detection limits used, and analyses performed (listing all contaminants detected and their corresponding cleanup target levels); and
- 26. one or more scaled site maps showing any areas excavated, all groundwater and surface water sampling locations, and an illustration of the degree and extent of groundwater and surface water contamination.
- (b) Summarize conclusions regarding site assessment objectives outlined in Rules 62-782.600(2)(a)-(m), F.A.C., and include one of the following:
- 1. a No Further Action Proposal without institutional or engineering controls shall be included if the site meets the applicable No Further Action criteria in Rule 62-782.680(1), F.A.C., or a No Further Action Proposal with institutional

- controls or both institutional and engineering controls may be included if the site meets the applicable No Further Action criteria in Rule 62-782.680(2), F.A.C.;
- 2. a Natural Attenuation with Monitoring Proposal may be included if the site meets the Natural Attenuation criteria in Rule 62-782.690, F.A.C.;
- 3. a recommendation to prepare a risk assessment shall be included if the participant chooses to justify alternative cleanup target levels using risk assessment studies demonstrating that human health, public safety, and the environment are protected to at least the same degree provided by the cleanup target levels established in this chapter; or
- 4. a recommendation to prepare a Remedial Action Plan pursuant to Rule 62-782.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-782.680(1), F.A.C., unless a proposal for a No Further Action with institutional controls or both institutional and engineering controls pursuant to Rule 62-782.680(2), F.A.C., or a proposal for Natural Attenuation with Monitoring pursuant to Rule 62-782.690, F.A.C., or a recommendation to prepare a risk assessment pursuant to Rule 62-782.650, F.A.C., is included.
- (8) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Site Assessment Report and the proposal or recommendation submitted pursuant to Rule 62-782.600(7)(b), F.A.C., or
 - (b) Notify the participant in writing, stating:
- 1. the reason(s) why the Site Assessment Report does not contain information adequate to support the conclusions regarding the site assessment objectives outlined in Rules 62-782.600(2)(a)-(m), F.A.C.; or
- 2. the reason(s) why the proposal or recommendation submitted pursuant to Rule 62-782.600(7)(b), F.A.C., is not supported by the applicable criteria.
- Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New_____

62-782.650 Risk Assessment.

- (1) If a participant performs a risk assessment, the following risk assessment task elements may be performed, as appropriate:
- (a) An exposure assessment that identifies pathways and routes by which human and environmental receptors may be exposed to contaminants and determines levels of contaminants to which human and environmental receptors may be exposed. The exposure assessment shall:
- 1. identify concentrations of contaminants found at the site in all contaminated media [refer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for guidance on the derivation of alternative cleanup

- target levels, for guidance on the derivation of alternative cleanup target levels for TRPHs based on a sub-classification methodology]:
- 2. identify background concentrations of contaminants found at the site and in the aquifer as a whole;
- 3. determine soil properties (for example, texture, moisture content, dry bulk density, organic carbon content, and infiltration rate) using methods listed in Chapter 62-777, F.A.C., Table III, or leaching potential as determined using a test such as USEPA Test Method 1312 (SPLP), in which leachate concentrations are compared with applicable groundwater cleanup target levels;
- 4. identify actual and potential exposure pathways and routes;
- <u>5. identify actual and potential human and environmental receptors for each exposure pathway, and any sensitive sub-populations:</u>
- 6. determine expected concentrations of contaminants to which actual and potential human and environmental receptors may be exposed;
- 7. determine exposure factors (exposure duration and frequency) based on site-specific characteristics, including consideration of current and plausible future land uses. Institutional and engineering controls may be proposed in order to ensure exposure factors do not change; and
- 8. identify established health-based values for all contaminants found at the site.
- (b) A toxicity assessment that determines human health and environmental criteria for contaminants found at the site. The criteria, taking into consideration acute and chronic health effects associated with short and long term exposure, may be developed for applicable exposure pathways and routes identified in the exposure assessment and shall include:
- 1. potable water exposure from ingestion, dermal contact, and inhalation of vapors and mists;
- 2. non-potable domestic water exposure from dermal contact, inhalation of vapors and mists, ingestion of food crops irrigated with such water, lawn watering, and other related exposures and exposures to pets and livestock from ingestion;
- 3. soil exposure from ingestion, dermal contact, inhalation, and ingestion by humans or animals of food crops grown in contaminated soil; and
- 4. non-potable surface water exposure from ingestion, dermal contact, and inhalation of vapors and mists. Adverse effects on freshwater or marine biota (including any bio-accumulative effects in the food chain) and on humans (for example, through incidental ingestion and dermal contact while using the resource for recreational purposes or fish consumption) should be considered.
- (c) A risk characterization that utilizes the results of the exposure assessment, the toxicity assessment, and any other relevant public health and epidemiological assessments, to characterize cumulative risks to the affected population(s) and

the environment from contaminants found at the site. Based on the concentrations of contaminants found at the site, the characterization shall include:

- 1. risks to human health and safety from exposure to the contamination;
- 2. risks from the contamination to non-human species and ecosystems; and
- 3. derivation of alternative cleanup target levels such that: for non-carcinogenic contaminants that affect the same organ(s), the hazard index (sum of the hazard quotients) is 1 or less; and for carcinogens, the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable [refer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for guidance on the derivation of alternative cleanup target levels for TRPHs based on a sub-classification methodology; and to Chapter 62-777, F.A.C., Table III for methods to be used in determining soil properties for the derivation of alternative cleanup target levels based on site-specific soil characteristics]. In developing alternative cleanup target levels, when scientific data are available the potential for additive, synergistic, or antagonistic interactions among contaminants and the potential for exposure to contaminants via multiple pathways shall be considered based on target organ(s) affected, mechanism(s) of toxicity, and empirical observations from clinical and laboratory studies. The default assumptions shall be that non-carcinogenic chemicals affecting the same target organ(s) have additive effects and that carcinogenic risk, regardless of target organ, is additive.
- (d) A justification for alternative cleanup target levels for groundwater or soil. The justification for the alternative cleanup target levels shall be based upon the site-specific characteristics affecting the site. In establishing the alternative cleanup target levels for groundwater or soil, the following factors shall be used, as applicable: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard index of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and (for groundwater only), nuisance, organoleptic, and aesthetic considerations.
- 1. the site-specific characteristics affecting the site may include:
- a. the present and future uses of the affected aquifer(s) and adjacent surface water, with particular consideration of the probability that the contamination is substantially affecting, or will migrate to and substantially affect, a known public or private source of potable water;
- b. the technical feasibility of achieving the soil or water quality criteria based on a review of available technology;
 - c. site soil characteristics; and
 - d. the results of the risk assessment.

- 2. mathematical transport models may be used to predict contaminant movement in the environment in order to provide assurances that risks to human health and the environment resulting from the establishment of alternative cleanup target levels are acceptable. If a mathematical transport model for contaminants is used, the model shall be validated, and adjusted accordingly, after subsequent monitoring to validate a No Further Action Proposal or during natural attenuation monitoring or active remediation monitoring, using empirical data as the data are obtained.
- (2) Two copies of the Risk Assessment Report shall be submitted by the participant to the Department for review, within the time frames specified in the VCA or in Rule 62-782.790, F.A.C.
- (3) The Risk Assessment Report shall contain a description of the task elements undertaken, summarize the conclusions obtained, and include one of the following:
- (a) A No Further Action Proposal without institutional or engineering controls shall be included if the site meets the applicable No Further Action criteria in Rule 62-782.680(1), F.A.C., or a No Further Action Proposal with institutional controls or both institutional and engineering controls may be included if the site meets the applicable No Further Action criteria in Rule 62-782.680(2), F.A.C.;
- (b) A Proposal for Natural Attenuation with Monitoring may be included if the site meets the Natural Attenuation with Monitoring criteria in Rule 62-782.690, F.A.C.; or
- (c) A recommendation to prepare a Remedial Action Plan pursuant to Rule 62-782.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-782.680(1), F.A.C., unless a proposal for a No Further Action with institutional controls or both institutional and engineering controls pursuant to Rule 62-782.680(2), F.A.C., or a proposal for Natural Attenuation with Monitoring pursuant to Rule 62-782.690, F.A.C., is included.
- (4) Within the time frames established in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Risk Assessment Report and the proposal or recommendation submitted by the participant pursuant to Rule 62-782.650(3),
 - (b) Notify the participant in writing, stating:
- 1. the reason(s) why the Risk Assessment Report does not contain information adequate to support the proposed alternative cleanup target levels; or
- 2. the reason(s) why the proposal or recommendation submitted pursuant to Rule 62-782.650(3), F.A.C., is not supported by the applicable criteria.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

- 62-782.680 No Further Action Criteria.
- (1) A No Further Action without institutional or engineering controls shall apply if:
- (a) Free product does not exist and no other fire or explosive hazard exists as a result of a release of non-aqueous phase liquids;
- (b) Contaminated soil is not present in the unsaturated zone, as demonstrated by the analyses of soil samples collected from representative sampling locations that show that concentrations of all of the applicable Contaminants of Concern listed in Table I of this chapter do not exceed:
 - 1. the background concentrations; or
- 2. the lower of the direct exposure residential cleanup target levels or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II. If more than one contaminant is present at the site, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. For carcinogens, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified such that the cumulative lifetime excess cancer risk level posed by the contaminants is 1.0E-6. If only leachability cleanup target levels are exceeded, then direct leachability testing results may be used to demonstrate that leachate concentrations do not exceed the applicable groundwater cleanup target levels. Leachability testing pursuant to USEPA Test Method 1312 (SPLP) must be performed on a minimum of three grab soil samples from each source area that exceed leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II, with the actual number of samples based on the horizontal and vertical extent of contamination and the site-specific stratigraphy;
- 3. alternative TRPHs cleanup target levels established in accordance with Rules 62-782.650(1)(a)1. and 62-782.650(1)(c)3., F.A.C.; or
- 4. alternative cleanup target levels established using appropriate site-specific properties of the contaminated soil in accordance with Rules 62-782.650(1)(a)3. and 62-782.650(1)(c)3., F.A.C.
- (c) Concentrations of contaminants in groundwater samples do not exceed the higher of the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I groundwater criteria column, except that if the site's groundwater contamination is affecting or may potentially affect a surface water body based on monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water criteria column or marine surface water criteria column, as applicable, shall also apply to groundwater; and

- (d) Concentrations of contaminants in surface water samples do not exceed the higher of the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water criteria column or marine surface water criteria column, as applicable.
- (2) A No Further Action with institutional controls or both institutional and engineering controls, shall apply if the controls are protective of human health, public safety and the environment and are agreed to by the current owner(s) of all affected properties, and the following conditions are met, as applicable:
- (a) Free product does not exist and no other fire or explosive hazard exists as a result of a release of non-aqueous phase liquids, or free product removal is not technologically feasible;
- (b) Alternative soil cleanup target levels have been established by the participant agreeing to one or more of the following:
- 1. the enactment of an institutional control, in which case the contaminant concentrations must not exceed the direct exposure commercial/industrial cleanup target levels or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II. If more than one contaminant is present at the site, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. The soil leachability cleanup target levels may be exceeded if it is demonstrated to the Department, based upon individual site characteristics and the restrictions in the institutional controls, that contaminants will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels specified in Chapter 62-777, F.A.C., Table I. If soil that exceeds the direct exposure residential or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-782.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated;
- 2. the enactment of an institutional control, in which case the contaminant concentrations in soil below two feet below land surface may exceed the direct exposure residential cleanup target levels but may not exceed the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II. The leachability cleanup target levels may be exceeded if it is demonstrated to the Department, based upon individual site characteristics and the restrictions in the institutional controls, that contaminants will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels specified in Chapter 62-777, F.A.C., Table I. If soil that exceeds direct exposure residential or leachability cleanup target levels specified in Chapter

- 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-782.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated, or exposed due to a change in site conditions;
- 3. the enactment of an institutional control, in which case the contaminant concentrations must not exceed the alternative soil cleanup target levels justified pursuant to Rule 62-782.650, F.A.C. If soil that exceeds direct exposure residential or leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-782.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated. The enactment of an institutional control is not necessary if the alternative soil cleanup target levels were justified solely using appropriate site-specific parameters of the contaminated soil in accordance with Rule 62-782.650(1)(a)3., F.A.C.; or
- 4. the implementation of engineering controls, such as permanent cover material, that prevent human exposure and limit water infiltration, in conjunction with institutional controls. If soil that exceeds direct exposure residential or leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-782.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated, or exposed due to a change in site conditions.
- (c) Alternative groundwater cleanup target levels have been established, depending on the current or projected use of groundwater in the vicinity of the site, by the participant agreeing to one or more of the following:
- 1. the enactment of an institutional control to ensure that the contaminated groundwater will not be utilized, in accordance with the following:
- a. for contamination of groundwater of low yield (average hydraulic conductivity of less than one foot per day, determined by performing slug tests on a minimum of three monitoring wells in each affected monitoring zone; and a maximum yield of 80 gallons per day, determined by pumping a four inch well screened across the cross-section of the plume, for a minimum of two hours) or with background concentrations that exceed Florida's Primary and Secondary Drinking Water Standards, then the cleanup target levels specified in Chapter 62-777, F.A.C., Table I groundwater of low yield/poor quality criteria column shall apply to groundwater;
- b. for groundwater contamination that is affecting or may potentially affect a surface water body with no other property or properties located between the source property boundary and the surface water body, then the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water criteria column or marine surface water criteria column, as applicable, shall apply to groundwater;

- c. for groundwater contamination that is limited to the immediate vicinity of the source area and the area of groundwater contamination is less than 1/4 acre, where it has been demonstrated by a minimum of one year of groundwater monitoring that the groundwater contamination is not migrating away from such localized source area, then the alternative cleanup target levels shall be established through a scientific evaluation. The scientific evaluation (historical data or modeling results, as applicable; the model used must be appropriate for the site conditions) must demonstrate that the contaminant concentrations in groundwater at the property boundary of the real property on which the contamination originates will not exceed the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I; or
- d. if alternative cleanup target levels have been justified pursuant to Rule 62-782.650, F.A.C., the contaminant concentrations do not exceed those alternative cleanup target levels; or
- 2. the implementation of engineering controls, such as a permanent containment (for example, a slurry wall), that prevent migration of the plume, in conjunction with institutional controls.
- (3) Unless the No Further Action Proposal is included in a Site Assessment Report pursuant to Rule 62-782.600(7)(b)1. F.A.C., two copies of the No Further Action Proposal shall be submitted by the participant to the Department for review when the criteria for No Further Action have been met. Before approval of a No Further Action with an institutional control or an engineering control accompanied by an institutional control, documentation of the agreement with the current property owner(s) of all affected properties regarding the institutional or engineering controls shall be submitted to the Department.
- (4) Within the time frames established in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with a Site Rehabilitation Completion Order approving the No Further Action Proposal;
- (b) Provide the reason(s) why the No Further Action Proposal does not contain information adequate to support the conclusion that the applicable No Further Action criteria in Rule 62-782.680, F.A.C., have been met.
- (5) The Site Rehabilitation Completion Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History-New

62-782.690 Natural Attenuation with Monitoring Criteria.

(1) Natural attenuation with monitoring is allowable for site rehabilitation depending on the current or projected use of groundwater in the vicinity of the site and the individual site characteristics, provided human health, public safety, and the

environment are protected. The individual site characteristics may include the current and projected use of the affected groundwater and surface water in the vicinity of the site, the current and projected land use of the area affected by the contamination, the exposed population, the location of the plume, the degree and extent of contamination, the rate of migration of the plume, the apparent or potential rate of degradation of contaminants through natural attenuation, and the potential for further migration in relation to the site's property boundary. Natural attenuation with monitoring is allowable provided the following criteria are met:

- (a) Free product does not exist and no other fire or explosive hazard exists as a result of a release of non-aqueous phase liquids;
- (b) Contaminated soil is not present, except that applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II may be exceeded if it is demonstrated to the Department that the soil does not constitute a continuing source of contamination to the groundwater at concentrations that pose a threat to human health, public safety, or the environment, and it is demonstrated that the rate of natural attenuation of contaminants in the groundwater exceeds the rate at which contaminants are leaching from the soil. The determination shall be based upon individual site characteristics and demonstrated by USEPA Test Method 1312 (SPLP) and based upon groundwater modeling, site stratigraphy, or site assessment results;
- (c) Contaminants present in the groundwater above background concentrations or applicable cleanup target levels are not migrating beyond the temporary point of compliance or migrating vertically, which may contaminate other aquifers or surface water resources or result in increased site rehabilitation time:
- (d) The physical, chemical, and biological characteristics of each contaminant and its transformation product(s) are conducive to natural attenuation;
- (e) The available data show an overall decrease in the contamination; and
- (f) The site is anticipated to achieve the applicable No Further Action criteria in Rule 62-782.680, F.A.C., as a result of natural attenuation in five years or less, the background concentrations or the applicable cleanup target levels are not exceeded at the temporary point of compliance as established pursuant to Rules 62-782.690(2) or (3), F.A.C., and contaminant concentrations do not exceed the criteria specified in Chapter 62-777, F.A.C., Table V; or
- (g) If the criteria in Rule 62-782.690(1)(f), F.A.C., are not met, the appropriateness of natural attenuation with monitioring may be demonstrated by the following:
- 1. a technical evaluation of groundwater and soil characteristics, chemistry, and biological activity that verifies that the contaminants have the capacity to degrade under the

- site-specific conditions. A listing of the site-specific conditions and geochemical parameters, as applicable, is provided in Chapter 62-777, F.A.C., Table IV;
- 2. a scientific evaluation (historical data or modeling results, as appropriate; the model used must be demonstrated to be appropriate for the site conditions) of the plume migration in relation to the temporary point of compliance as established pursuant to Rules 62-782.690(2) or (3), F.A.C., an estimation of annual milestone reductions of concentrations of contaminants in monitoring wells, and an estimation of the time required to meet the applicable No Further Action criteria in Rule 62-782.680, F.A.C. Available technical information (including historical water quality data) shall be used for model calibration; and
 - 3. a life-cycle cost analysis of remedial alternatives.
- (2) Provided human health, public safety and the environment are protected, the point of compliance may be temporarily moved from the source of the contamination.
- (a) The point of compliance may be temporarily moved to the property boundary, or to the edge of the plume when the plume is within the property boundary, while cleanup, including cleanup through natural attenuation processes in conjunction with appropriate monitoring, is proceeding.
- (b) The temporary point of compliance may extend beyond the property boundary when accompanied by monitoring, if such extension is needed to facilitate monitoring of natural attenuation or to address the current conditions of the plume, provided human health, public safety and the environment are protected. If the point of compliance is temporarily extended beyond the property boundary, it cannot be extended further than the lateral extent of the plume at the time of execution of the VCA if known, or the lateral extent of the plume as defined at the time of the approved site assessment. Prior to a temporary extension of the point of compliance beyond the property boundary, the participant shall provide actual notice to any affected local government and to the owner(s) of any property into which the point of compliance is allowed to extend. Such actual notice shall be in written form and mailed by "Certified Mail, Return Receipt Requested" to the current property owner at the owner's address listed in the current county property tax office records. Additionally, prior to extending the point of compliance beyond the property boundary, the participant shall provide constructive notice to residents and business tenants of the property into which the point of compliance is allowed to extend. Such constructive notice shall be achieved by posting the notice in the affected area and by publishing the notice, at least 16 square inches in size, in a newspaper of general circulation in the area and in ethnic newspapers or local community bulletins. Actual and constructive notices must include the following information:
- 1. the type of proposed agency action (i.e., temporary extension of the point of compliance);

- 2. a description of the location of the subject site, the Department's identification number assigned to the drycleaning facility or wholesale supply facility, and the name and address of the participant;
- 3. the location where complete copies of any relevant documents concerning the site and the proposed remedial strategy, including temporary extension of the point of compliance, are available for public inspection; and
- 4. a paragraph including the statement: "Persons receiving this notice shall have the opportunity to comment on the Department's proposed action within 30 days of receipt of the notice." The notice shall also include the name and address of a contact person at the Department with jurisdiction over the site, to whom comments should be directed. For purposes of actual notice, the 30-day comment period shall commence on the delivery date stamped on the return receipt. For purposes of constructive notice, the 30-day comment period shall commence on the date the signs are posted and the notice is published in newspapers and community bulletins, and the notice shall state the 30-day deadline by which comments must be received.
- (c) The location of the temporary point of compliance shall be based on the individual site characteristics listed in Rule 62-782.690(1), F.A.C.
- (3) Where surface water is or may be exposed to contaminated groundwater (based on monitoring well data, groundwater flow rate and direction, or fate and transport modeling), the point of measuring compliance with the surface water standards shall be in the groundwater from the landward side immediately adjacent to the surface water body.
- (4) Unless the Monitoring Only Proposal for Natural Attenuation with Monitoring is included in a Site Assessment Report pursuant to Rule 62-782.600(7)(b)2., F.A.C., two copies of the Proposal for Natural Attenuation with Monitoring shall be submitted by the participant to the Department for review when the criteria for Natural Attenuation with Monitoring have been met.
- (5) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Proposal for Natural Attenuation with Monitoring; or
- (b) Provide the reason(s) why the Monitoring Only Proposal for Natural Attenuation with Monitoring does not contain information adequate to support the conclusion that the applicable Natural Attenuation with Monitoring criteria in Rule 62-782.690, F.A.C., have been met.
- (6) The objective of the monitoring program shall be to achieve the applicable No Further Action criteria in Rule 62-782.680, F.A.C.
- (7) The monitoring program shall be performed as specified in the Natural Attenuation Monitoring Plan approval, as follows:
 - (a) A minimum of two monitoring wells are required:

- 1. at least one well shall be located at the downgradient edge of the plume; and
- 2. at least one well shall be located in the area(s) of maximum contaminant concentrations or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure);
- (b) The monitoring period shall be a minimum of one year, unless two consecutive quarterly sampling events have indicated that applicable cleanup target levels have been met, in which case the requirements of paragraph (8) shall apply;
- (c) The designated monitoring wells shall be sampled for analyses of applicable contaminants at a frequency specified in the Natural Attenuation Monitoring Plan approval;
- (d) Water-level measurements in all designated wells and piezometers shall be made immediately prior to each sampling event;
- (e) The analytical results (laboratory report), chain of custody record [Form 62-782.900(2)], table summarizing the analytical results, site map(s) illustrating the analytical results, and the water-level elevation information (summary table and flow map) shall be submitted by the participant as a Natural Attenuation Monitoring Report to the Department within the time frames specified in the VCA or in Rule 62-782.790, F.A.C.;
- (f) If analyses of groundwater samples indicate that concentrations of applicable contaminants exceed any action levels specified in the Monitoring Only Plan approval, the well or wells shall be resampled within 30 days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the participant to the Department within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., to:
- 1. perform a supplemental site assessment and submit a supplemental Site Assessment Report pursuant to Rule 62-782.600, F.A.C.;
 - 2. perform additional monitoring; or
- 3. prepare and submit a Remedial Action Plan pursuant to Rule 62-782.700, F.A.C.; and
- (g) The annual milestone reductions of contaminant concentrations in monitoring wells, which shall be used to verify annual progress of site rehabilitation by natural attenuation, shall be achieved during the monitoring program. If the annual rate of expected cleanup progress is not achieved, then the monitoring report described in Rule 62-782.690(7)(e), F.A.C., shall include a proposal to:
- 1. perform a supplemental site assessment and submit a supplemental Site Assessment Report pursuant to Rule 62-782.600, F.A.C.;
 - 2. perform additional monitoring; or
- 3. prepare and submit a Remedial Action Plan pursuant to Rule 62-782.700, F.A.C.

- (8) Following completion of natural attenuation monitoring, two copies of a Site Rehabilitation Completion Report shall be submitted by the participant to the Department for review, within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., when the criteria for No Further Action pursuant to Rule 62-782.680, F.A.C., have been met. The Site Rehabilitation Completion Report shall contain documentation adequate to support the opinion that site cleanup objectives have been achieved.
- (9) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with a Site Rehabilitation Completion Order approving the Site Rehabilitation Completion Report; or
- (b) Notify the participant in writing, stating the reason(s) why the Site Rehabilitation Completion Report does not contain information adequate to support the opinion that cleanup objectives have been achieved. Site rehabilitation activities shall not be deemed complete until such time as a Site Rehabilitation Completion Report is approved.
- (10) The Site Rehabilitation Completion Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New

62-782.700 Active Remediation.

- (1) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., two copies of a Remedial Action Plan shall be submitted by the participant to the Department for review. The objective of the active remediation shall be to achieve the applicable No Further Action criteria in Rule 62-782.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-782.690, F.A.C. The Remedial Action Plan must provide a design that addresses cleanup of all soil, sediment, groundwater, or surface water found to be contaminated.
- (2) Prior to performing any pilot study, a Pilot Study Work Plan shall be submitted by the participant to the Department for review in accordance with the time frames specified in the VCA or in Rule 62-782.790, F.A.C. to determine the need for any applicable Department permits or authorizations (for example, underground injection control, National Pollutant Discharge Elimination System, or air emissions) and to ensure that human health and the environment are adequately protected.
- (3) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Pilot Study Work Plan; or

- (b) Notify the participant in writing, stating the reason(s) why the Pilot Study Work Plan does not contain information adequate to support the conclusion that the pilot study will comply with all applicable requirements in Rule 62-782.700(2), F.A.C.
 - (4) The Remedial Action Plan shall:
- (a) Include all information required by Rule 62-782.300(2), F.A.C.;
- (b) Summarize the Site Assessment Report conclusions and any additional data obtained since its publication;
- (c) If groundwater contamination is present, include results from a round of groundwater sampling and analyses from a number of monitoring wells adequate to determine the highest concentrations of contaminants, to verify the horizontal and vertical extent of the plume, and to provide design data for the Remedial Action Plan. The sampling and analyses shall be performed within 270 days prior to submittal of the Remedial Action Plan. If the results from the confirmatory round of sampling contradict earlier results, then the applicable site assessment tasks specified in Rule 62-782.600, F.A.C., shall be performed;
- (d) Explain the rationale for the active remediation method selected, which shall include at a minimum:
 - 1. results from any pilot studies or bench tests; and
- 2. results of an evaluation of remedial alternatives, and a discussion of why other remedial alternatives considered were rejected, based on the following criteria:
- <u>a. long term and short term human health and environmental impacts;</u>
- b. implementability, which may include ease of construction, site access, and necessity for permits;
 - c. operation and maintenance requirements;
 - d. reliability;
 - e. feasibility;
 - f. estimated time required to achieve cleanup; and
- g. cost-effectiveness of installation, operation and maintenance, when compared to other site remediation alternatives;
- (e) Include an evaluation of the production of breakdown contaminants or by-products resulting from bioremediation, oxidation, or other natural processes, as applicable;
- (f) Summarize the operational details of the equipment to be used during active remediation, including:
 - 1. the disposition of any effluent;
- 2. the expected concentrations of contaminants in the effluent;
- 3. the method of air emissions treatment and the expected-quantities in pounds per day of any contaminants discharged into air as a result of all on-site active remediation systems. A separate air permit will not be required if the total air emissions from all on-site remediation equipment system(s) does not exceed 13.7 pounds per day. For on-site remediation

- equipment system(s) located at a facility that is a Title V source pursuant to Chapter 62-213, F.A.C., a separate permit under that chapter may be required;
- 4. the rates and concentrations of any in situ enhancement technologies implemented; and
- 5. the schedule for maintenance and monitoring of the remediation system;
 - (g) If groundwater contamination is present:
- 1. include a list of contaminants to be monitored in the recovery well(s) and in the effluent from the treatment system (based on the type of treatment employed and disposition of the effluent) or other chemical indicators to aid in the evaluation of the appropriateness natural attenuation with monitioring pursuant to Rule 62-782.690(1)(g)1., F.A.C., or an in situ method of site rehabilitation. Contaminants that do not exceed the background concentrations or the applicable cleanup target levels in samples from the recovery wells or monitoring wells for three consecutive quarters may be excluded from subsequent monitoring events;
- 2. include the designation of a representative number of monitoring wells and surface water bodies, and a proposal for their sampling frequency adequate to monitor the cleanup progress during active remediation, and the description of the methodology proposed to evaluate the effectiveness and efficiency of the remediation system. The designated wells shall include at least one well located at the downgradient edge of the plume and one well in the area of highest groundwater contamination or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure). Consideration shall be given to the expected duration of cleanup when specifying monitoring frequency. For cleanups expected to last greater than two years, wells shall be sampled quarterly for the first year and semiannually thereafter. For cleanups expected to last less than two years, wells shall be sampled quarterly;
- 3. include the designation of a representative number of previously contaminated monitoring wells. These wells shall be sampled once a year, and the samples shall be analyzed for the applicable contaminants in order to redefine the plume and fully evaluate the effectiveness and efficiency of the remediation system; and
- 4. include the designation of a representative number of monitoring wells and staff gauge locations to collect water-level data each time groundwater samples are collected;
- (h) Provide the details of any proposed treatment or disposition of contaminated soil or sediment. If contaminated soil exists at the site and active remediation does not include treatment or removal of such soil, the Remedial Action Plan shall include a proposal to implement an institutional control or both an institutional and an engineering control, pursuant to Rule 62-782.680(2), F.A.C.
- (5) Other requirements to be included in the Remedial Action Plan, if applicable, include the following:

- (a) Vacuum extraction systems shall be equipped with a means of air emissions treatment for at least the first 30 days of system operation. Air emissions treatment may be discontinued after the first 30 days of system operation if the total in air emissions from all the on-site remediation equipment system(s) does not exceed 13.7 pounds per day;
- (b) Bioventing systems shall be equipped with a means of air emissions treatment unless the Remedial Action Plan design is based on respiration rates and optimum air flow that result in soil remediation primarily by bioremediation with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup;
- (c) In situ air sparging systems shall be designed and operated in conjunction with air emissions treatment system(s) unless the Remedial Action Plan design is based on sparging rates and optimal air flow with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup. If a vacuum extraction system is used, the vacuum extraction system shall operate at an air flow rate at least 50% greater than the sparging air flow rate, and the vacuum extraction system shall be provided with air emissions control as described in Rule 62-782.700(5)(a), F.A.C.;
- (d) Biosparging systems shall be equipped with a means of air emissions control unless the Remedial Action Plan design is based on the optimum air sparging rates that promote biological activity with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup;
- (e) Multi-phase extraction systems shall be equipped with a means of air emissions treatment during system operation. Air emissions treatment may be discontinued if all on-site remediation equipment system(s) does not exceed 13.7 pounds per day; and
- (f) A sampling schedule shall be specified for monitoring vacuum extraction systems, in situ sparging, bioremediation, or other in situ means of remediation of soil and groundwater.
- (6) The Remedial Action Plan may propose active remediation followed by natural attenuation with monitoring. The active remediation may consist solely of soil remediation, short-term or intermittent groundwater remediation, other remedial enhancements, or combinations of these. The discontinuation of active remediation may be appropriate at any time, depending on the site-specific characteristics and conditions. The Remedial Action Plan shall include a discussion of when the active remediation will be discontinued.
- (7) The Remedial Action Plan may propose the use of new and innovative technologies or approaches to meet the No Further Action criteria in Rule 62-782.680, F.A.C., or the Natural Attenuation criteria in Rule 62-782.690, F.A.C. The Remedial Action Plan proposal of innovative technologies or approaches shall include a demonstration that the proposed

- technology or approach meets the criteria in Rules 62-782.700(1)-(6), F.A.C. These technologies or approaches may include low-cost enhancements to natural attenuation.
- (8) The remedial action plan summary form [Form 62-782.900(4)] shall be completed and submitted as part of the Remedial Action Plan. The information provided in the remedial action plan summary form shall be resubmitted to be consistent with the final approved Remedial Action Plan and any subsequent modifications to the approved Remedial Action Plan.
- (9) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Remedial Action Plan; or
 - (b) Notify the participant in writing, stating:
- 1. the reason(s) why the Remedial Action Plan does not contain information adequate to support the conclusion that the active remediation objectives will comply with all applicable requirements in Rule 62-782.700, F.A.C.; or
- 2. the reason(s) why the proposal or recommendation submitted pursuant to Rule 62-782.700, F.A.C., is not supported by the applicable criteria.
- (10) Prior to implementation of the Remedial Action Plan, the participant must obtain all applicable Department permits or authorizations required for site rehabilitation activities (for example, separate permits for underground injection control, National Pollutant Discharge Elimination System, or air emissions), if not included in the Remedial Action Plan approval. Participants are advised that other federal or local requirements may apply to these activities.
- (11) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., engineering drawings (As-Built Drawings) shall be submitted by the participant to the Department. The engineering drawings shall include all construction and equipment design specifications of the installed active remediation system(s) and any operational parameters different from those in the approved Remedial Action Plan. A summary of the system(s) startup activities shall be attached to the engineering drawings.
- (12) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the operation of the active remediation system shall be initiated unless permits required under Rule 62-782.700(10), F.A.C., have not been obtained. The following data shall be collected during active remediation, unless otherwise provided in the Remedial Action Plan:
- (a) Water-level data collected from all designated wells, piezometers, and staff gauge locations each time monitoring wells and recovery wells are sampled. If water-level data remain unchanged, the participant may propose, pursuant to Rule 62-782.700(15), F.A.C., that the requirement be modified or discontinued;

- (b) Total volume of free product recovered and the thickness and horizontal extent of free product during each month of the reporting period until free product is no longer detected in monitoring wells or recovery wells:
- (c) Total volume of groundwater recovered from each recovery well during each month of the operating period for the first year, and quarterly thereafter:
- (d) Concentrations of applicable contaminants based on analyses performed on the effluent from the treatment system, daily for the first five days with a 24 hour turnaround on analytical results, weekly for the next three weeks, monthly for the next two months, quarterly for the next two years and semi-annually thereafter;
- (e) Concentrations of applicable contaminants based on analyses performed on the untreated groundwater from the individual recovery well(s), as proposed in the approved Remedial Action Plan, weekly for the first month, monthly for the next two months, quarterly for the next two years and semi-annually thereafter;
- (f) Analytical data from all monitoring wells sampled during the remediation year to monitor rehabilitation progress during active remediation, including all information required by Rule 62-782.300(2), F.A.C.;
- (g) Operational parameters for in situ system(s), which include measurements of biological, chemical, or physical indicators that will verify radius of influence at representative monitoring locations, weekly for the first month, monthly for the next two months, quarterly for the first two years, and semi-annually thereafter. If operational parameters remain unchanged, the participant may propose, pursuant to paragraph (15), that the monitoring be modified or discontinued;
- (h) Operational parameters for bioremediation system(s), including measurements of dissolved oxygen at representative monitoring locations; rates of biological, chemical, or nutrient enhancement additions; and any other indicators of biological activity as proposed in the approved Remedial Action Plan; weekly for the first month, monthly for the next two months, and quarterly thereafter. If operational parameters remain unchanged, the participant may propose, pursuant to paragraph (15), that the monitoring be modified or discontinued;
- (i) Concentrations of recovered vapors from a vacuum extraction system and post-treatment air emissions, if air emissions treatment is provided, weekly for the first month, monthly for the next two months, and quarterly thereafter (for activated carbon off-gas treatment, additional sampling events may be performed based on the estimated time of breakthrough), unless two consecutive influent sampling events do not show exceedances of applicable air quality standards, as follows:

- 1. concentrations of recovered vapors from individual wells shall be determined using an organic vapor analyzer with a flame ionization detector, or other applicable field detection device, in order to optimize the air flow rate and contaminant
- 2. the influent and effluent samples shall be analyzed for contaminants of concern using an appropriate analytical method referenced in the approved Remedial Action Plan and specified in the approved comprehensive quality assurance plan pursuant to Chapter 62-160, F.A.C.; and
- 3. the samples shall be collected using appropriate air sampling protocols specified in the approved comprehensive quality assurance plan pursuant to Chapter 62-160, F.A.C.;
- (i) Percentage of system operation time and treatment efficiency for all operating treatment systems; and
- (k) Results of analyses of soil samples taken to verify that the applicable No Further Action criteria in Rule 62-782.680, F.A.C., or the applicable Natural Attenuation criteria in Rule 62-782.690, F.A.C., have been met, based on one of the following:
- 1. when both field screening and laboratory results using the most sensitive method for the constituent being analyzed for vacuum extraction systems indicate no detectable concentrations of contaminants in the recovered vapors;
- 2. when the screening for bioventing parameters indicates that the bioventing is complete; or
- 3. if alternative soil cleanup target levels were established pursuant to Rule 62-782.650, F.A.C., when system performance or monitoring using the applicable analytical methods for the appropriate constituents indicate that the alternative soil cleanup target levels have been achieved.
- (13) During implementation of the Remedial Action Plan, status reports of remedial action shall be submitted by the participant to the Department within the time frames specified in the VCA or in Rule 62-782.790, F.A.C. The Remedial Action Status Report shall contain the following information, as applicable:
- (a) A summary of the data requested in Rules 62-782.700(12)(a)-(k), F.A.C.;
- (b) All information required by Rule 62-782.300(2), F.A.C.;
- (c) A summary of the estimated mass of contaminants recovered in all phases, including non-aqueous free product, dissolved and vapor phases, by all on-site remediation equipment, and a comparison to the original estimate of mass of contaminants on-site;
- (d) One or more scaled site maps showing groundwater flow direction(s), and the current degree and extent of the contamination;
- (e) Conclusions as to the effectiveness of the active remediation for the specified period covered in the status report;

- (f) Recommendations to continue the operation of the treatment system(s) or to modify the site rehabilitation; and
- (g) The annual status report information, summarized on Form 62-782.900(5).
- (14) If effluent concentrations or air emissions exceed those in the approved Remedial Action Plan or plume migration occurs during remediation system startup or during operation of the treatment system, corrective actions shall be taken and the Department shall be notified by the participant within seven days. If the condition may represent a threat to human health, public safety or the environment, the Department shall be notified within 24 hours. Details of all such incidents shall be included in the status report described in Rule 62-782.700(13), F.A.C.
- (15) During implementation of the Remedial Action Plan, the participant may propose:
- (a) Supplemental assessment to determine alternative cleanup target levels pursuant to Rule 62-782.650, F.A.C. During the supplemental assessment, active remediation shall continue;
- (b) Modifications to existing treatment or recovery system(s) pursuant to Rule 62-782.700(13), F.A.C.; or
- (c) Alternative technologies or approaches pursuant to Rule 62-782.700(7), F.A.C.
- (16) Active remediation shall be deemed complete when the No Further Action criteria in Rule 62-782.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-782.690, F.A.C., have been met.
- (17) If the site does not meet the No Further Action criteria in Rule 62-782.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-782.690, F.A.C., the participant may propose the discontinuation of active groundwater remediation for review and approval by the Department, provided the following demonstration and analyses are met:
- (a) Contaminated soil has been properly removed and disposed, or treated in situ, so that the applicable soil cleanup target levels are met or addressed by the enactment and implementation of institutional controls or both institutional and engineering controls;
- (b) After a minimum of one year of groundwater treatment, concentrations of contaminants in designated monitoring wells and recovery wells have leveled off. This demonstration must be based on subsequent monthly sampling results obtained for a minimum of 180 days, unless an alternative frequency has been approved in the Remedial Action Plan or pursuant to paragraph (15). "Leveling-off" shall mean that the graph of contaminant concentrations versus time generally fits a curve defined by the equation $C=C_f+C_0e^{-kt}$. that the lower limb of the curve is substantially linear, and that the slope of the final portion of the curve approaches zero.

Applicable statistical methods shall be applied to demonstrate this conclusion. In the preceding equation, symbols are defined as follows:

- 1. C: concentration of the applicable contaminant at time t;
- 2. C_f: coefficient representing final concentration that the curve approaches asymptotically;
- 3. C₀: coefficient representing concentration difference between the final concentration and the concentration at time zero:
 - 4. e: 2.718, the base of natural logarithms;
- 5. k: coefficient representing the exponential factor that indicates how fast the concentration approaches $C_{\underline{f}}$:
 - 6. t: time in days from some fixed starting point;
 - (c) An analysis or demonstration has been made of:
- 1. the technical feasibility of enhancements to the existing remediation system;
- 2. the technical feasibility of other proven groundwater or soil treatment techniques to further reduce the concentrations of applicable contaminants at the site;
- 3. the costs and time frames involved to further reduce the concentrations of applicable contaminants employing the alternative method(s) proposed;
- 4. the effects on the designated or potential use of the water resource if contaminants remain at existing concentrations;
- 5. the effect on, and any protection that may be required of, surface water resources;
- 6. the effect on human health, public safety, and the environment if contaminants remain at existing concentrations;
- 7. the extent and potential for further migration of contaminated groundwater above background concentrations or applicable cleanup target levels; and
- 8. institutional controls or both institutional and engineering controls that may be necessary to ensure protection of the public and the environment from future use of contaminated groundwater.
- (18) The results of the demonstration and analyses described in Rules 62-782.700(17)(a)-(c), F.A.C., shall be compiled in a report and submitted by the participant to the Department for review in accordance with the VCA or with Rule 62-782.790, F.A.C. The Department shall determine, using the criteria specified in Rule 62-782.700(17)(c), F.A.C., whether modifications to the Remedial Action Plan are required pursuant to Rule 62-782.700(15), F.A.C., to effect further treatment; however, if alternative methods are not required, active remediation shall be deemed complete.
- (19) A Post Active Remediation Monitoring Plan shall be submitted by the participant to the Department pursuant to the Post Active Remediation Monitoring described in Rule 62-782.750, F.A.C., when the No Further Action criteria in Rule 62-782.680, F.A.C., or the leveling off criteria in Rule 62-782.700(17), F.A.C., have been met.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New

62-782.750 Post Active Remediation Monitoring.

- (1) Groundwater monitoring shall be performed following the completion of active groundwater remediation or soil remediation as described in Rule 62-782.700, F.A.C. When active groundwater remediation has met the No Further Action criteria in Rule 62-782.680, F.A.C., or the leveling off criteria in Rule 62-782.700(17), F.A.C., a Post Active Remediation Monitoring Plan using the provisions of Rule 62-782.750(3), F.A.C., and including analytical results demonstrating this conclusion, shall be submitted by the participant to the Department for review.
- (2) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with written approval of the Post Active Remediation Monitoring Plan; or
- (b) Notify the participant in writing, stating the reason(s) why the Post Active Remediation Monitoring Plan does not contain information adequate to support the conclusion, pursuant to Rule 62-782.700, F.A.C., that the applicable cleanup target levels shall be achieved at the end of the monitoring period.
- (3) The monitoring program shall be performed as specified in the Post Active Remediation Monitoring Plan approval, as follows:
 - (a) A minimum of two monitoring wells are required:
- 1. at least one well shall be located at the downgradient edge of the plume; and
- 2. at least one well shall be located in the area(s) of maximum contaminant concentrations or directly adjacent to it if the area of highest groundwater contamination is inaccessible (for example, under a structure);
- (b) The monitoring period shall be a minimum of one year. However, if contamination was only present in the unsaturated zone during the site assessment and active remediation tasks, only one round of groundwater sampling is required;
- (c) The designated monitoring wells shall be sampled quarterly or at a frequency specified in the Post Active Remediation Monitoring Plan approval for analyses of contaminants that were present prior to the initiation of active remediation;
- (d) The analytical results (laboratory report), chain of custody record [Form 62-782.900(2)], table summarizing the analytical results, and site map(s) illustrating the analytical results shall be submitted by the participant to the Department in a Post Active Remediation Monitoring Report within the time frames specified in the VCA or in Rule 62-782.790, F.A.C.; and
- (e) If analyses of groundwater samples indicate that concentrations of applicable contaminants exceed any action levels specified in the Post Active Remediation Monitoring Plan approval, the well or wells shall be resampled within 30

days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the participant to the Department within the time frames specified in the VCA or Rule 62-782.790, F.A.C.. to:

- 1. perform a supplemental site assessment and submit a supplemental Site Assessment Report pursuant to Rule 62-782.600, F.A.C.;
 - 2. perform additional monitoring; or
- 3. implement additional active remediation pursuant to Rule 62-782.700, F.A.C.
- (4) The remediation equipment shall be maintained in an inactive but operational status during the duration of post active remediation monitoring.
- (5) Following completion of monitoring pursuant to Rule 62-782.750, F.A.C., two copies of a Site Rehabilitation Completion Report shall be submitted by the participant to the Department for review, when the criteria for No Further Action pursuant to Rule 62-782.680, F.A.C., have been met within the time frames specified in the VCA or in Rule 62-782.790, F.A.C. The Site Rehabilitation Completion Report shall contain documentation adequate to support the opinion that site cleanup objectives have been achieved.
- (6) Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., the Department shall:
- (a) Provide the participant with a Site Rehabilitation Completion Order approving the Site Rehabilitation Completion Report; or
- (b) Notify the participant in writing, stating the reason(s) why the Site Rehabilitation Completion Report does not contain information adequate to support the opinion that the cleanup objectives have been met. Site rehabilitation activities shall not be deemed complete until such time as a Site Rehabilitation Completion Report is approved.
- (7) The Site Rehabilitation Completion Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS.

62-782.790 Time Schedules.

- (1) Site rehabilitation performed under this rule shall be conducted within the time frame specified in Table B in this chapter.
- (2) For site rehabilitation being performed at drycleaning sites eligible for state funded assistance under the Water Quality Assurance Trust Fund, the time frames specified in this chapter do not apply.
- (3) If the participant has entered into a Consent Order with the Department for site rehabilitation, the time frames and any alternative cleanup target levels set forth in the Consent Order shall take precedence over the time frames and cleanup target levels set forth in this chapter.

- (4) If the participant has voluntarily entered into a VCA with the Department for site rehabilitation, the time frames and any alternative cleanup target levels set forth in the VCA shall take precedence over the time frames and cleanup target levels set forth in this chapter.
- (5) Within 60 days of receipt of a written notification from the Department that a plan or report does not contain adequate information or that the information provided is not supported by the applicable criteria, the requested information shall be submitted by the participant to the Department.
- (6) A modification of the time frame may be obtained by the responsible party for any action set forth in this chapter for good cause shown by requesting in writing that the Department make such a modification. The request shall specify which time frame(s) is to be modified, the amount of additional time required, and provide documentation supporting the request. The request shall be received by the Department at least 20 days prior to the time the action is to be initiated. If emergency situations at a site do not allow for a full 20 days notice, the request shall detail such emergency situation. Within 20 days of receipt of a request for modification, the Department shall notify the responsible party if additional information regarding the request is needed. The Department shall notify the responsible party within 20 days of receipt of the request or of the additional information as to whether modification of the time frame(s) will be allowed. For purposes of this paragraph, good cause shall mean unanticipated events outside the control of the responsible party.
- (7) The failure of the responsible party to meet any time frame herein shall be a violation of Chapters 376 and 403, F.S., and shall be enforceable by the Department pursuant to Sections 376.303 and 403.121, F.S., or Consent Order.
- (8) The failure of the Department to meet any time frame herein shall entitle the responsible party to compel compliance through the provisions of Section 403.412, F.S., or through such remedies as may be available and appropriate in circuit court. In no circumstances shall the Department's failure to meet any time frame herein be construed as approval of any plan or action by the Department.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS.

62-782.800 Notices.

Within the time frames specified in the VCA or in Rule 62-782.790, F.A.C., except as provided in Rule 62-782.500(2)(f), F.A.C., written notification shall be provided by the participant to the Department prior to performing field activities such as Interim Source Removal activities, installing monitoring or recovery well(s), performing sampling, or installing remediation equipment. Personnel from the Department shall be allowed the opportunity to observe these field activities and to take split samples. Raw data shall be exchanged as soon as data are available. If the Department chooses to be present when the field activities are being performed, it shall be the Department's responsibility to confirm the field activities are being performed in accordance with the written notification.

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New

62-782.900 Forms.

The forms used by the Department in the Drycleaning Solvent Cleanup Program are adopted and incorporated by reference in this rule. Each form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Bureau of Waste Cleanup, 2600 Blair Stone Road, Tallahassee, FL 32399-2400; or to the applicable local district office of the Department.

- (1) Form 62-782.900(1), Free Product Removal Notification Form for Drycleaning Sites (effective).
- (2) Form 62-782.900(2), Chain of Custody Record (effective).
- (3) Form 62-782.900(3), Drycleaning Site Water Sampling Log (effective).
- (4) Form 62-782.900(4), Remedial Action Plan Summary (effective).
- (5) Form 62-782.900(5), Active Remediation Status Report Summary (effective).

Specific Authority 376.3078(4) FS. Law Implemented 376.3078(4) FS. History–New

Table A Drycleaning Contaminants of Concern (Table for use in Chapter 62-782, F.A.C.)

<u>(</u>
Contaminants of Concern – Chlorinated Solvent Sites
carbon tetrachloride
<u>chloroform</u>
chloroethane [or ethyl chloride]
chloromethane [or methyl chloride]
dichloroethane, 1,1-
dichloroethane, 1,2- [or EDC]
dichloroethene, 1,1-
dichloroethene, cis-1,2-
dichloroethene, trans-1,2-
methylene chloride [or dichloromethane]
tetrachloroethene [or PCE]
1,1,2 trichloro-1,2,2-trifluoroethane [or Freon 113]
trichloroethane, 1,1,1-
trichloroethene [or TCE]
vinyl chloride
Contaminants of Concern – Petroleum Solvent Sites
<u>benzene</u>
<u>ethylbenzene</u>
toluene
total xylenes
acenaphthene
acenaphthylene
methylnaphthalene,1-
methylnaphthalene,2-

naphthalene TRPHs

Table B **Submittals and Time Frames**

Type of Report	Participant Action or	<u>Department</u>
or Activity	Submittal Time	Review or
	Frames	Comment Time
		Frames
Interim Source	When seeking	Within 30 days
Removal	approval before	of receipt.
<u>Proposal</u>	implementation of an	
	alternative product	
	recovery method,	
	<u>groundwater</u>	
	recovery, soil	
	treatment or disposal	
	<u>technique</u>	
	(62-782.500, F.A.C.).	
Interim Source	Within 180 days of	No comment
Removal Status	initiating source	required.
Report Interim Source	removal activities. Within 60 days of	Within 60 days
Removal	completion of source	of receipt.
Report	removal activities.	or receipt.
Site	SAR submitted	Within 60 days
Assessment	within 270 days of	of receipt.
Report (SAR)	discharge or	<u> </u>
	discovery.	
Risk	Optional (within 60	Within 60 days
<u>Assessment</u>	days of SAR)	of receipt.
Report (RAR)		
No Further	When the site meets	Within 60 days
Action (NFA)	the criteria for NFA	of receipt.
Proposal	(62-782.680, F.A.C.).	Wid: 60 1
Natural	When the site meets	Within 60 days
Attenuation	the criteria for MO	of receipt.
(NA) with	(62-782.690, F.A.C.).	
Monitoring Proposal		
Proposal Natural	Within 60 days of	No comment
Attenuation	sample collection.	required.
Monitoring	zampre concention.	
Report		
(NAMR)		
Remedial	Within 90 days of	Within 60 days
Action	approval of a SAR or	of receipt.
Proposal (RAP)	RAR.	
As-Built	Within 120 days of	No comment
<u>Drawings</u>	initiating operation of	required.
	the active	
	remediation system.	N
<u>Initiate</u>	Within 120 days of	No comment
Operation of	RAP approval.	required.
Active		
Remedial		
<u>System</u>		

Remedial	Within 60 days of the	No comment
Action Status	anniversary date of	required.
Report	initiating operation of	required.
Report	active remediation	
	system.	
Post Active	When the site meets the	Within 60 days
Remediation	criteria for NFA	of receipt.
Monitoring	(62-782.680, F.A.C.) or	or receipt.
Plan	Leveling-Off	
(PARMP)	(62-782.700(17),	
(I AKWII)	F.A.C.)	
Post Active	Within 60 days of	No comment
Remediation	sample collection.	required.
Monitoring	<u>sample confection.</u>	required.
Report		
Site	Within 60 days of the	Within 60 days
Rehabilitation	final sampling event. If	of receipt. If the
Completion	Site Rehabilitation	drycleaning
Report	Completion Report	facility meets the
(SRCR)	(SRCR) not approved	requirements of
(BRCH)	then submit	Chapter 62-782,
	modifications, etc.	F.A.C. for the
	within 60 days of	issuance of a
	Department's response.	SRCO, a SRCO
	Department s response.	will be issued.
Notices for	Within seven (7) days	No comment
Field	but not less than 24	required.
Activities	hours prior notice to the	<u>==q</u>
	Department to perform	
	field activity.	
Submittal to	Within 60 days of	Within the same
the	receipt of the	time frame for
Department of	Department's response.	review of the
addenda,		original
responses, or		submittal.
modification		
to plans or		
reports,		
pursuant to		
Rule		
62-782.690,		
F.A.C.		
1./1.0.		

NAME OF PERSON ORIGINATING PROPOSED RULE: John M. Ruddell

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Kirby B. Green, III

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 2, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: August 14, 1998

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCKET NO.: 98-79R RULE CHAPTER TITLE: RULE CHAPTER NO.: Brownfields Cleanup Criteria Rule 62-785 **RULE TITLES: RULE NOS:** Referenced Guidelines 62-785.100 **Applicability** 62-785.150 Definitions 62-785.200 **Quality Assurance Requirements** 62-785.300 **Professional Certifications** 62-785.400 Combined Document 62-785.450 Interim Source Removal 62-785.500 Site Assessment 62-785.600 Risk Assessment 62-785.650 No Further Action Criteria 62-785.680 Natural Attenuation with Monitoring Criteria 62-785.690 Active Remediation 62-785.700 Post Active Remediation Monitoring 62-785.750 62-785.900

PURPOSE AND EFFECT: The Department is proposing amendments to the Rule Chapter to make clarifications to the rules, and to refine the cleanup target levels due to evolving science.

SUMMARY: The Department of Environmental Protection is proposing to amend the Brownfields Cleanup Criteria rules, Chapter 62-785, Florida Administrative Code (F.A.C.) The proposed amendments would repeal Tables I through VI, which set forth certain contaminant cleanup target levels and Figures 1-9 which set forth methodologies to establish alternative cleanup target levels. Simultaneously with the proposed repeal, the Department is proposing to create a new rule chapter, Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, to establish certain cleanup target levels applicable to the rehabilitation of brownfields, petroleum and drycleaning sites and at soil treatment facilities. The proposed new rule chapter would also set forth methodologies for use in establishing alternate cleanup target levels for brownfields contaminants of concern. Proposed amendments to the brownfields rule chapter will reference the Chapter 62-777, F.A.C., cleanup target levels and figures applicable to rehabilitation of brownfields sites. Some of the cleanup target levels now contained in the brownfields rule chapter will change when they are included in the proposed new Chapter 62-777, F.A.C. The proposed cleanup target levels were recalculated to refine the numbers based on rounding conventions and to emerging science. The proposed amendments to Chapter 62-785, F.A.C., and the simultaneous adoption of proposed rule Chapter 62-777, F.A.C., are intended to result in a structural change in the way the rules are applied to cleanup of brownfield sites.

STATEMENT SUMMARY OF OF **ESTIMATED** REGULATORY COST: The Department has in accordance with the requirements of Chapter 120, F.S., prepared a Statement of Economic Cost, which is summarized as follows: Quantitative assessment of economic impacts because of the absence of baseline data within the brownfields cleanup environment (please see the Statement of Estimated Regulatory Cost for 62-785, F.A.C., Brownfields Cleanup Criteria Rule dated March 1998). However, it may be reasonable to conclude (based on economic research applied to petroleum contaminated sites factoring in Risk-Based Corrective Action and natural attenuation with monitoring) that cleanup target levels that change after inclusion in Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels, are not expected to provide adverse economic impacts to either the Department or to stakeholders of the regulated community. This statement is made with the full knowledge that some of the cleanup target levels associated with contamination at brownfields sites will be more stringent. However, some of the cleanup target levels are less stringent, and the previous inclusion in Chapter 62-785, F.A.C., Brownfields Cleanup Criteria Rule, of Risk-Based Corrective Action principles and the application of natural attenuation with monitoring are expected to provide considerable net savings to cleanup costs of contaminated sites within a state-designated brownfield.

A copy of the Statement of Estimated Regulatory cost may be obtained by contacting the person designated below as the proposed rule contact. Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RISK IMPACT STATEMENT: A Risk Impact Statement prepared in accordance with 120.81, F.S., is available. A copy may be obtained by contacting the person designated below as the proposed rule contact.

SPECIFIC AUTHORITY: 376.81 FS.

LAW IMPLEMENTED: 376.80, 376.81 FS.

HEARING WILL BE HELD BEFORE THE ENVIRONMENTAL REGULATION COMMISSION AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., May 26-27, 1999

PLACE: Room 609, Twin Towers Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in of Personnel at (850)488-2996 Bureau (800)955-8771(TDD), at least seven days before the meeting. THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: Roger B. Register, Department of Environmental Protection, Bureau of Waste Cleanup, Mail Station 4505, Twin Towers, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)488-0190 or at the e-mail address: "register_r@dep.state.fl.us".

THE FULL TEXT OF THE PROPOSED RULES IS:

62-785.100 Referenced Guidelines.

Specific references to the guidelines listed below are made within this chapter. The 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. Use of these guidelines is not mandatory, but they are included for informational purposes only.

- (1) Development and Evaluation of Sediment Quality Assessment Guidelines, Volumes 1-4, dated November 1994.; and
- (2) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999.
- (2) Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-785, F.A.C., Final Report, dated April 30, 1998.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98<u>. Amended</u>

62-785.150 Applicability.

- (1) The cleanup criteria contained in this rule shall apply to any cleanup of a brownfield site or sites within a designated brownfield area. The site rehabilitation at a designated brownfield area is governed by the terms of a brownfield site rehabilitation agreement executed by the person responsible for brownfield site rehabilitation (PRFBSR) and the Department or a delegated local program pursuant to Section 376.80(5), F.S. This chapter is established for the purposes of protecting the human public health, and public safety and the environment under actual circumstances of exposure and for determining, on a site-specific basis, the rehabilitation program tasks that comprise a site rehabilitation program and the levels at which a rehabilitation program task and site rehabilitation program may be deemed completed. In establishing this chapter, risk-based corrective action principles were incorporated to the maximum extent feasible, to achieve protection of human health, and public safety and the environment in a cost-effective manner. Therefore, this chapter provides both default cleanup target levels and a process for the derivation of site-specific alternative cleanup target levels that are protective of human health, and public safety and the environment.
- (2) Chapter 62-777, F.A.C., provides groundwater, surface water, and soil cleanup target levels, as well as natural attenuation default concentrations for groundwater, a listing of soil properties and test methods, a listing of site-specific conditions and geochemical parameters, and default parameters and equations that may be used to establish cleanup target levels for contaminants not listed in Chapter 62-777, F.A.C., or alternative groundwater and soil cleanup target levels for listed contaminants.

(3)(2) Cleanup target levels for each contaminant found in groundwater, as specified in Chapter 62-777, F.A.C., Table I, or derived pursuant to paragraphs (4)(3) or (5)(4), or alternative cleanup target levels that may be established pursuant to Rules 62-785.650 or 62-785.680, F.A.C. this chapter, are enforceable under this chapter and at a designated brownfield area subject to a brownfield site rehabilitation agreement. Cleanup target levels for each contaminant found in groundwater shall be the applicable state water quality standards, except where alternative cleanup target levels are established pursuant to Rules 62-785.650 or 62-785.680, F.A.C. this chapter. This chapter is not intended to create any new water quality standards pursuant to Chapters 62-520 or 62-550, F.A.C. The eurrent numerical standards promulgated in Chapters 62-520 and 62-550, F.A.C., or cleanup target levels based on the minimum criteria specified in Chapters 62-520 or 62-550, F.A.C., are the cleanup target levels referenced in Chapter 62-777, F.A.C., Table I, as applicable. In establishing the applicable minimum criteria for groundwater, the following factors were considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient of 1 or less; the best achievable detection limits; and nuisance, organoleptic, and aesthetic considerations. Site-specific groundwater cleanup target levels may be justified based on background concentrations. Where contaminated groundwater is discharging into surface water, or when available information (for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling) indicates that it may discharge into surface water in the future, the cleanup target levels for the contaminants shall also be based on the surface water standards and criteria. The current numerical standards promulgated in Chapter 62-302, F.A.C., or cleanup target levels based on the toxicity criteria specified in Chapter 62-302, F.A.C., are referenced in Chapter 62-777, F.A.C., Table I, as applicable.

(4)(3) For contaminants found in groundwater not listed in Chapter 62-777, F.A.C., Table I, the cleanup target levels shall be derived based on:

- (a) The minimum criteria specified in Chapters 62-520 or 62-550, F.A.C., and the equations provided in Chapter 62-777, <u>F.A.C.</u>, Figures 1 and 2, as applicable. In establishing the applicable minimum criteria for groundwater, the following factors are to be considered: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard quotient of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and organoleptic, and aesthetic considerations; and
- (b) The toxicity criteria specified in Chapter 62-302, F.A.C., and the equations provided in Chapter 62-777, F.A.C., Figures 3A and 3B, if contaminated groundwater is discharging into surface water, or when available information

(for example, monitoring well data, groundwater flow rate and direction, or fate and transport modeling) indicates that it may discharge into surface water in the future.

(5)(4) For contaminants found in groundwater that affect the same target organ(s), except for those with eurrent numerical standards promulgated in Chapters 62-520 or 62-550, F.A.C., the cleanup target levels referenced specified in Chapter 62-777, F.A.C., Table I, or those derived pursuant to paragraph (4)(3), shall be adjusted accordingly, such that for non-carcinogenic contaminants that affect the same organ(s) the hazard index (sum of the hazard quotients) is 1 or less, and for carcinogens the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable. The synergistic and antagonistic effects of contaminants found in groundwater shall also be considered when the scientific data are available.

(6)(5) Cleanup target levels for contaminants found in soil, as specified in Chapter 62-777, F.A.C., Table II, or derived pursuant to paragraphs (7)(6) or (8)(7), or alternative cleanup target levels that may be established pursuant to Rules <u>62-785.650</u> or <u>62-785.680</u>, F.A.C. this chapter, are enforceable under this chapter and at a designated brownfield area subject to a brownfield site rehabilitation agreement. In establishing soil cleanup target levels, the methodology presented in the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777 62-785, F.A.C., Final Report, dated May 26, 1999 April 30, 1998, was utilized. In establishing soil cleanup target levels 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; a hazard quotient of 1 or less; and the best achievable detection limits. Site-specific soil cleanup target levels may be justified based on background concentrations. In establishing leachability-based soil cleanup target levels for protection of the groundwater, the soil cleanup target levels shall be based on the groundwater cleanup target levels or the alternative cleanup target levels for groundwater established pursuant to Rule 62-785.650, F.A.C., as appropriate.

(7)(6) For contaminants found in soil not <u>listed</u> specified in <u>Chapter 62-777, F.A.C.</u>, Table II, the cleanup target levels shall be derived based on the following:

- (a) For human exposure, the following factors are to be considered: calculations using a lifetime excess cancer risk level of 1.0E-6, a hazard quotient of 1 or less, the best achievable detection limits, and the naturally occurring background concentrations; and the equations provided in <u>Chapter 62-777, F.A.C., Figures 4, 5, 6, 7, and 8 must be utilized, as applicable; and</u>
- (b) For leachability, the soil cleanup target levels for protection of groundwater shall be based on the groundwater cleanup target levels or the alternative cleanup target levels for groundwater established pursuant to Rule 62-785.650, F.A.C., as appropriate, and the equation provided in Chapter 62-777, F.A.C., Figure 9.

(8)(7) For contaminants found in soil that affect the same target organ(s), the cleanup target levels specified in Chapter 62-777. F.A.C.. Table II, or those derived pursuant to paragraph (7)(6), shall be adjusted accordingly, such that for non-carcinogenic contaminants that affect the same organ(s) the hazard index (sum of the hazard quotients) is 1 or less, and for carcinogens the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable. The synergistic and antagonistic effects of contaminants found in soil shall also be considered when the scientific data are available.

(9)(8) For contaminants found at the site about which information regarding the actual circumstances of exposure has been provided to the person responsible for brownfield site rehabilitation (PRFBSR) by the Department, delegated local program, local government or the public, the cleanup target levels for the affected medium or media, except where a state water quality standard is applicable, shall be adjusted accordingly to take into account the site-specific exposure conditions including multiple pathways of exposure that affect the same individual or sub-population.

(10)(9) Receipt of approval under this chapter does not relieve the PRFBSR from the obligation to comply with other Department rules (for example, Chapters 62-701, 62-713, 62-730, 62-770, and 62-782, F.A.C.) regarding ooff-site disposal, relocation or treatment of contaminated media must be performed in accordance with applicable Department rules (for example, Chapters 62-701, 62-730, 62-770, and 62-775, F.A.C.). PRFBSR are advised that other federal or local requirements may apply to these activities

(11)(10) The cleanup criteria contained in this rule shall not affect the cleanup criteria, priority ranking, and other rights and obligations inherent in petroleum contamination site rehabilitation under the Petroleum Contamination Site Cleanup Criteria rule, Chapter 62-770, F.A.C., and drycleaning contamination site rehabilitation under the Drycleaning Solvent Cleanup Criteria rule, Chapter 62-782, F.A.C. Sections 376.30 through 376.319, F.S.

(12)(11) Final Orders related to the review of plans, reports, or any other submittals made by a person under the provisions of this chapter shall be undertaken by the Department or the delegated local program and shall be subject to the provisions of Chapter 120, F.S.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98, Amended

62-785.200 Definitions.

All words and phrases defined in Section 376.79, F.S., shall have the same meaning when used in this chapter unless specifically stated otherwise in this chapter. The following words and phrases used in this chapter shall, unless the context clearly indicates otherwise, have the following meanings:

(1) "Action level" means a specified concentration of a contaminant that, if exceeded during monitoring of natural attenuation with monitoring or post active remediation

monitoring, may require additional site assessment or active remediation. The Aaction levels are is established during the approval process for proposals for Natural Attenuation with Mmonitoring pursuant to Rule 62-785.690, F.A.C., or Post Active Remediation Monitoring pursuant to Rule 62-785.750, F.A.C. "Action levels" are not equivalent to "cleanup target levels"."

- (2) through (9) No change.
- (10) "Contaminated" means the presence of free product or any contaminant in surface water, groundwater, soil, sediment, or upon the land, in quantities or concentrations that may result in exceedances of the applicable cleanup target levels specified in Chapter 62-777, F.A.C., in this chapter or water quality standards in Chapters 62-3, 62-302, 62-520, or 62-550, F.A.C., or in quantities or concentrations that may result in contaminated sediment.
 - (11) through (12) No change.
- (13) "Contaminated soil" means soil that is contaminated with free product or contaminants to the extent that applicable soil cleanup target levels specified in Chapter 62-777, F.A.C., in this chapter are exceeded.
 - (14) through (18) No change.
- (19) "Innovative technology" means a process that has been tested and used as a treatment for contamination, but lacks an established history of full-scale use and information about its cost and how well it works sufficient to support prediction of its performance under a variety of operating conditions. An innovative technology is one that is undergoing pilot-scale treatability studies, which usually are performed in the field or the laboratory and require installation of the technology, and which provide performance, cost, and design objectives for the technology prior to full--scale use.
 - (20) through (22) No change.
- (23)"Person responsible for brownfield site rehabilitation" (PRFBSR) means the individual or entity that is designated by a local government in its resolution establishing a brownfield area to enter into the brownfield site rehabilitation agreement with the Department or the delegated local program, and that enters into an agreement with the local government for redevelopment of the site pursuant to Section 376.80(5)(i)(1), F.S.
 - (24) through (30) No change.
- (31) "Surface water" includes rivers, lakes, streams, springs, impoundments, canals and all other water upon the surface of the earth, whether contained in bounds, created naturally or artificially, or diffused. Stormwater and wastewater process water retention or treatment facilities, and canals and trenches that are integral to such facilities, that are not connected to other surface water, are not included in the definition of surface water.
 - (32) No change.

- (33) "Temporary point of compliance" is the boundary represented by one or more designated monitoring wells at which groundwater cleanup target levels may not be exceeded while site rehabilitation under an approved <u>natural attenuation</u> monitoring only plan for natural attenuation process is proceeding.
 - (34) No change.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98<u>. Amended</u>

- 62-785.300 Quality Assurance Requirements.
- (1) through (2)(a) No change.
- (b) Copies of the completed chain of custody record form(s) [(Form 62-785.900(2)]);
- (c) Copies of the completed water sampling log form(s) [(Form 62-785.900(3)]); and
 - (d) No change.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98, Repromulgated

- 62-785.400 Professional Certifications.
- (1) Applicable portions of technical documents submitted to the Department or to the delegated local program by the PRFBSR must be signed and sealed by a professional engineer registered under Chapter 471, F.S., and/or a professional geologist registered under Chapter 492, F.S., certifying that the applicable portions of the technical document and associated work comply with standard professional practices, the rules of the Department and any other laws and rules governing the profession. If a laboratory report is submitted separately from any other technical document submittal, this requirement shall not apply to that laboratory report.
 - (2) No change.

Specific Authority 376.81 FS. Law Implemented 376.80, 376.81, 403.0877 FS. History-New 7-6-98, Amended

62-785.450 Combined Document.

- (1) The Site Assessment Report, the Risk Assessment Report, and the Remedial Action Plan, as applicable, may be submitted by the PRFBSR to the Department or to the delegated local program for review either separately as each program task is completed, or as a combined document for review. Other individual program task documents may be included in a combined document if agreed to in the BSRA.
- (2) The combined document may incorporate, as applicable, the required content for the Site Assessment Report, Risk Assessment Report and Remedial Action Plan program tasks pursuant to Rules 62-785.600, 62-785.650 and 62-785.700, F.A.C., including a No Further Action Proposal or a Monitoring Only Proposal for Natural Attenuation for Monitoring associated with the Site Assessment Report or the Risk Assessment Report.
 - (3) through (4) No change.
 - (5) No change.

- (5)(a) Provide the PRFBSR with written approval of the Approve an individual program task or the combined document; or
 - (b)1. No change.
- 2. the reason(s) why a No Further Action Proposal or a Monitoring Only Proposal for Natural Attenuation with Monitoring does not meet the applicable criteria pursuant to Rules 62-785.680 or 62-785.690, F.A.C.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History–New 7-6-98, Amended_____.

62-785.500 Interim Source Removal.

- (1) Interim source removal includes removal of free product or contaminated soil, or removal of the source(s) of contamination. The objectives of the interim source removal are to remove specific known contaminant source(s), and/or provide temporary control to prevent or minimize contaminant migration, and to protect human health and the environment prior to the approval of a Remedial Action Plan prepared and submitted in accordance with Rule 62-785.700, F.A.C.
 - (2) Free Product Removal and Disposal.
- (a) The PRFBSR may perform product recovery provided that:
- 1. all applicable Department rules (for example, Chapters 62-730 and 62-770, F.A.C.) are followed before product recovery is performed. PRFBSR are advised that other federal or local requirements may apply to these activities;
- <u>1.2.</u> product recovery does not spread contamination into previously uncontaminated or less contaminated areas through untreated discharges, improper treatment, improper disposal or improper storage;
 - 2.3. flammable products are handled in a safe manner;
- 3.4. the recovered product is characterized and properly disposed in accordance with all Department rules (for example, Chapters 62-730 and 62-770, F.A.C.). PRFBSR are advised that other federal or local requirements may apply to these activities; and
- <u>4.5.</u> all sampling and analyses are performed in accordance with Rule 62-785.300, F.A.C.
 - (b)1. through (b)3. No change.
- (b)4. fluid vacuum techniques (for example, vacuum pump trucks) or total fluid displacement pumps, as long as the technique used does not smear or spread free product or result in contaminating previously uncontaminated or less contaminated media.
 - (c) through (c)2. No change.
 - (d) No change.
- (d)1. <u>provide the PRFBSR with written approval of Approve</u> the Interim Source Removal Proposal; or
- 2. <u>nNotify</u> the PRFBSR in writing, stating the reason(s) why the Interim Source Removal Proposal does not contain information adequate to support a product recovery method pursuant to Rule 62-785.500(2)(c), F.A.C.

- (2)(e) through (3)(a) No change.
- (3)(a)1. the groundwater contamination is of limited extent, such that the pumping of shallow aquifer well(s) within the plume may result in the site achieving the criteria for No Further Action in Rule 62-785.680, F.A.C., or the criteria for monitoring of Natural Attenuation with Monitoring in Rule 62-785.690, F.A.C.;
 - (a)2. through (a)3. No change.
- 4. the recovered groundwater is properly disposed at a publicly owned treatment works or at a permitted Hazardous Waste Treatment, Storage or Disposal facility, if the recovered groundwater is a hazardous waste; and
- 5. the groundwater recovery is limited to one pumping event.; and
- 6. the PRFBSR obtains all applicable permits or authorizations pursuant to Department rules (for example, Chapters 62-730 and 62-770, F.A.C.) before groundwater recovery is performed. PRFBSR are advised that other federal or local requirements may apply.
- (b) Within the timeframes and frequencies specified in the BSRA, an Interim Source Removal Status Report documenting the recovery progress and summarizing all recovery activities for a specified period of time shall be submitted by the PRFBSR to the Department or to the delegated local program for review.
 - (4) Groundwater Recovery, Treatment and Disposal.
- (a) The PRFBSR may perform groundwater recovery prior to the approval of a Remedial Action Plan prepared and submitted in accordance with Rule 62-785.700, F.A.C., provided the following criteria are met:
- 1. the PRFBSR submits submittal of a proposal that includes the same level of engineering detail as a Remedial Action Plan pursuant to Rule 62-785.700, F.A.C. Applicable sections must be signed and sealed in accordance with Rule 62-785.400, F.A.C.; and
- 2. the PRFBSR obtains all applicable permits or authorizations pursuant to Department rules (for example, Chapters 62-730 and 62-770, F.A.C.) before groundwater recovery is performed. PRFBSR are advised that other federal or local requirements may apply.
 - (4)(b) No change.
- 1. <u>provide the PRFBSR with written approval of Approve</u> the proposal; or
- 2. <u>nNotify</u> the PRFBSR in writing, stating the reason(s) why the proposal does not contain information adequate to perform groundwater recovery prior to the approval of a Remedial Action Plan pursuant to Rule 62-785.500(4), F.A.C.
 - (c) No change.
 - (5) Soil and Sediment Removal, Treatment and Disposal.

- (a) The PRFBSR may excavate contaminated soil or contaminated sediment for proper treatment or proper disposal as an interim source removal activity provided the following criteria are met:
 - (a)1. through 2. No change.
- 3. when a soil vacuum extraction system is necessary to abate an imminent threat to human life, health, or safety within a structure or utility conduit, then the vacuum extraction system must be designed and operated only to abate the imminent threat. The Department or the delegated local program must be notified, within 24 hours, of the imminent threat and the intent to use a soil vacuum extraction system. The air emissions monitoring and frequency of monitoring shall performed in accordance with 62-785.700(5)(4)(a) and (10)(i), F.A.C.;
- 4. the handling, storing, disposal or treatment of contaminated soil or sediment shall be performed in accordance with all applicable Department rules (for example. Chapters 62-701, 62-730 or 62-770, F.A.C.). Additionally, USEPA Test Method 1311, Toxicity Characteristic Leaching Procedure (TCLP), must be performed on a number of samples sufficient to verify that the contaminated soil or sediment does not exceed the applicable criteria for a hazardous waste unless the soil or sediment is known to be contaminated by petroleum or petroleum products or from a known listed hazardous waste; and
- 5. when excavated soil or sediment is temporarily stored or stockpiled on-site, the soil shall be secured in a manner that prevents human exposure to contaminated soil or sediment and prevents soil or sediment exposure to precipitation that may cause surface runoff, and any excavation shall be secured to prevent entry by the public. The temporary storage or stockpiling of excavated contaminated soil or sediment shall not exceed 60 days, or 90 days if the excavated contaminated soil or sediment is stored in accordance with Chapter 62-730, F.A.C. PRFBSR are advised that other federal or local requirements may apply to these activities.
 - (b) No change.
- (c) Soil or sediment treatment or disposal techniques not authorized by applicable rules of the Department require approval in an Interim Source Removal Proposal or in a Remedial Action Plan submitted pursuant to Rule 62-785.700, F.A.C. The Interim Source Removal Proposal shall include the information outlined in Rules 62-785.700(4)(3) and (5)(4), F.A.C., as applicable.
 - (d) No change.
- 1. provide the PRFBSR with written approval of approve the Interim Source Removal Proposal submitted pursuant to Rule 62-785.500(5)(c), F.A.C.; or
 - 2. No change.

(6) Authorizations.

Authorization or receipt of approval under Rule 62-785.500, F.A.C., does not relieve the PRFBSR from the obligation to comply with other Department rules (for example, Chapters 62-701 and 62-730, F.A.C.) for product recovery, product disposal, groundwater recovery, or the handling, storage, disposal or treatment of contaminated media. PRFBSR are advised that other federal or local requirements may apply to these activities.

(7)(6) Interim Source Removal Report.

- (a) through (a)5. No change.
- 6. a scaled site map (including a graphical representation of the scale used) showing location(s) of all on-site structures (including any buildings, locations of underground storage tanks, storm drain systems, and septic tanks-), locations where free product was recovered and the area of soil removal or treatment, and the approximate locations of all samples made;
 - 7. through 12. No change.
- (b) Within the timeframes specified in the BSRA, the Department or the delegated local program shall
- 1. provide the PRFBSR with written approval of approve the Interim Source Removal Report submitted pursuant to the criteria in Rule 62-785.500(7)(6), F.A.C.; or
- 2. notify the PRFBSR in writing, stating the reason(s) why the Interim Source Removal Report does not conform with the applicable Interim Source Removal criteria pursuant to Rule 62-785.500<u>(7)(6)</u>, F.A.C.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98, Amended_

- 62-785.600 Site Assessment.
- (1) through (2)(a)8. No change.
- (b) To determine whether contamination is present and the types of contaminants present, and to determine the horizontal and vertical extent of contamination in every medium found to be contaminated, such as: for soil, to the lower of the direct exposure residential I cleanup target levels and the applicable leachability cleanup target levels provided in Chapter 62-777, F.A.C., Table II; and for groundwater, to the groundwater cleanup target levels or to the Surface Water Criteria provided in Chapter 62-777, F.A.C., Table I, as applicable;
- (c) To determine or confirm the origin(s) of the source(s) of contamination, if technologically possible.; If the soil concentration of a contaminant is above its soil saturation concentration (Csat), free product may be present [refer to the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, dated May 26, 1999, for development of SCTLs based on Csat].
 - (d) through (k) No change.
- (l) To report any off-site activities (for example, dewatering, active remediation, or flood control pumping) in the immediate vicinity of the site that may have an effect on the groundwater flow at the site (for example, dewatering, active

remediation, or flood control pumping), unless the site meets the No Further Action criteria in Rule 62-785.680(1), F.A.C.; and

- (2)(m) through (4)(c) No change.
- (c) Sampling of undisturbed soil above and below the water table using <u>hand augering</u>, drilling or direct push technology to obtain information on site stratigraphy and non-aqueous phase liquids entrapped below the water table, to determine geotechnical parameters, and to assess the appropriateness of <u>using</u> natural attenuation <u>with monitoring</u>;
 - (d) through (h) No change.
- (i) Survey of every top-of-casing to the National Geodetic Vertical Datum (NGVD) of 1929 or to the North American Vertical Datum (NAVD88) of 1988;
 - (j) through (k) No change.
- 1. drill cuttings and drilling mud generated during monitoring well installation shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated or less contaminated media. Authorization under this rule does not relieve the PRFBSR from the obligation to comply with other Department rules and all applicable Department rules (for example, Chapters 62-701, 62-730, and 62-770, and 62-782, F.A.C.) for handling and disposal of contaminated media are followed. PRFBSR are advised that other federal or local requirements may apply; and
- 2. development water and purge water shall be handled and disposed of in such a manner that contamination is not spread into previously uncontaminated or less contaminated media. Authorization under this rule does not relieve the PRFBSR from the obligation to comply with other Department rules (for example, Chapters 62-701, 62-730, 62-770, and 62-782, F.A.C.) for handling and disposal of contaminated media. PRFBSR are advised that other federal or local requirements may apply;
 - (l) through (m) No change.
- (n) If the possibility exists that the contamination may have affected public or private water supply wells, sampling of the well or wells for the appropriate laboratory analyses, with the consent of the owner(s), to determine whether any contamination is present;
 - (o) No change.
- (p) Performance of slug tests or a pumping test, if appropriate, on different strata of the surficial aquifer or of different aquifers, if applicable, using water-table monitoring wells, intermediate depth monitoring wells, and vertical extent monitoring wells. Performance of a pumping test may be deferred until the Remedial Action Plan phase if groundwater extraction is proposed in accordance with the provisions of Rule 62-785.700, F.A.C. If a pumping test is performed within the plume, at least two samples of the groundwater withdrawn during the test shall be collected and analyzed for the appropriate contaminants and physical properties (for example, Hardness, Iron, Total Dissolved Solids and Total Suspended

<u>Solids</u>) that may affect the treatment system and disposal options (for example, Hardness, Iron, Total Dissolved Solids and Total Suspended Solids). At a minimum, one sample shall be collected at the <u>mid-point beginning</u> of the pumping test and one at the end of the pumping test;

- (q) No change.
- (r) Sampling of soil for USEPA Test Method 1312, Synthetic Precipitation Leaching Procedure (SPLP) analyses, or for USEPA Test Method 1311, Toxicity Characteristic Leaching Procedure (TCLP) analyses if the contamination is derived from used oil or similar petroleum products or if the information available indicates that the soil has the potential to be a hazardous waste there is insufficient information available to determine if the soil is a hazardous waste, or for the analyses of the physical parameters listed in Chapter 62-777, F.A.C., Table III; and
 - (4)(s) through (5) No change.
- (6) Two copies of a Site Assessment Report (that may reference previously submitted documents) shall be submitted by the PRFBSR to the Department or to the delegated local program for review within the timeframes specified within the BSRA.
 - (7) No change.
- (a) Summarize all tasks that were completed pursuant to Rules 62-785.600(2)-(4), F.A.C., and summarize the results obtained. All maps shall indicate the North direction, be drawn to scale, and include a graphical representation of the scale used. The following shall be included when applicable:
 - 1. through 3. No change.
- 4. one or more scaled site maps showing all pertinent surface and <u>subsurface</u> <u>geological</u> features present in the immediate vicinity of the contamination;
 - 5. through 14. No change.
- 15. a description of the site-specific stratigraphy, based on the <u>lithologic</u> boring logs prepared during monitoring well installation and on standard penetration test borings (including composition, thickness and continuity of various lithologic units);
 - 16. through 21. No change.
- 22. a table that is updated any time additional piezometers, monitoring wells, or recovery wells are installed and that summarizes the well construction details (including the top-of-casing elevation referenced to NGVD of 1929 or NAVD88, depth of the top of the screen below land surface, total depth and screen length, and ground surface elevation referenced to NGVD of 1929 or NAVD88) of all monitoring wells (including storage tank compliance wells or other compliance wells required by permit), piezometers, and recovery wells;
 - 23. through (7)(b)1. No change.

- 2. a Monitoring Only Proposal for Natural Attenuation with Monitoring may be included if the site meets the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C.
 - 3. No change.
- 4. a recommendation to prepare a Remedial Action Plan pursuant to Rule 62-785.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-785.680(1), F.A.C., unless a proposal for a No Further Action with engineering and institutional controls or both institutional and engineering controls pursuant to Rule 62-785.680(2), F.A.C., or a proposal for Natural Attenuation with Mmonitoring pursuant to Rule 62-785.690, F.A.C., or a recommendation to prepare a risk assessment pursuant to Rule 62-785.650, F.A.C., is included.
 - (8) No change.
- (a) Provide the PRFBSR with written approval of the Site Assessment Report and the proposal or recommendation submitted pursuant to Rule 62-785.600(7)(b), F.A.C.; or
 - (b) No change.
- 1. the reason(s) why the Site Assessment Report does not contain information adequate to support the conclusions regarding the site assessment objectives outlined in Rules 62-785.600(2)(a)-(m), F.A.C.; or
 - 2. No change.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History–New 7-6-98, Amended

- 62-785.650 Risk Assessment.
- (1) No change.
- (a) An exposure assessment that identifies pathways and routes by which human and environmental receptors may be exposed to contaminants and determines levels of contaminants to which human and environmental receptors may be exposed. The exposure assessment shall, as applicable:
- 1. identify concentrations of contaminants found at the site in all contaminated media [(refer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777 62-785, F.A.C., Final Report, dated May 26, 1999 April 30, 1998, for guidance on the derivation of alternative cleanup target levels for total recoverable petroleum hydrocarbons (TRPHs) based on a sub-classification methodology)];
 - 2. No change.
- 3. determine soil properties (for example, texture, moisture content, dry bulk density, organic carbon content, and infiltration rate) using methods listed in Chapter 62-777, F.A.C., Table III, or leaching potential as determined using a test such as USEPA Test Method 1312 (SPLP), in which leachate concentrations are compared with applicable groundwater cleanup target levels;
 - 4. through 6. No change.

- 7. determine exposure factors (exposure duration and frequency) based on site-specific characteristics, including consideration of current and plausible future land uses. Institutional and engineering controls may be proposed in order to ensure insure exposure factors do not change; and
 - 8. No change.
- (b) A toxicity assessment that determines human health and environmental criteria for contaminants found at the site. The criteria, taking into consideration acute and chronic health effects associated with short and long term exposure, may be developed for applicable exposure pathways and routes identified in the exposure assessment and shall include, as applicable:
 - 1. No change.
- 2. non-potable domestic water exposure from dermal contact, inhalation of vapors and mists, ingestion of food crops irrigated with such water, lawn watering, and other related exposures, and exposures to pets and livestock from ingestion;
 - 3. through 4. No change.
- (c) A risk characterization that utilizes the results of the exposure assessment, the toxicity assessment, and any other relevant public health and epidemiological assessments, to characterize cumulative risks from contaminants found at the site to the affected population(s) and the environment from contaminants found at the site. Based on the concentrations of contaminants found at the site, the characterization shall include, as applicable:
 - 1. through 2. No change.
- 3. derivation of alternative cleanup target levels such that: for non-carcinogenic contaminants that affect the same organ(s), the hazard index (sum of the hazard quotients) is 1 or less; and for carcinogens, the cumulative lifetime excess cancer risk level is 1.0E-6, as applicable [frefer to Appendix C of the Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777 62-785, F.A.C., Final Report, dated May 26, 1999 April 30, 1998, for guidance on the derivation of alternative cleanup target levels for TRPHs based on a sub-classification methodology; and to Chapter 62-777, F.A.C., Table III for methods to be used in determining soil properties for the derivation of alternative cleanup target levels based on site-specific soil characteristics). In developing alternative cleanup target levels, when scientific data are available the potential for additive, synergistic, or antagonistic interactions among contaminants and the potential for exposure to contaminants via multiple pathways shall be considered based on target organ(s) affected, mechanism(s) of toxicity, and empirical observations from clinical and laboratory studies. The default assumptions shall be that non-carcinogenic chemicals affecting the same target organ(s) have additive effects and that carcinogenic risk, regardless of target organ, is additive.

- (d) A justification for alternative cleanup target levels for groundwater or soil. The justification for the alternative cleanup target levels shall be based upon the site-specific characteristics affecting the site. In establishing the alternative cleanup target levels for groundwater or soil, the following factors shall be used, as applicable: calculations using a lifetime excess cancer risk level of 1.0E-6; a hazard index of 1 or less; the best achievable detection limits; the naturally occurring background concentrations; and (for groundwater only), nuisance, organoleptic, and aesthetic considerations.
 - 1. through 1.d. No change.
- 2. mathematical transport models may be used to predict contaminant movement in the environment in order to provide assurances that risks to human health and the environment resulting from the establishment of alternative cleanup target levels are acceptable. If a mathematical transport model for contaminants is used, the model shall be validated, and adjusted accordingly, after subsequent monitoring to validate a the No Further Action Proposal proposal or during natural attenuation with monitoring or active remediation monitoring, using empirical data as the data are obtained.
- (2) Two copies of the Risk Assessment Report shall be submitted by the PRFBSR to the Department or to the delegated local program for review, within the timeframes specified in the BSRA.
- (3) The Risk Assessment Report shall contain a description of the task elements undertaken, summarize the conclusions obtained, and include one of the following:
- (a) A No Further Action Proposal without institutional or engineering controls shall be included if the site meets the applicable No Further Action criteria in Rule 62-785.680(1), F.A.C., or a No Further Action Proposal with institutional controls or both institutional and engineering controls may be included if the site meets the applicable No Further Action criteria in Rule 62-785.680(2), F.A.C.;
- (b) A Monitoring Only Proposal for Natural Attenuation with Monitoring may be included if the site meets the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C.; or
- (c) A recommendation to prepare a Remedial Action Plan pursuant to Rule 62-785.700, F.A.C., shall be included if the site does not meet the No Further Action criteria in Rule 62-785.680(1), F.A.C., unless a proposal for a No Further Action with institutional controls or both institutional and engineering controls pursuant to Rule 62-785.680(2), F.A.C., or a proposal for Natural Attenuation with Mmonitoring pursuant to Rule 62-785.690, F.A.C., is included.
 - (4) No change.
- (a) Provide the PRFBSR with written approval of the Risk Assessment Report and the proposal or recommendation submitted by the PRFBSR pursuant to Rule 62-785.650(3), F.A.C.; or
 - (b) No change.

- 1. the reason(s) why the Risk Assessment Report does not contain information adequate to support the proposed alternative cleanup target levels; or
 - 2. No change.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History–New 7-6-98, Amended

- 62-785.680 No Further Action Criteria.
- (1) through (1)(a) No change.
- (b) Contaminated soil is not present in the unsaturated zone, as demonstrated by the analyses of soil samples <u>collected</u> from representative sampling locations that show that concentrations of all of the applicable contaminants <u>do not</u> exceed are less than:
 - 1. the background concentrations; or
- 2. the lower of the direct exposure <u>residential</u> I cleanup target levels or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II. If more than one contaminant is present at the site, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. For carcinogens, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified such that the cumulative lifetime excess cancer risk level posed by the contaminants is 1.0E-6. If only leachability cleanup target levels are exceeded, then direct leachability testing results may be used to demonstrate that leachate concentrations do not exceed the applicable groundwater cleanup target levels. Leachability testing pursuant to USEPA Test Method 1312 (SPLP), or USEPA Test Method 1311 (TCLP) if the contamination is derived from used oil or similar petroleum products, must be performed on a minimum of three grab soil samples from each source area that exceed leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II, with the actual number of samples based on the horizontal and vertical extent of contamination and the site-specific stratigraphy;
 - 3. No change.
- 4. alternative cleanup target levels established using appropriate site-specific soil properties of the contaminated soil in accordance with Rules 62-785.650(1)(a)3. and 62-785.650(1)(c)3., F.A.C.;
- (c) Concentrations of contaminants in None of the eontaminants analyzed for in groundwater samples do not exceed the higher of the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I groundwater criteria column Column A, except that if the site's groundwater contamination is affecting or may potentially affect a surface water body based on monitoring well data, groundwater flow rate and direction, or fate and transport modeling, then the cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water

criteria column or marine surface water criteria column Column B or Column C, as applicable, shall also apply to groundwater; and

- (d) Concentrations of contaminants in None of the eontaminants analyzed for in surface water samples do not exceed the higher of the background concentrations or the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water criteria column or marine surface water criteria column Column B or Column C, as applicable.
- (2) A No Further Action with institutional controls, or both institutional and engineering controls, shall apply if the controls are protective of human health, public safety and the environment and are agreed to by the current owner(s) of all affected properties, and the following conditions are met, as applicable:
 - (a) through (b) No change.
- 1. the enactment of an institutional control, in which case the contaminant concentrations must not exceed the direct exposure commercial/industrial H cleanup target levels or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II, as applicable. If more than one contaminant is present at the site, the direct exposure cleanup target levels in Chapter 62-777, F.A.C., Table II shall be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. The soil leachability cleanup target levels may be exceeded if it is ean be demonstrated to the Department or to the delegated local program, based upon individual site characteristics, that contaminants will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels specified in Chapter 62-777, F.A.C., Table I. If soil that exceeds the direct exposure residential I or the applicable leachability cleanup target levels specified listed in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-785.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated;
- 2. the enactment of an institutional control, in which case the contaminant concentrations in soil below two feet below land surface may exceed the direct exposure residential 4 cleanup target levels but may not exceed the applicable leachability cleanup target levels specified in Chapter 62-777, <u>F.A.C.</u>, Table II. The leachability cleanup target levels may be exceeded if it is ean be demonstrated to the Department or to the delegated local program, based upon individual site characteristics, that contaminants will not leach into the groundwater at concentrations that exceed applicable groundwater cleanup target levels specified in Chapter 62-777, <u>F.A.C.</u>, Table I. If soil that exceeds direct exposure residential Hor applicable leachability cleanup target levels specified listed in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in

- Rules 62-785.500(5) and (6), F.A.C., shall apply if the soil is later excavated, or exposed due to a change in site conditions or site conditions change and the contaminated soil is exposed;
- 3. the enactment of an institutional control, in which case the contaminant concentrations must not exceed the alternative soil cleanup target levels justified pursuant to Rule 62-785.650, F.A.C. <u>If soil that exceeds the direct exposure residential or the</u> applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-785.500(5) and (6), F.A.C., shall apply if the soil is later excavated. The enactment of an institutional control is not necessary if the alternative soil cleanup target levels were justified solely using appropriate site-specific soil parameters of the contaminated soil in accordance with Rule 62-785.650(1)(a)3., F.A.C.; or
- 4. the implementation of engineering controls, such as permanent cover material, that prevent human exposure and limit water infiltration, in conjunction with institutional controls. If soil that exceeds the direct exposure residential or the applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II is allowed to remain on-site, then soil removal, treatment and disposal criteria in Rules 62-785.500(5) and (6), F.A.C., shall apply if the contaminated soil is later excavated, or exposed due to a change in site conditions; and
 - (c) through (c)1. No change.
- 1.a. for contamination of groundwater of low yield (average hydraulic conductivity of less than one foot per day, determined by performing slug tests on a minimum of three monitoring wells in each affected monitoring zone; and a maximum yield of 80 gallons per day, determined by pumping a four inch well screened across the cross-section of the plume, for a minimum of two hours) or with background concentrations that exceed Florida's Primary and Secondary Drinking Water Standards, then the cleanup target levels specified listed in Chapter 62-777, F.A.C., Table I groundwater of low yield/poor quality criteria column Column D shall apply to groundwater;
- b. for groundwater contamination that is affecting or may potentially affect a surface water body with no other property or properties located between the source property boundary and the surface water body, then the applicable cleanup target levels specified in Chapter 62-777, F.A.C., Table I freshwater surface water criteria column or marine surface water criteria column Column B or Column C, as applicable, shall apply to groundwater;
- c. for groundwater contamination that is limited to the immediate vicinity of the source area and the area of groundwater contamination is less than 1/4 acre, where it has been demonstrated by a minimum of one year of groundwater monitoring that the groundwater contamination is not migrating away from such localized source area, then the

alternative cleanup target levels shall be established through a scientific evaluation. The scientific evaluation (historical data or modeling results, as applicable; the model used must be appropriate for the site conditions) must demonstrate that the contaminant concentrations in groundwater at the property boundary of the real property on which the contamination originates will not exceed the background concentrations or the applicable cleanup target levels specified in <u>Chapter 62-777</u>, <u>F.A.C.</u>, Table I; or

- d. No change.
- 2. the implementation of engineering controls, such as a permanent containment (for example, a slurry wall), that prevents migration of the plume, in conjunction with institutional controls.
- (3) Unless the No Further Action Proposal is included in a Site Assessment Report pursuant to Rule 62-785.600(7)(b)1., F.A.C., two copies of the No Further Action Proposal shall be submitted by the PRFBSR to the Department or to the delegated local program for review when the criteria for No Further Action have been met achieved. Before approval of a No Further Action with an institutional control or an engineering control accompanied by an institutional control, documentation of the agreement with the current property owner(s) of all affected properties regarding the institutional or engineering controls shall be submitted to the Department or to the delegated local program.
 - (4) No change.
- (a) Provide the PRFBSR with <u>a Site Rehabilitation</u> <u>Completion Order approving written approval of</u> the No Further Action Proposal; or
 - (b) No change.
- (5) The If the No Further Action Proposal meets the eriteria in Rule 62-785.680, F.A.C., then a Site Rehabilitation Completion Order shall be issued. This Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98. Amended ______.

62-785.690 Natural Attenuation with Monitoring Criteria.

(1) Natural attenuation with monitoring is may be allowable for site rehabilitation depending on the current or projected use of groundwater in the vicinity of the site and the individual site characteristics, provided human health, public safety, and the environment are protected. The individual site characteristics may include the current and projected use of the affected groundwater and surface water in the vicinity of the site, the current and projected land use of the area affected by the contamination, the exposed population, the location of the plume, the degree and extent of contamination, the rate of migration of the plume, the apparent or potential rate of degradation of contaminants through natural attenuation, and

the potential for further migration in relation to the site's property boundary. Natural attenuation with monitoring is allowable provided the following criteria are met:

- (a) No change.
- (b) Contaminated soil is not present, except that applicable leachability cleanup target levels specified in Chapter 62-777, F.A.C., Table II may be exceeded if it is demonstrated to the Department or to the delegated local program that the soil does not constitute a continuing source of contamination to the groundwater at concentrations that pose a threat to human health, public safety, and the environment, and it is ean be demonstrated that the rate of natural attenuation of contaminants in the groundwater exceeds the rate at which contaminants are leaching from the soil. The determination shall be based upon individual site characteristics and demonstrated by USEPA Test Method 1312 (SPLP), or USEPA Test Method 1311 (TCLP) if the contamination is derived from used oil or similar petroleum products, and based upon groundwater modeling, site stratigraphy, or site assessment results;
 - (c) through (e) No change.
- (f) The site is anticipated to achieve the applicable No Further Action criteria in Rule 62-785.680, F.A.C., as a result of natural attenuation in five years or less, the background concentrations or the applicable cleanup target levels are not exceeded at the temporary point of compliance as established pursuant to Rules 62-785.690(2) or (3), F.A.C., and contaminant concentrations do not exceed the criteria specified listed in Chapter 62-777, F.A.C., Table V; or
- (g) If the criteria in Rule 62-785.690(1)(f), F.A.C., are not met, the appropriateness of natural attenuation with monitoring may be demonstrated by the following:
- 1. a technical evaluation of groundwater and soil characteristics, chemistry, and biological activity that verifies that the contaminants have the capacity to degrade under the site-specific conditions. A listing of the site-specific conditions and geochemical parameters, as applicable, <u>is are provided in Chapter 62-777, F.A.C.</u>, Table IV;
- 2. a scientific evaluation (historical data or modeling results, as appropriate; the model used must be demonstrated to be appropriate for the site conditions) of the plume migration in relation to the temporary point of compliance as established pursuant to Rules 62-785.690(2) or (3), F.A.C., an estimation of annual milestone reductions of concentrations of contaminants in monitoring wells, and an estimation of the time required to meet achieve the applicable No Further Action criteria in Rule 62-785.680, F.A.C. Available technical information (including historical water quality data) shall be used for model calibration; and
- 3. a <u>life-cycle cost</u> cost-benefit analysis of remedial alternatives.

- (2) through (2)(a) No change.
- (b) The temporary point of compliance may extend beyond the property boundary when accompanied by monitoring, if such extension is needed to facilitate monitoring of natural attenuation or to address the current conditions of the plume, provided human health, public safety and the environment are protected. If the point of compliance is temporarily extended beyond the property boundary, it cannot be extended further than the lateral extent of the plume at the time of execution of the BSRA, if known, or the lateral extent of the plume as defined at the time of the approved site assessment. Prior to a temporary extension of the point of compliance beyond the property boundary, the PRFBSR shall provide actual notice to any affected local government and to the owner(s) of any property into which the point of compliance is allowed to extend. Such actual notice shall be in written form and mailed by "Certified Mail, Return Receipt Requested" to the current property owner at the owner's address listed in the current county property tax office records. Additionally, prior to extending the point of compliance beyond the property boundary, the PRFBSR shall provide constructive notice to residents and business tenants of the property into which the point of compliance is allowed to extend. Such constructive notice shall be achieved by posting the notice in the affected area and by publishing the notice, at least 16 square inches in size, in a newspaper of general circulation in the area and in ethnic newspapers or local community bulletins. Actual and constructive notices must include the following information:
 - (2)(b)1. through (3) No change.
- (4) Unless the Monitoring Only Proposal for Natural Attenuation with Monitoring is included in a Site Assessment Report pursuant to Rule 62-785.600(7)(b)2., F.A.C., two copies of the Monitoring Only Proposal for Natural Attenuation with Monitoring shall be submitted by the PRFBSR to the Department or to the delegated local program for review when the criteria for Natural Attenuation with Monitoring have been met achieved.
 - (5) No change.
- (a) Provide the PRFBSR with written approval of the Monitoring Only Proposal for Natural Attenuation with Monitoring; or
- (b) Provide the reason(s) why the Monitoring Only Proposal for Natural Attenuation with Monitoring does not contain information adequate to support the conclusion that the applicable Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C., have been met.
- (6) If the Monitoring Only Proposal for Natural Attenuation with Monitoring meets the criteria in Rule 62-785.690(1), F.A.C., then a Natural Attenuation Monitoring Only Plan approval shall be issued. The objective of the monitoring program shall be to meet achieve the applicable No Further Action criteria in Rule 62-785.680, F.A.C.

- (7) The monitoring program shall be performed as specified in the Natural Attenuation Monitoring Only Plan approval, as follows:
 - (a) No change.
- 1. at least one well shall be located at the downgradient edge of the plume downgradient from the area(s) of maximum contaminant concentrations; and
 - 2. through (b) No change.
- (c) The designated monitoring wells shall be sampled for analyses of applicable contaminants at a frequency specified in the Natural Attenuation Monitoring Only Plan approval;
 - (d) No change.
- (e) The analytical results (laboratory report), chain of record form [(Form 62-785.900(2))], table summarizing the analytical results, site map(s) illustrating the analytical results, and the water-level elevation information (summary table and flow map) shall be submitted by the PRFBSR as a Natural Attenuation Monitoring Only Report to the Department or to the delegated local program within the timeframes specified in the BSRA;
- (f) If analyses of groundwater samples indicate that concentrations of applicable contaminants exceed any action levels specified in the Natural Attenuation Monitoring Only Plan approval, the well or wells shall be resampled within 30 days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the PRFBSR within the timeframes specified in the BSRA to the Department or to the delegated local program within the timeframes specified in the BSRA to:
 - (f)1. through (g)3. No change.
- (8) Following completion of natural attenuation with monitoring, two copies of a Site Rehabilitation Completion Report shall be submitted by the PRFBSR to the Department or to the delegated local program for review, within the timeframes specified in the BSRA, when the criteria for No Further Action pursuant to Rule 62-785.680, F.A.C., have been met achieved. The Site Rehabilitation Completion Report shall contain documentation adequate to support the opinion that site cleanup objectives have been achieved.
 - (9) No change.
- (a) Provide the PRFBSR with a Site Rehabilitation Completion Order approving written approval of the Site Rehabilitation Completion Report; or
- (b) Notify the PRFBSR in writing, stating Provide the reason(s) why the Site Rehabilitation Completion Report does not contain information adequate to support the opinion that cleanup objectives have been achieved. Site rehabilitation activities shall not be deemed complete until such time as a Site Rehabilitation Completion Report is approved.
- (10) The Upon approval of the Site Rehabilitation Completion Report, the Department shall issue a Site Rehabilitation Completion Order. This Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History–New 7-6-98, Amended

62-785.700 Active Remediation.

- (1) Within the timeframes specified in the BSRA, two copies of a Remedial Action Plan shall be submitted by the PRFBSR to the Department or to the delegated local program for review. The objective of the active remediation shall be to meet achieve the applicable No Further Action criteria in Rule 62-785.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C. The Remedial Action Plan must provide a design that addresses cleanup of all soil, sediment, groundwater, or surface water found to be contaminated.
- (2) Prior to performing any pilot study, a Pilot Study Work Plan shall be submitted in accordance with the timeframes in the BSRA by the PRFBSR to the Department or to the delegated local program for review within the timeframes specified in the BSRA to determine the need for any applicable Department permits or authorizations (for example, underground injection control, National Pollutant Discharge Elimination System, or air emissions) and to ensure insure that human health and the environment are adequately protected.
 - (3) through (4)(f)2. No change.
- 3. the method of air emissions treatment and the expected quantities in pounds per day of any contaminants discharged into air as a result of all on-site active remediation systems. A separate air permit will not be required if the total volatile organic compounds in the air emissions from all on-site remediation equipment system(s) does not exceed 13.7 pounds per day. For on-site remediation equipment system(s) located at a facility that is a Title V source pursuant to Chapter 62-213, F.A.C., a separate permit under that chapter may be required;
 - 4. through (4)(g). No change.
- 1. include a list of contaminants to be monitored in the recovery well(s) and in the effluent from the treatment system (based on the type of treatment employed and disposition of the effluent) or other chemical indicators to aid in the evaluation of the appropriateness of natural attenuation with monitoring pursuant to Rule 62-785.690(1)(g)1., F.A.C., or an in situ method of site rehabilitation. Contaminants that do not exceed the background concentrations or the applicable cleanup target levels in samples from the recovery wells or monitoring wells for three consecutive quarters may be excluded from subsequent monitoring events;
- 2. include the designation of a representative number of monitoring wells and surface water bodies, and a proposal for their sampling frequency adequate to monitor the cleanup progress during active remediation, and the description of the methodology proposed to evaluate the effectiveness and efficiency of the remediation system. The designated wells shall include at least one well located at the downgradient edge of the plume and one a well in the area of maximum highest groundwater contamination or directly adjacent to it if the area

of highest groundwater contamination is inaccessible (for example, under a structure). Consideration shall be given to the expected duration of cleanup when specifying monitoring frequency. For cleanups expected to last greater than two years, wells shall be sampled quarterly for the first year and semiannually thereafter. For cleanups expected to last less than two years, wells shall be sampled quarterly;

- 3. through 4. No change.
- (h) Provide the details of any proposed treatment or disposition of contaminated soil or sediment. If contaminated soil exists at the site and active remediation does not include treatment or removal of such soil, the Remedial Action Plan shall include a proposal to implement an institutional control or both an institutional and <u>an</u> engineering control, pursuant to Rule 62-785.680(2), F.A.C.
 - (5) No change.
- (a) Vacuum extraction systems shall be equipped with a means of air emissions treatment for at least the first 30 days of system operation. Air emissions treatment may be discontinued after the first 30 days of system operation if the total volatile organic compounds in the air emissions from all the on-site remediation equipment system(s) do not exceed is less than 13.7 pounds per day;
- (b) Bioventing systems shall be equipped with a means of air emissions treatment unless the Remedial Action Plan design is based on respiration rates and optimum optimal air flow that result in soil remediation primarily by bioremediation with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup;
- (c) In situ air sparging systems shall be designed and operated in conjunction with air emissions treatment system(s) unless the Remedial Action Plan design is based on sparging rates and optimum optimal air flow with minimal volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup. If a vacuum extraction system is used, the vacuum extraction system shall operate at an air flow rate at least 50% greater than the sparging air flow rate, and the vacuum extraction system shall be provided with air emissions control as described in Rule 62-785.700(5)(a), F.A.C.:
- (d) Biosparging systems shall be equipped with a means of air emissions control unless the Remedial Action Plan design is based on the optimum air sparging rates that promote biological activity with minimal minimum volatilization of hydrocarbons. This objective shall be confirmed by emissions sampling during startup;
- (e) Multi-phase extraction systems shall be equipped with a means of air emissions treatment during system operation. Air emissions treatment may be discontinued if the total volatile organic compounds in the air emissions from <u>all</u> the on-site remediation equipment <u>system(s)</u> do not exceed is less than 13.7 pounds per day; and
 - (f) through (6) No change.

- (7) The Remedial Action Plan may propose the use of new and innovative technologies or approaches to meet the No Further Action criteria in Rule 62-785.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C. The Remedial Action Plan proposal of innovative technologies or approaches shall include a demonstration that the proposed technology or approach meets the criteria in Rules 62-785.700(1)-(6), F.A.C., These technologies or approaches may include low-cost enhancements to natural attenuation.
- (8) The remedial action plan summary form [(Form 62-785.900(4)]) shall be completed and submitted as part of the Remedial Action Plan. The information provided in the remedial action plan summary form shall be resubmitted to be consistent with the final approved Remedial Action Plan and any subsequent modifications to the approved Remedial Action Plan.
 - (9) through (12)(j) No change.
- (k) Results of analyses of soil samples taken to verify that the applicable No Further Action criteria in Rule 62-785.680, F.A.C., or the applicable Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C., have been meet achieved, based on one of the following:
 - (k)1. through (13) No change.
- (13)(a) A summary of the data requested in Rules 62-785.700(12)(a)-(k), F.A.C.;
 - (b) and (c) No change.
- (d) One or more scaled site maps showing groundwater flow direction(s), and the current degree and extent of the contamination;
 - (e) through (15)(c) No change.
- (16) Active remediation shall be deemed complete when the No Further Action criteria in Rule 62-785.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C., have been met.
- (17) If the site does not meet the No Further Action criteria in Rule 62-785.680, F.A.C., or the Natural Attenuation with Monitoring criteria in Rule 62-785.690, F.A.C., the PRFBSR may propose, the discontinuation of active groundwater remediation for review and approval by the Department or by the delegated local program, the discontinuation of active groundwater remediation, provided the following demonstration and analyses are met:
 - (17)(a) No change.
- (b) After a minimum of one year of groundwater treatment, concentrations of contaminants in designated monitoring wells and recovery wells have leveled off. This demonstration must be based on subsequent monthly sampling results obtained for a minimum of 180 days, unless an alternative frequency has been approved in the Remedial Action Plan or pursuant to paragraph (15). "Leveling-off" shall mean that the graph of contaminant concentrations versus time generally fits a curve defined by the equation C=Cf+Coe-kt,

that the lower limb of the curve is substantially linear, and that the slope of the final portion of the curve approaches zero. Applicable statistical methods shall be applied to demonstrate this conclusion. In the preceding equation, symbols are defined as follows:

- 1. through 8. No change.
- (18) The results of the demonstration and analyses described in Rules 62-785.700(17)(a)-(c), F.A.C., shall be compiled in a report and submitted by the PRFBSR to the Department or to the delegated local program for review in accordance with the BSRA. The Department or the delegated local program shall determine, using the criteria specified in Rule 62-785.700(17)(c), F.A.C., whether modifications to the Remedial Action Plan are required pursuant to paragraph (15) to effect further treatment; however, if alternative methods are not required, active remediation shall be deemed complete.
- (19) A Post Active Remediation Monitoring Plan shall be submitted by the PRFBSR to the Department or to the delegated local program pursuant to the Post Active Remediation Monitoring described in Rule 62-785.750, F.A.C., when the No Further Action criteria in Rule 62-785.680, F.A.C., or the leveling off criteria in Rule 62-785.700(17), F.A.C., have been meet achieved.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98, Amended

- 62-785.750 Post Active Remediation Monitoring.
- (1) Groundwater monitoring shall be performed following the completion of active groundwater remediation or soil remediation as described in Rule 62-785.700, F.A.C. When active groundwater remediation has met achieved the No Further Action criteria in Rule 62-785.680, F.A.C., or the leveling off criteria in Rule 62-785.700(17)(6), F.A.C., a Post Active Remediation Monitoring Plan using the provisions of Rule 62-785.750(3)(4), F.A.C., and including analytical results demonstrating this conclusion, shall be submitted by the PRFBSR to the Department or to the delegated local program for review.
 - (2) through (2)(a) No change.
- (b) Notify the PRFBSR in writing, stating the reason(s) why the Post Active Remediation Monitoring Plan does not contain information adequate to support the conclusion, pursuant to Rule 62-785.700, F.A.C., that the applicable cleanup target levels shall be achieved at the end of the monitoring period.
- (3) If the Post Active Remediation Monitoring Plan meets the applicable criteria in Rule 62-785.700, F.A.C., then a Post Active Remediation Monitoring Plan approval shall be issued.
- (3)(4) The monitoring program shall be performed as specified in the Post Active Remediation Monitoring Plan approval, as follows:
 - (a) No change.

- 1. at least one well shall be located at the <u>downgradient</u> <u>edge of the plume</u> <u>edge of the plume downgradient from the area(s) of maximum contaminant concentrations</u>; and
 - (a)2. through (3)(c) No change.
- (d) The analytical results (laboratory report), chain of custody record form [(Form 62-785.900(2)]), table summarizing the analytical results, and site map(s) illustrating the analytical results shall be submitted by the PRFBSR to the Department or to the delegated local program in a Post Active Remediation Monitoring Only Report within the timeframes specified in the BSRA; and
- (e) If analyses of groundwater samples indicate that concentrations of applicable contaminants exceed any action levels specified in the Post Active Remediation Monitoring Plan approval, the well or wells shall be resampled within no later than 30 days after the initial positive result is known. If the results of the resampling confirm the exceedance(s), then a proposal shall be submitted by the PRFBSR to the Department or to the delegated local program within the timeframes specified in the BSRA to:
 - (e)1. through 3. No change.
- (4)(5) The remediation equipment shall be maintained in an inactive but operational status during the duration of post active remediation monitoring.

(5)(6) Following completion of monitoring pursuant to Rule 62-785.750, F.A.C., two copies of a Site Rehabilitation Completion Report shall be submitted by the PRFBSR to the Department or to the delegated local program for review within the timeframes specified in the BSRA, when the criteria for No Further Action pursuant to Rule 62-785.680, F.A.C., have been met achieved within the timeframes specified in the BSRA. The Site Rehabilitation Completion Report shall contain documentation adequate to support the opinion that site cleanup objectives have been achieved.

- (6)(7) Within the timeframes specified in the BSRA, the Department or the delegated local program shall:
- (a) Provide the PRFBSR with <u>a Site Rehabilitation</u> <u>Completion Order approving written approval of</u> the Site Rehabilitation Completion Report; or
 - (b) No change.
- (7)(8) The Upon approval of the Site Rehabilitation Completion Report, the Department shall issue a Site Rehabilitation Completion Order. This Order shall constitute final agency action regarding cleanup activities at the site.

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History-New 7-6-98, Amended

62-785.900 Forms.

The forms used by the Department or by the delegated local program in the Brownfields Cleanup Criteria program are adopted and incorporated by reference in this rule. Each form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may

be obtained by writing to the Department of Environmental Protection, Bureau of Waste Cleanup, 2600 Blair Stone Road, Tallahassee, FL 32399-2400; to the applicable local district office of the Department; or to the applicable delegated local program.

- (1) <u>Form 62-785.900(1)</u>, Free Product Removal Notification Form for Brownfield Sites, (effective 7-6-98).
- (2) Form 62-785.900(2), Chain of Custody Record Form, (effective 7-6-98).
- (3) <u>Form 62-785.900(3)</u>, Brownfield Site Water Sampling Log Form, (effective 7-6-98).
- (4) Form 62-785.900(4), Remedial Action Plan Summary Form, (effective 7-6-98).
- (5) Form 62-785.900(5), Active Remediation Status Report Summary Form, (effective 7-6-98).

Specific Authority 376.81 FS. Law Implemented 376.81 FS. History–New 7-6-98, Amended_____.

The following tables and figures were deleted from Chapter 62-785, F.A.C.:

TABLE 1 Groundwater Cleanup Target Levels

TABLE II Soil Cleanup Target Levels

TABLE III Soil Properties and Test Methods

TABLE IV Site-Specific Conditions and Geochemical Parameters for Technical Evaluation of Natural Attenuation

TABLE V Natural Attenuation Default Source Concentrations

TABLE VI Default Parameters for Figures 4 and 5

FIGURE 1 EQUATION FOR DERIVING SITE-SPECIFIC CLEANUP TARGET LEVELS FOR CARCINOGENS IN GROUNDWATER

FIGURE 2 EQUATION FOR DERIVING SITE-SPECIFIC CLEANUP TARGET LEVELS

FOR SYSTEMIC TOXICANTS IN GROUNDWATER
FIGURE 3A EQUATIONS USED TO CALCULATE
FRESHWATER OR MARINE SURFACE WATER
CRITERIA BASED ON HUMAN HEALTH ENDPOINTS

FIGURE 3B METHODOLOGY USED TO CALCULATE FRESHWATER AND MARINE SURFACE WATER CRITERIA BASED ON CHRONIC TOXICITY

FIGURE 4 MODEL EQUATION FOR DEVELOPING ACCEPTABLE RISK-BASED

CONCENTRATIONS IN SOIL (Acceptable Soil Cleanup Target Levels for Carcinogens)

FIGURE 5 MODEL EQUATION FOR DEVELOPING ACCEPTABLE RISK-BASED CONCENTRATIONS IN SOIL (Acceptable Soil Cleanup Target Levels for Non-Carcinogens)

FIGURE 6 DERIVATION OF THE PARTICULATE EMISSION FACTOR

FIGURE 7 EQUATION USED FOR THE DETERMINATION OF THE VOLATILIZATION FACTOR

FIGURE 8 **EQUATION USED** FOR THE **DETERMINATION OF Csat**

FIGURE 9 EQUATION FOR THE DETERMINATION OF SOIL CLEANUP TARGET LEVELS (SCTLS) BASED ON LEACHABILITY

NAME OF PERSON ORIGINATING PROPOSED RULE: John M. Ruddell

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Kirby B. Green, III

DATE PROPOSED RULE APPROVED: April 2, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: December 11, 1998

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Law Enforcement

DOCKET NO.: 99-10R

RULE TITLE: RULE NO.:

Okeechobee Waterway Boating

Restricted Areas 62N-24.011

PURPOSE AND EFFECT: Martin County has requested that this department establish boating safety areas along the Okeechobee Waterway portion of the Florida Intracoastal Waterway as it makes its way through Martin County. These areas will be at the Timer Powers Park and boat ramp, the Palm City Bridge, the Florida Turnpike Bridge, the I-95 Bridge and the Moore Haven Lock Structure. The wakes from speeding vessels present a danger to vessels being launched or recovered at the public boat ramps located at the Timer Powers Park, Phipps Park and Leighton Park. Obstruction of visibility is also a concern in the areas around the Florida Turnpike Bridge, I-95 Bridge, the St. Lucie Lock and Dam, the Moore Haven Lock Structure.

The local offices of the Florida Marine Patrol and Florida Game and Fresh Water Fish Commission have confirmed that hazardous conditions exist at these locations.

By codifying these zones by rule, all zones established heretofore by the Department (or by the Department of Natural Resources, DNR) other than by rulemaking are disestablished, and any regulatory markers other than those installed to implement this rule will be removed.

This action is being coordinated with the Martin County Commission, United States Army Corps of Engineers and the United States Coast Guard.

SUMMARY: The establishment of Slow Speed Minimum Wake zones are as follows: A zone to begin 200 feet north of the centerline of the Palm City Bridge to 1,500 feet south of the centerline of the Palm City Bridge at the northern tip of island located east of Leighton Park at the public boat ramp in the Florida Intracoastal Waterway. A zone to begin at the St. Lucie Lock and Dam easterly, shoreline to shoreline, to 1,000 feet east of the eastern span of the northbound traffic lane of I-95. A zone beginning 1,000 feet east of the centerline of the Timer Powers Boat Ramp, shoreline to shoreline, to 1,000 feet west

of the centerline of the Timer Powers Boat Ramp at Timer Powers Park. A zone beginning at the Moore Haven Lock Structure 1,000 feet north of the lock gates to 500 feet southwest of the lock gates within Martin County.

Martin County will be authorized to install and maintain appropriate regulatory markers as directed by the Division of Law Enforcement within the boating restricted area and shall install and maintain "Resume Normal Safe Operation" markers at the boundaries of the boating restricted areas.

OF STATEMENT OF **ESTIMATED** SUMMARY REGULATORY COSTS: None.

Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 327.04, 327.46 FS.

LAW IMPLEMENTED: 327.46 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE TIME, DATE AND PLACE SHOWN BELOW. (IF NOT REQUESTED, THIS HEARING WILL NOT BE HELD):

TIME AND DATE: 7:00 p.m. – 9:00 p.m., May 26, 1999

PLACE: The United States Army Corps of Engineers, St. Lucie Lock & Dam Visitors Center, 2200 S. W. Canal Street, Stuart, Florida 33497, (561)219-4575 during normal business hours).

If accommodation for a disability is needed to participate in the activity, please notify the Personnel Services Specialist in the Bureau of Personnel at (850)488-2996 or (800)955-8771 (TDD), at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Ms. Tara Alford, Division of Law Enforcement, Office of Enforcement Planning & Policy Coordination, Mail Station 650, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, (850)488-5600, extension 136

THE FULL TEXT OF THE PROPOSED RULE IS:

62N-24.011 Okeechobee Waterway Boating Restricted Areas.

- (1) For the purpose of regulating speed and operation of vessel traffic on the Okeechobee Waterway, the following Boating Restricted Areas are established:
 - (a) 1. through 3. No change.
- 4. Palm City Bridge (C. R. 714) A Slow Speed Minimum Wake boating restricted area, shoreline to shoreline, in and adjacent to the Okeechobee Waterway, from 200 feet north of the centerline of the Palm City Bridge to 1,500 feet south of the centerline of the Palm City Bridge at the northern tip of the island located east of Leighton Park and the public boat ramp as depicted in drawing D.

- 5. St. Lucie Lock and Dam Structure, the Florida Turnpike and I-95 Bridges - A Slow Speed Minimum Wake boating restricted area, shoreline to shoreline, in and adjacent to the St. Lucie Lock and Dam easterly to 1,000 feet east of the eastern span of the northbound traffic lane of I-95, as depicted in drawing E.
- 6. Timer Powers Park and Boat Ramp A Slow Speed Minimum Wake boating restricted area, shoreline to shoreline, in and adjacent to the Okeechobee Waterway, from 1,000 feet east of the centerline of the Timer Powers Boat Ramp to 1,000 feet west of the centerline of the Timer Powers Boat Ramp, as depicted in drawing F.
- 7. Moore Haven Lock Structure A Slow Speed Minimum Wake boating restricted area, shoreline to shoreline, north from the lock gates 1,000 feet in and adjacent to the Okeechobee Waterway to 500 feet southwest of the lock gates, as in depicted marker G.
- (b) Martin County, Palm Beach County, the City of Clewiston (in coordination and cooperation with the South Florida Water Management District), and Glades County are authorized to install and maintain appropriate regulatory markers as directed by the Division of Law Enforcement within the boating restricted areas, or portions thereof, located within the respective counties. These local governmental entities may enter into agreements with public or private organizations or individuals to effect this purpose.
- (2) The boating restricted areas described in 62N-24.011 are depicted on the following drawings:

Specific Authority 327.04, 327.46 FS, Law Implemented 327.46 FS, History-New 1-5-88, Formerly 16N-24.011, 62N-24.011, Amended 1-8-96,

NAME OF PERSON ORIGINATING PROPOSED RULE: Tara Alford, Division of Law Enforcement, Marjorie Stoneman Douglas Building, 3900 Commonwealth Boulevard, Mail Station 650, Tallahassee, Florida 32399-3000

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: David B. Struhs, Secretary, Department of Environmental Protection, Marjorie Stoneman Douglas Building, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: March 14, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: April 2, 1999

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Marine Resources

DOCKET NO.: 99-08R

RULE CHAPTER TITLE: RULE CHAPTER NO.:

Comprehensive Shellfish Control Code 62R-7 **RULE TITLES:** RULE NOS.:

Shellfish Harvesting Area Standards 62R-7.004

Container Identification, Terminal Sale

Date; Prohibitions 62R-7.010

PURPOSE AND EFFECT: This amendment will reclassify the Apalachicola Bay System shellfish harvesting area in Franklin County during the summer months of July, August, and September. This reclassification was initiated based on a request made by the shellfish industry in Franklin County for harvesting during the summer months to continue from the summer approved West 1 area, to continue harvesting from an oyster bar commonly known as East Hole in the summer conditionally approved east area, and to discontinue harvesting from an oyster bar commonly known as Cat Point.

SUMMARY: The reclassification will remove the summer east conditionally approved area which includes the East Hole and Cat Point oyster bars and establish a new summer approved East Hole area which includes the East Hole oyster bar. Currently the Summer Conditionally Approved East area is closed to shellfishing during summer months when Apalachicola River discharge measured the same day at Blountstown exceeds 29,838 cubic feet per second (equivalent to Apalachicola River stage measured the same day at Blountstown exceeds 12.93 feet) or five-day cumulative rainfall measured at the Apalachicola Airport exceeds 4.99 inches. The summer approved East Hole area will be closed during emergency conditions in accordance with 62R-7.003(13) and 62R-7.004(9). The proposed reclassification of the East Hole oyster bar from summer conditionally approved East to summer approved East Hole is expected to decrease the duration of closure during the summer months by an average of 2.6 days per month, from 2.6 days per month closed to 0.0 days per month closed.

The acres of current classifications during the summer are 19,377 acres Summer Approved (10,688 in the Summer Approved area + 8,709 acres in the Summer West 1 Approved area), 20,581 acres Summer Conditionally Approved (3,714 acres in the Summer Conditionally Approved North area + 9,550 acres in the Summer Conditionally Approved South area + 7,317 acres in the Summer Conditionally Approved East area), 10,807 acres Conditionally Restricted; and 11,059 acres Prohibited. The reclassification will remove the 7,317 acre Summer Conditionally Approved East area and establish a new 1,785 acre Summer Approved East Hole area.

The sanitary conditions in these areas are appropriate for the proposed classifications to protect public health of shellfish consumers.

Additionally, the text descriptions of the four-digit area codes used on shellfish tags will be updated to identify the locations of where shellfish are harvested in the Apalachicola Bay shellfish harvesting area. These codes or the name of the harvest area must be recorded on harvester tags. This information provides for tracing shellfish that are implicated in illness outbreaks back to the harvest area.

These amendments place descriptions, references to shellfish harvesting area map numbers, and operating criteria for the Apalachicola Bay System shellfish harvesting area (#16) in the document Shellfish Harvesting Area Classification Boundaries and Management Plans. This document is hereby incorporated by reference in 62R-7.004(1). Additionally, these amendments provide an illustration of the Apalachicola Bay System shellfish harvesting area classification boundaries in shellfish harvesting area map #16. This map is hereby incorporated by reference in 62R-7.004(1).

SUMMARY OF STATEMENT OF **ESTIMATED** REGULATORY COST: No statement of estimated regulatory cost has been prepared.

Any person who wishes to provide information regarding the statement of estimated regulatory costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 370.021(1), 370.071(1) FS.

LAW IMPLEMENTED: 370.071 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE. A HEARING WILL BE HELD AT THE TIME, DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:00 a.m., Tuesday, May 14, 1999

PLACE: Marjory Stoneman Douglas Building, Conference Room B, First Floor, 3900 Commonwealth Boulevard, Tallahassee, Florida

If accommodation for a disability is needed to participate in this activity, please notify the Personnel Services Specialist in the Bureau of Personnel at (850)488-2996 or (800)955-8771 (TDD), at least seven days before the meeting.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULES IS: John McDowell, Bureau of Marine Resource Regulation and Development, 3900 Commonwealth Boulevard, Room 822, Tallahassee, Florida, Phone (850)488-5471

THE FULL TEXT OF THE PROPOSED RULES IS:

62R-7.004 Shellfish Harvesting Area Standards.

- (1) The Department shall describe and/or illustrate harvesting areas and provide harvesting area classifications as approved, conditionally approved, restricted, conditionally restricted, prohibited, or unclassified as defined herein, including criteria for opening and closing shellfish harvesting areas in accordance with Section C of the National Shellfish Sanitation Program Manual of Operations, Part I. Copies of individual shellfish harvesting area maps, revised April 14, 1999 January 6, 1999, and the document Shellfish Harvesting Area Classification Boundaries and Management Plans, revised April 14, 1999 January 6, 1999, containing shellfish harvesting area descriptions, references to shellfish harvesting area map numbers, and operating criteria herein incorporated by reference may be obtained by writing to the Department at 3900 Commonwealth Boulevard, Room 822, Tallahassee, Florida 32399.
- (2) through (10) No change.

This rule will take effect on 7-1-99.

Specific Authority 370.021(1), 370.071(1) FS. Law Implemented 370.071 FS. History—New 1-4-87, Amended 5-21-87, 8-26-87, 8-10-88, 8-31-88, 10-27-88, 7-18-89, 8-30-89, 11-11-90, 1-9-91, 11-5-92, 5-6-93, 5-31-94, Formerly 16R-7.004, Amended 7-3-95, 6-18-97, 7-1-97, 7-22-97, 10-12-97, 12-16-97, 12-28-97, 2-12-98, 2-25-98, 7-1-98, 7-20-98, 11-3-98, 12-28-98, 3-18-98, 7-1-99.

62R-7.010 Container Identification, Terminal Sale Date; Prohibitions.

- (1) through (2) No change.
- (3) The harvester's tag's shall contain legible waterproof information arranged in the specific order as follows:
- (a) The harvester's saltwater product license number as assigned by the Department;
 - (b) The date of harvesting;
 - (c) The time of harvest;
 - (d) The time of refrigeration, if applicable;
- (e) The identification of the harvest area using the four digit code or name of the harvest area listed in Table 2, which is incorporated herein and appears at the end of this Chapter, as well as the most precise identification within that area as practicable;
 - (f) Common name of shellfish and quantity of shellfish;

- (g) The following statement will appear in bold capitalized type "THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY AND THEREAFTER KEPT ON FILE FOR 90 DAYS."
 - (4) through (12) No change.

This rule will take effect on 7-1-99.

Specific Authority 370.071 (1) FS., Law Implemented 370.071 FS. History—New 1-4-87, 5-21-87, 8-10-88, 7-9-89, 8-30-89, 5-6-93, 9-14-93, 8-21-94, Formerly 16R-7.010, Amended 9-1-95, 5-8-96, 2-6-97, 10-12-97, 2-12-98, 2-25-98, 7-1-98, 11-3-98, 12-28-98, 3-18-98, 7-1-99.

TABLE 2: FOUR DIGIT CODES AND NAMES OF HARVEST AREAS

AREA

CODE HARVEST AREA NAME

- 0222 Pensacola Bay: Conditionally Approved (Escambia Bay, Winter, November 1 through March 30)
- 0232 Pensacola Bay: Conditionally Approved (East Bay, Winter, November 1 through March 30)
- 0242 Pensacola Bay: Conditionally Approved (Escambia Bay, Spring/Fall, April 1 through June 30 and October 1 through October 31)
- 0252 Pensacola Bay: Conditionally Approved (East Bay, Spring/Fall, April 1 through June 30 and October 1 through October 31)
- O215 Pensacola Bay: Restricted (Escambia Bay Spring/Fall, April 1 through June 30 and October 1 through October 31)
- 0216 Pensacola Bay: Conditionally Restricted (Escambia Bay Winter, November 1 through March 30)
- 0226 Pensacola Bay: Conditionally Restricted (East Bay, Winter, November 1 through March 30)
- 0622 Choctawhatchee: Conditionally Approved (Central)
- 0632 Choctawhatchee: Conditionally Approved (Eastern)
- 0806 West Bay: Conditionally Restricted (Spring/Fall, April 1 through June 30 and October 1 through November 30)
- 0812 West Bay: Conditionally Approved (Winter, December 1 through March 31)
- 0822 West Bay: Conditionally Approved (Spring/Fall, April 1 through June 30 and October 1 through November 30)
- 1012 North Bay: Conditionally Approved (Western)
- 1022 North Bay: Conditionally Approved (Eastern)
- 1206 East Bay: Conditionally Restricted
- 1212 East Bay: Conditionally Approved (Section 1)
- 1222 East Bay: Conditionally Approved (Section 2)
- 1401 St. Joe Bay: Approved
- 1506 Indian Lagoon: Conditionally Restricted
- 1512 Indian Lagoon: Conditionally Approved Zone X (April 1 June 30 & October 1 December 31)
- 1522 Indian Lagoon: Conditionally Approved Zone Y (April 1 June 30 & October 1 December 31)
- 1532 Indian Lagoon: Conditionally Approved Zone Z (April 1 June 30 & October 1 December 31)

- 1542 Indian Lagoon: Conditionally Approved Zone A (January 1 – March 31)
- 1552 Indian Lagoon: Conditionally Approved Zone B (January 1 – March 31)
- Apalachicola Bay: Approved (Winter) 1611
- 1621 Apalachicola Bay: Approved (Summer)
- Apalachicola Bay: Approved, Shellfish lease numbers 525, 551, 551B, 580, 582, 609, 672, and 981 (Summer)
- 1612 Apalachicola Bay: Conditionally Approved West 1 (Winter) or Apalachicola Bay: Approved West 1 (Summer)
- 1622 Apalachicola Bay: Conditionally Approved West 2 (Winter)
- 1632 Apalachicola Bay: Conditionally Approved West 3 (Winter)
- 1642 Apalachicola Bay: Conditionally Approved East (Winter) or Apalachicola Bay Approved East Hole (Summer) Apalachicola Bay: Conditionally Approved East (Summer)
- 1652 Apalachicola Bay: Conditionally Approved North (Summer)
- 1662 Apalachicola Bay: Conditionally Approved South (Summer)
- 1606 Apalachicola Bay: Conditionally Restricted
- Ochlockonee Bay: Conditionally Approved 2002
- 2006 Ochlockonee Bay: Conditionally Restricted
- 2206 Wakulla: Conditionally Restricted
- 2212 Wakulla: Conditionally Approved (Zone 1)
- 2222 Wakulla: Conditionally Approved (Zone 2)
- 2501 Horseshoe: Approved (Summer)
- 2502 Horseshoe: Conditionally Approved (Winter)
- 2506 Horseshoe: Conditionally Restricted (Winter)
- 2802 Suwannee Sound: Conditionally Approved
- 2806 Suwannee Sound: Conditionally Restricted
- 3012 Cedar Key: Conditionally Approved (Zone A)
- 3022 Cedar Key: Conditionally Approved (Zone B)
- 3006 Cedar Key: Conditionally Restricted
- Waccasassa Bay: Conditionally Approved 3202
- 3206 Waccasassa Bay: Conditionally Restricted
- 3402 Withlacoochee Bay: Conditionally Approved
- 3406 Withlacoochee Bay: Conditionally Restricted
- 3702 Citrus County: Conditionally Approved
- 3706 Citrus County: Conditionally Restricted
- 4202 Boca Ciega Bay: Conditionally Approved
- 4802 Lower Tampa Bay: Conditionally Approved
- 4806 Lower Tampa Bay: Conditionally Restricted

- 5402 Sarasota Bay: Conditionally Approved
- 5406 Sarasota Bay: Conditionally Restricted
- 5602 Lemon Bay: Conditionally Approved
- 5802 Gasparilla: Conditionally Approved
- 6002 Myakka River: Conditionally Approved
- 6006 Myakka River: Conditionally Restricted
- 6202 Pine Island Sound: Conditionally Approved
- Ten Thousand Islands: Conditionally Approved
- 7001 Indian River/St. Lucie: Approved
- 7006 Indian River/St. Lucie: Restricted
- 7202 North Indian River: Conditionally Approved
- North Indian River: Conditionally Restricted 7206
- 7412 Body F: Conditionally Approved (Zone 1)
- 7422 Body F: Conditionally Approved (Zone 2)
- 7416 Body F: Conditionally Restricted (Zone 3)
- 7426 Body F: Conditionally Restricted (Zone 4)
- 7506 Body E: Conditionally Restricted
- 7602 Body D: Conditionally Approved
- 7606 Body D: Conditionally Restricted
- Body C: Conditionally Approved (Zone 1, March 1 7712 through November 30)
- 7722 Body C: Conditionally Approved (Zone 2, March 1 through November 30)
- 7732 Body C: Conditionally Approved (December 1 through February 28 (or February 29 during a leap year)
- 7716 Body C: Conditionally Restricted (December 1 through February 28 (or February 29 during a leap year)
- 7726 Body C: Conditionally Restricted (March 1 through November 30)
- 7802 Body B: Conditionally Approved
- 7805 Body B: Restricted
- 7902 South Banana River: Conditionally Approved
- 7906 South Banana River: Conditionally Restricted
- 8001 Body A: Approved
- 8005 Body A: Restricted
- 8201 Volusia: Approved
- 8212 Volusia: Conditionally Approved (Zone 1)
- 8222 Volusia: Conditionally Approved (Zone 2)
- Volusia: Conditionally Restricted 8206
- 8802 St. Johns South: Conditionally Approved
- 8806 St. Johns South: Conditionally Restricted
- 9202 St. Johns North: Conditionally Approved
- St. Johns North: Conditionally Restricted 9206

INDEX OF SHELLFISH HARVESTING AREA MAPS

Revised April 14, 1999 January 6, 1999

Shellfish			
Name	Area Number	Map Number(s)	Revised date
Apalachicola Bay System	16	16	April 14, 1999
			April 22, 1998
Boca Ciega Bay	42	42	April 15, 1997
Body A	80	80	October 10, 1997
Body B	78	78	April 15, 1997
Body C	77	77A, 77B	April 15, 1997
Body D	76	76	April 15, 1997
Body E	75	75	April 15, 1997
Body F	74	74	April 15, 1997
Cedar Key	30	30	April 15, 1997
Choctawhatchee Bay	06	06	April 15, 1997
Citrus County	37	37	April 15, 1997
Duval County	96	96	April 15, 1997
East Bay	12	12	April 15, 1997
Gasparilla Sound	58	58	April 15, 1997
Horseshoe Beach	25	25A, 25B	January 6, 1999
Indian Lagoon	15	15A, 15B	April 15, 1997
Indian River/St. Lucie Counties	70	70	April 15, 1997
Lemon Bay	56	56	May 20, 1998
Lower Tampa Bay	48	48	April 15, 1997
Myakka River	60	60	October 28, 1998
North Bay	10	10	April 15, 1997
North Indian River	72	72	April 15, 1997
North St. Johns	92	92	April 15, 1997
Ochlockonee Bay	20	20	August 26, 1998
Pensacola Bay System	02	02A, 02B	April 15, 1997
Pine Island Sound	62	62	October 28, 1998
Sarasota Bay	54	54	April 15, 1997
South Banana River	79	79	May 21, 1997
South St. Johns	88	88	April 15, 1997
South Volusia	82	82A, 82B	December 10, 1997
St. Joseph Bay	14	14	April 15, 1997
Suwannee Sound	28	28	December 17, 1997
Ten Thousand Islands	66	66	April 15, 1997
Waccasassa Bay	32	32	April 15, 1997
Wakulla County	22	22	April 15, 1997
West Bay	08	08A, 08B	October 28, 1998
Withlacoochee Bay	34	34	April 15, 1997

INDEX OF SHELLFISH HARVESTING AREA CLASSIFICATION BOUNDARIES AND MANAGEMENT PLANS

Revised April 14, 1999 January 6, 1999

Shellfish Harvesting Area			
Name	Area Number	Map Number(s)	Revised date
Apalachicola Bay System	16	16	April 14, 1999
			April 22, 1998
Boca Ciega Bay	42	42	April 15, 1997
Body A	80	80	October 10, 1997
Body B	78	78	April 15, 1997
Body C	77	77A, 77B	April 15, 1997
Body D	76	76	April 15, 1997
Body E	75	75	April 15, 1997
Body F	74	74	April 15, 1997
Cedar Key	30	30	April 15, 1997
Choctawhatchee Bay	06	06	April 15, 1997
Citrus County	37	37	April 15, 1997
Duval County	96	96	April 15, 1997
East Bay	12	12	April 15, 1997
Gasparilla Sound	58	58	April 15, 1997
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Pensacola Bay System	02	02A, 02B	April 15, 1997
Pine Island Sound	62	62	October 28, 1998
Sarasota Bay	54	54	April 15, 1997
South Banana River	79	79	May 21, 1997
South St. Johns	88	88	April 15, 1997
South Volusia	82	82A, 82B	December 10, 199
St. Joseph Bay	14	14	April 15, 1997
Suwannee Sound	28	28	December 17, 199
Ten Thousand Islands	66	66	April 15, 1997
Waccasassa Bay	32	32	April 15, 1997
Wakulla County	22	22	April 15, 1997
West Bay	08	08A, 08B	October 28, 1998
Withlacoochee Bay	34	34	April 15, 1997

NAME OF PERSON ORIGINATING PROPOSED RULE: Robert Thompson

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Edwin Conklin, Director, Division of Marine Resources

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 14, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: March 26, 1999

DEPARTMENT OF HEALTH

Board of Medicine

RULE TITLE: RULE NO.: Fees 64B8-41.001

PURPOSE AND EFFECT: The Board of Medicine has approved for the Dietetics and Nutrition Practice Council to amend this rule to change some of the fees and update the rule text regarding special accommodations.

SUMMARY: Recommendations were made to the Board of Medicine to update this rule to amend some of the fees and to notify applicants of the proper rule to refer to when requesting special accommodations, and the Board agreed to the changes. SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST: No Statement of Estimated Regulatory Cost was prepared.

Any person who wishes to provide information regarding the statement of estimated costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 455.711, 468.507, 468.508 FS.

LAW IMPLEMENTED: 455.641, 455.711, 468.508 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE NOTICED IN THE NEXT AVAILABLE FLORIDA ADMINISTRATIVE WEEKLY.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Kaye Howerton, Executive Director, Dietetics and Nutrition Practice Council, 2020 Capital Circle, S. E., Bin #C05, Tallahassee, Florida 32399-3255

THE FULL TEXT OF THE PROPOSED RULE IS:

64B8-41.001 Fees.

- (1) The application fee for licensure shall be \$75.00 \$50.00.
- (2) The endorsement fee for an applicant seeking licensure by endorsement shall be 25.00 \$50.00.
 - (3) through (4) No change.
- (5) When the Counsel certifies the applicant to sit for the examination or for re-examination, it is the applicant's responsibility to complete the examination process with the national vendor. In compliance with the Americans for Disabilities Act, any applicant requesting special

accommodations shall comply with the Department of Health's rule 64B-1.005, F.A.C. The examination fee for an applicant seeking licensure by examination shall be \$150.00.

(6) The reexamination fee for an applicant seeking licensure by examination shall be \$150.00.

(6)(7) The biennial renewal fee shall be \$50.00 of which \$5.00 is specifically earmarked for the fund to combat unlicensed activity pursuant to Section 455.641, Florida Statutes.

(7)(8) The reactivation fee for inactive licenses shall be \$50.00 \$10.00.

(8)(9) No change.

(9)(10) The inactive status fee shall be \$25.00 \$10.00.

(10)(11) No change.

(11) $\frac{(12)}{(12)}$ No change.

Specific Authority 468.507, 468.508, 455.711 FS. Law Implemented 468.508, 455.641, 455.711 FS. History–New 4-9-89, Amended 8-28-90, 11-9-92, Formerly 21M-47.001, Amended 9-21-93, 11-4-93, 1-3-94, Formerly 61F6-47.001, Amended 12-28-94, 5-2-95, Formerly 59R-41.001, Amended 11-24-97......

NAME OF PERSON ORIGINATING PROPOSED RULE: Dietetics and Nutrition Practice Council

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Dietetics and Nutrition Practice Council

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 10, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: February 26, 1999

DEPARTMENT OF HEALTH

Board of Medicine

RULE TITLE:

Temporary Permits
64B8-42.003

PURPOSE AND EFFECT: The Board of Medicine has approved for the Distortion and Nutrition Practice Council to

approved for the Dietetics and Nutrition Practice Council to amend the rule text.

SUMMARY: Recommendations were made to the Board of Medicine to update the rule text with regard to temporary permits and the board agreed to the amendments.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COST: No Statement of Estimated Regulatory Cost was prepared.

Any person who wishes to provide information regarding the statement of estimated costs, or to provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

SPECIFIC AUTHORITY: 468.511, 468.507 FS.

LAW IMPLEMENTED: 468.511 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE NOTICED IN THE NEXT AVAILABLE FLORIDA ADMINISTRATIVE WEEKLY.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Kaye Howerton, Executive Director, Dietetics and Nutrition Practice Council, 2020 Capital Circle, S. E., Bin #C05, Tallahassee, Florida 32399-3255

THE FULL TEXT OF THE PROPOSED RULE IS:

64B8-42.003 Temporary Permits.

- (1) No change.
- (2) An applicant who has been issued a temporary permit based on apparent eligibility to take the for the next scheduled examination but who has never passed an examination to determine competency as recognized by the Board and who is not qualified for licensure by endorsement, may practice dietetics and nutrition under the supervision of a licensed dietitian/nutritionist until notification of the results of the examination. An applicant must take the examination within six months of the issuance of a temporary permit. A temporary permit shall expire one year from the date of issuance. The expiration date shall be extended for an applicant who did not take the examination due to illness, death of a family member, jury duty, military service, or similar circumstances beyond the applicant's control, provided a notarized statement and supporting documentation is supplied. Such extension is valid only until notification of the results of the next examination.
 - (3) No change.

Specific Authority 468.511, 468.507 FS. Law Implemented 468.511 FS. History–New 4-9-89, Formerly 21M-48.003, 61F6-48.003, Amended 11-12-95, Formerly 59R-42.003, Amended 11-24-97._____.

NAME OF PERSON ORIGINATING PROPOSED RULE: Dietetics and Nutrition Practice Council

NAME OF SUPERVISOR OR PERSON WHO APPROVED THE PROPOSED RULE: Dietetics and Nutrition Practice Council

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: April 10, 1999

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAW: February 26, 1999

Section III Notices of Changes, Corrections and Withdrawals

DEPARTMENT OF AGRICULTURE AND CONSUMER **SERVICES**

Division of Consumer Services

RULE TITLE: RULE NO.: 5J-12.005 **Local Ordinances**

NOTICE OF WITHDRAWAL

Notice is hereby given that the above rule, as noticed in Vol. 25, No. 2, January 15, 1999, Florida Administrative Weekly has been withdrawn.

DEPARTMENT OF TRANSPORTATION

RULE CHAPTER NO.: RULE CHAPTER TITLE: 14-96 State Highway System Connection Permits. Administrative Process RULE NOS.: **RULE TITLES:** 14-96.007 Application Submittal, Review, Approval, and Conditions 14-96.011 Permit Modification or Revocation: Alteration or Closure of **Permitted Connections** 14-96.012 Closure and Modification of

> (Including Those to be Considered "Grandfathered")

Unpermitted Connections

NOTICE OF CHANGE

SUMMARY OF CHANGE: Notice is hereby given that the following changes have been made to the proposed rule amendments in accordance with subparagraph 120.54(3)(d)1., Florida Statutes. Notice of rulemaking was published in Vol. 25, No. 7, February 19, 1999, issue of the Florida Administrative Weekly. The changes are in response to comments provided by the Joint Administrative Procedures Committee.

- 1. In 14-96.007(6)(b), the word "may" is changed to "will" so that the section reads as follows:
- "(b) Permit Time Extension. The permit will may be extended past the one year time limit (only with Department approval) for good cause, such as weather delays, natural disasters, local government coordination delays, or other technical problems not within the control of the applicant."
- 2. In 14-96.007(9), the next to last sentence is reworded to read as follows:
- "Action will be taken to revoke, close, or modify an eExisting access across a corridor may be revoked by the Department if it interferes with the safe or efficient operation of the corridor or the state highway."
- 3. 14-96.011(2)(b), last sentence is reworded to read as follows:
- "Where the Department's action requirement to file an application has become final and no timely application for a new access connection has been filed, the Department will may take immediate action to close or modify the connection in accordance with the notice."
- 4. In 14-96.012(2), the first sentence is deleted in its entirety.