## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Board of Dentistry |
| DIVISION: | N/A |
| SUBJECT: | Fees Applicable to the licensure, certification and registration of dentists, dental hygienists and dental assistants. |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Sections 63-1-107, 63-5-105, 63-5-114, 63-5-117 |
| EFFECTIVE DATES: | July 16, 2013 - June 30, 2014 |
| FISCAL IMPACT: | The proposed amendments may provide a minimal decrease in state government revenues. |
| STAFF RULE ABSTRACT: | The proposed amendments revise the fees applicable to dentists, dental assistants, and dental hygienists. The fees reduced or eliminated for dentists are as follows: the $400 dental licensure application fee will no longer be required for limited and educational limited licenses, instead, a $150 fee will apply to such licenses; the licensure renewal fee, excluding limited, education limited and inactive pro bono licenses, will be reduced from $300 to $250; the licensure renewal fee for limited and education limited licenses, will be reduced from $300 to $50; and the examination fee of $875 will no longer be required. The fees reduced or eliminated for dental hygienists are as follows: the licensure renewal fee will be reduced from $190 to $100; and the administration of local anesthesia certification fee of $50 will no be longer required. The fee reduced for dental assistants is as follows: the registration renewal fee will be reduced from $135 to $50. |

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

No written or public comments were submitted at this hearing.

**Regulatory Flexibility Addendum**
Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

Regulatory Flexibility Act Analysis
of Impact on Small Businesses

(1) The proposed rule amendments do not overlap, duplicate, or conflict with other federal, state, and local governmental rules.

(2) The language of the proposed rule amendments is clear, concise, and lacks ambiguity.

(3) The proposed rule amendments do not institute new compliance or reporting requirements for small businesses.

(4) The rule amendments do not establish schedules or deadlines for compliance and/or reporting requirements for small businesses.

(5) The rule amendments clarify existing requirements and do not institute new compliance or reporting requirements for small businesses.

(6) The rule amendments do not establish new performance standards for small businesses and do not establish design or operational standards.

(7) The proposed rule amendments do not create unnecessary entry barriers or other effects that stifle entrepreneurial activity.

## STATEMENT OF ECONOMIC IMPACT TO SMALL BUSINESSES

**Name of Board, Committee or Council:** Tennessee Board of Dentistry

**Rulemaking hearing date:** January 31, 2013

1. **Type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, and/or directly benefit from the proposed rule:**

   The proposed rule amendments only affect licensed dentists, dental hygienists and dental assistants. The proposed rules reduce existing fee requirements and, as such, there are no additional costs or direct benefit to any small businesses.

2. **Projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record:**

   The proposed rules only reduce existing fees and, as such, do not require reporting, recordkeeping or other administrative costs in order to comply with the proposed rule.

3. **Statement of the probable effect on impacted small businesses and consumers:**

   These rules do not impact small businesses or consumers. The rules reduce licensure fee amounts for dentists, dental hygienists and dental assistants applying for licensure.

4. **Description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and/or objectives of the proposed rule that may exist, and to what extent, such alternative means might be less burdensome to small business:**

   The Board of Dentistry does not believe there are less burdensome alternatives to the proposed rule amendment. The rules are positive in that they provide a lesser financial burden on applicants and are not burdensome to small businesses.

5. **Comparison of the proposed rule with any federal or state counterparts:**

   **Federal:** The Board of Dentistry is not aware of any federal entity that regulates the practice of Dentistry.

   **State:** After reviewing the rules for other states in the southeastern region of the United States, it has been determined that other states either have rules that are consistent with the proposed rule amendments or do not address the specific topics covered by the proposed rule amendments.

6. **Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.**

   An exemption of small businesses is not applicable as the proposed rules only reduce existing fees and, as such, do not impact small businesses.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

These rule amendments are not expected to have an impact on local governments.

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**Division of Publications**
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**For Department of State Use Only**

Sequence Number: 04-14-13
Rule ID(s): 5476
File Date: 4/17/13
Effective Date: 7/16/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Board of Dentistry |
| **Division:** | |
| **Contact Person:** | Jennifer L. Putnam, Assistant General Counsel |
| **Address:** | Office of General Counsel<br>220 Athens Way, Suite 210<br>Nashville, TN 37243 |
| **Phone:** | 615-714-1611 |
| **Email:** | Jennifer.Putnam@tn.gov |

**Revision Type (check all that apply):**
X Amendment
___ New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0460-01 | General Rules |
| **Rule Number** | **Rule Title** |
| 0460-01-.02 | Fees |

(Rule 0460-01-.01, continued)

(28) Specialist - A licensee who has satisfactorily completed the requirements as set forth in the Dental Practice Act and these rules to practice one of the specialties recognized by the Board.

***Authority:*** *T.C.A. §§4-5-202, 4-5-204, 63-5-101, 63-5-105, 63-5-107, 63-5-108, 63-5-111 through 63-5-115, and 63-5-117.* ***Administrative History:*** *Original rule filed June 7, 1974. Repeal and new rule filed August 26, 1980; effective December 1, 1980. Amendment filed September 13, 1985; effective October 13, 1985. Amendment filed September 24, 1987; effective November 8, 1987. Amendment filed April 30, 1991; effective June 14, 1991. Repeal and new rule filed December 11, 1991; effective January 25, 1992. Amendment filed February 12, 1996; effective April 27, 1996. Amendment filed December 7, 1998; effective February 20, 1999. Amendment filed February 9, 2000; effective April 24, 2000. Amendment filed August 21, 2002; effective November 4, 2002. Amendment filed February 18, 2003; effective May 4, 2003. Amendment filed September 17, 2003; effective December 1, 2003. Amendment filed November 17, 2003; effective January 31, 2004. Amendment filed June 18, 2004; effective September 1, 2004. Amendment filed December 28, 2004; effective March 13, 2005. Amendments filed August 3, 2005; effective October 17, 2005. Amendment filed August 23, 2005; effective November 6, 2005. Amendment filed October 12, 2007; effective December 26, 2007. Amendments filed September 25, 2008; effective December 9, 2008.*

**0460-01-.02 FEES.** The fees authorized by the Tennessee Dental Practice Act (T.C.A. §§ 63-5-101, et seq.) and other applicable statutes are established and assessed by the Board as non-refundable fees, as follows:

(1) Dentists

| | |
|---|---|
| ~~(a) Licensure Application Fee - Payable each time an application for licensure is filed. This fee also applies to limited, educational limited, dual degree and criteria (reciprocity) licensure applicants.~~ | ~~$400.00~~ |
| (a) Licensure Application Fee - Payable each time an application for licensure is filed. This fee also applies to dual degree and criteria (reciprocity) licensure applicants. | $400.00 |
| ~~(b) Limited and Educational Limited Licensure Fee - Payable each time an application for a limited or an educational limited license is filed. This fee is to be paid in addition to the licensure application fee.~~ | ~~$150.00~~ |
| (b) Limited and Educational Limited Licensure Fee - Payable each time an application for a limited or an educational limited license is filed. | $150.00 |
| (c) Criteria (Reciprocity) Licensure Fee - Payable each time an application for a criteria (reciprocity) license is filed. This fee is to be paid in addition to the licensure application fee. | $ 150.00 |
| (d) Specialty Certification Application Fee - Payable each time an application for a specialty certification is filed. | $150.00 |
| (e) Student Clinical Instructors Exemption Fee - Payable each time and for each individual named in the Application for Exemption submitted pursuant to Rule 0460-02-.04 (5). | $10.00 |

(Rule 0460-01-.02, continued)

(f) Permit Fees - (limited conscious sedation, comprehensive conscious sedation, deep sedation/general anesthesia) Payable each time an application for a new permit or a biennial renewal of a permit is filed.

1. Initial Permit Fee $300.00

2. Biennial Permit Renewal Fee $100.00

~~(g) Licensure Renewal Fee – Payable biennially by all licensees, including educational and dual degree licensees, and excluding Inactive Pro Bono licensees.~~ ~~$300.00~~

(g) Licensure Renewal Fee – Payable biennially by all licensees excluding Limited, Educational Limited and Inactive Pro Bono licenses $250.00

(h) Limited and Educational Limited Licensure Renewal Fee - Payable biennially. $ 50.00

(~~h~~i) State Regulatory Fee - Payable upon application for licensure and biennially thereafter by all licensees. $ 10.00

(~~i~~j) Reinstatement Fee - Payable when a licensee fails to renew licensure timely and which is paid in addition to all current and past due licensure renewal fees. $750.00

(~~j~~k) Duplicate License Fee - Payable when a licensee requests a replacement for a lost or destroyed "artistically designed" wall license or renewal certificate. $ 30.00

(~~k~~l) Inactive Pro Bono Renewal Fee $ 0.00

~~(l) Examination Fee - Payable each time an application is filed to take a Board-approved examination as provided in rule 0460-02-.05 (1) (a) or the National Boards' examination, and when the applicant has been instructed to submit this fee directly to the Board.~~ ~~$ 875.00~~

(2) Dental Hygienist

(a) Licensure Application Fee - Payable each time an application for licensure is filed. This fee also applies to criteria approval and educational licensure applications. $115.00

(b) Criteria Licensure Fee - Payable each time an application for criteria approval licensure (reciprocity) is filed. This fee is to be paid in addition to the licensure application fee. $ 50.00

(c) Educational Licensure Fee - Payable each time an application for an educational license is filed. This fee is to be paid in addition to the licensure application fee. $ 50.00

(d) Student Clinical Instructor Exemption Fee - Payable each time and for each individual named in the Application for Exemption submitted pursuant to Rule 0460-03-.04(5). $ 10.00

| | | |
|---|---|---|
| ~~(e)~~ | ~~Licensure Renewal Fee - Payable biennially by all licensees, including criteria approved and educational licensees.~~ | ~~$190.00~~ |
| (e) | Licensure Renewal Fee - Payable biennially by all licensees, including criteria approved and educational licensees. | $100.00 |
| (f) | State Regulatory Fee - Payable upon application for licensure and biennially thereafter by all licensees. | $ 10.00 |
| (g) | Reinstatement Fee - Payable when a licensee fails to renew licensure timely and which is paid in addition to all current and past due licensure renewal fees. | $200.00 |
| (h) | Duplicate License Fee - Payable when a licensee requests a replacement for a lost or destroyed "artistically designed" wall license or renewal certificate. | $ 20.00 |
| (i) | Examination Fee - Payable each time an application is filed to take a Board-approved examination as provided in rule 0460-03-.05 (1) (a) or the National Boards' examination, and when the applicant has been instructed to submit this fee directly to the Board. | $ 875.00 |
| ~~(j)~~ | ~~Administration of Local Anesthesia Certification Fee – Payable each time an application for certification is filed.~~ | ~~$ 50.00~~ |

(3) Dental Assistants

| | | |
|---|---|---|
| (a) | Registration Application Fee - Payable each time an application for a registration to practice as a dental assistant is filed. | $ 30.00 |
| ~~(b)~~ | ~~Registration Renewal Fee - Payable biennially by all registrants.~~ | ~~$135.00~~ |
| (b) | Registration Renewal Fee – Payable biennially by all registrants. | $ 50.00 |
| (c) | State Regulatory Fee - Payable upon application for registration and biennially thereafter by all registrants | $ 10.00 |
| (d) | Reinstatement Fee - Payable when a registration is not timely renewed and which is paid in addition to all current and past due registration renewal fees. | $100.00 |
| (e) | Duplicate Registration Fee - Payable when a registrant requests a replacement for a lost or destroyed "artistically designed" wall registration or renewal certificate. | $ 20.00 |
| (f) | Coronal Polishing Examination Fee - Payable each time the registrant applies to sit for the written and/or clinical | $ 75.00 |

(Rule 0460-01-.02, continued)

examination. It is collected by the Board's Administrative Office.

| | | |
|---|---|---|
| (g) | Sealant Application Certification Fee - To be paid to the Board's Administrative Office. | $ 15.00 |
| (h) | Radiology Certification Fee – To be paid to the Board's Administrative Office | $ 15.00 |
| (i) | Nitrous Oxide Monitoring Certification Fee – To be paid to the Board's Administrative Office | $ 15.00 |
| (j) | Expanded Restorative Functions Certification Fee – To be paid to the Board's Administrative Office | $ 15.00 |
| (k) | Expanded Prosthetic Functions Certification Fee – To be paid to the Board's Administrative Office | $ 15.00 |

(4) Fees may be paid in the following manner:

(a) All fees paid by money order, certified, personal, or corporate check must be submitted to the Board's Administrative Office and made payable to the Tennessee Board of Dentistry.

(b) Fees may be paid by Division-approved credit cards or other Division-approved electronic methods.

***Authority:*** *T.C.A. §§4-3-1011, 4-5-202, 4-5-204, 63-1-103, 63-1-106, 63-1-107, 63-1-108, 63-5-105, 63-5-105(7), 63-5-107, 63-5-108, 63-5-110 through 63-5-114, 63-5-117, 63-5-118, and 63-5-132.* ***Administrative History:*** *Original rule certified June 7, 1974. Repeal and new rule filed August 26, 1980; effective December 1, 1980. Amendment filed October 13, 1983; effective November 14, 1983. Amendment filed September 24, 1987; effective November 8, 1987. Amendment filed June 8, 1989; effective July 23, 1989. Amendment filed November 30, 1989; effective January 14, 1990. Repeal and new rule filed December 11, 1991; effective January 25, 1992. Amendment filed December 5, 1994; effective February 18, 1995. Amendment filed March 20, 1996; effective June 3, 1996. Amendment filed September 26, 1996; effective December 10, 1996. Amendment filed February 9, 2000; effective April 24, 2000. Repeal and new rule filed April 10, 2002; effective June 24, 2002. Amendment filed August 21, 2002; effective November 4, 2002. Amendment filed March 17, 2003; effective July 29, 2003. Amendment filed June 13, 2003; effective August 27, 2003. Amendment filed August 18, 2003; effective November 1, 2003. Amendment filed September 17, 2003; effective December 1, 2003. Amendment filed October 20, 2003; effective January 3, 2004. Amendment filed June 18, 2004; effective September 1, 2004. Amendment filed December 28, 2004; effective March 13, 2005. Amendment filed December 16, 2005; effective March 1, 2006. Amendments filed October 12, 2007; effective December 26, 2007.*

**0460-01-.03 BOARD OFFICERS, CONSULTANTS, MEETINGS, DECLARATORY ORDERS, AND SCREENING PANELS.**

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| Charles E. Holt, Jr. | X | | | | |
| James L. Smith | X | | | | |
| Mary R. Warner | X | | | | |
| Nadim J. Jubran | X | | | | |
| John M. Douglass | X | | | | |
| Mary Ellen Vaughn | X | | | | |
| Lawrence Hsia | X | | | | |
| Randall P. Prince | X | | | | |
| Michael P. Tabor | X | | | | |
| Bettye Lynn Richert | X | | | | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Board of Dentistry on 01/13/2013, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 11/07/12

Rulemaking Hearing(s) Conducted on: (add more dates). 01/13/13

Date: Jennifer L. Putnam 3/20/13

Signature:

Name of Officer: Jennifer L. Putnam

Title of Officer: Assistant General Counsel, Department of Health

THEODORA P. WILKINS STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY

Subscribed and sworn to before me on: 3/20/13

Notary Public Signature: Theodora P. Wilkins

My commission expires on: 11/3/15

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All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

Robert E. Cooper, Jr.
Attorney General and Reporter

4-5-13
Date

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**Department of State Use Only**

Filed with the Department of State on: 4/17/13

Effective on: 7/16/13

Tre Hargett
Secretary of State

## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Tennessee Fish and Wildlife Commission |
| DIVISION: | Boating and Law Enforcement |
| SUBJECT: | Boating Safety |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Section 69-9-209 |
| EFFECTIVE DATES: | July 25, 2013 through June 30, 2014 |
| FISCAL IMPACT: | Minimal. |
| STAFF RULE ABSTRACT: | The rule updates changes in no-wake zones relative to vessel operations that have occurred since the rule was last amended. Some zones have been added to the rule that are public facilities and have been previously marked by buoys or signs by the U.S. Army Corps of Engineers. Some zones were deleted that are no longer necessary to protect property. Language was added to some zones to make them more consistent within the body of water. The rule clarifies that inner tubes are included in the types of devices on which persons may not be towed by motor boats travelling in no-wake zones. |

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

RULE: 1660-.02-.07

| | |
|---|---|
| New | |
| Amendment | X |
| Repeal | X |

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[✓] There were no public comments to the above-described rule.

[ ] Attached hereto are the responses to public comments.

**Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

(1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, and/or directly benefit from the proposed rule;

The Commission does not anticipate significant impact to small businesses in Tennessee.

(2) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record;

The Commission anticipates no record keeping associated with this rule.

(3) A statement of the probable effect on impacted small businesses and consumers;

The Commission anticipates no probable effect to small businesses.

(4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and/or objectives of the proposed rule that may exist, and to what extent, such alternative means might be less burdensome to small business;

The Commission is unaware of alternatives to the proposed rule and does not believe the rule as proposed would be burdensome to small businesses.

(5) A comparison of the proposed rule with any federal or state counterparts; and

The Commission is unaware of federal or state counterparts to this rule.

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.

The Commission anticipates no probable effect to small businesses and exemptions to this rule would likely not be beneficial.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

Will passage of this rule have a projected financial impact on local governments?

The Commission is not aware of any projected financial impacts on local governments.

Please describe the increase in expenditures or decrease in revenues:

None.

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**For Department of State Use Only**

Sequence Number: 04-15-13
Rule ID(s): 5477
File Date: 4/26/13
Effective Date: 7/25/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Tennessee Fish and Wildlife Commission |
| **Division:** | Boating and Law Enforcement |
| **Contact Person:** | Lisa Crawford |
| **Address:** | PO Box 40747, Nashville, TN |
| **Zip:** | 37204 |
| **Phone:** | 615-781-6606 |
| **Email:** | Lisa.Crawford@tn.gov |

**Revision Type (check all that apply):**
X Amendment
___ New
X Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 1660-02-07 | Rules and Regulations Governing Operation of Vessels |
| **Rule Number** | **Rule Title** |
| 1660-02-07-.03 | Chilhowee Lake |
| 1660-02-07-.04 | Old Hickory Lake |
| 1660-02-07-.06 | Pickwick Lake |
| 1660-02-07-.07 | Center Hill Lake |
| 1660-02-07-.09 | Watauga Lake |
| 1660-02-07-.10 | Tims Ford Lake |
| 1660-07-02-.11 | Special Areas |
| 1660-02-07-.19 | Nickajack Reservoir |
| 1660-02-07-.25 | Cherokee Reservoir (Cherokee Dam) |
| 1660-02-07-.26 | Melton Hill Reservoir |
| 1660-02-07-.32 | Cordell Hull Lake |
| 1660-02-07-.35 | Wolf River |

Chapter 1660-02-07
Rules and Regulations Governing Operation of Vessels

Repeal

1660-02-07-.03 CHILHOWEE LAKE, is hereby repealed in its entirety

~~1660-02-07-.03 CHILHOWEE LAKE. All motorboats being operated on that portion of Chilhowee Lake which lies from River Mile 38 as designated by signs shall be operated subject to the following provisions:~~

~~(1) Motorboats shall not exceed five (5) miles per hour.~~

~~(2) Motorboats shall not tow a person on water skis, surfboard or similar devices.~~

*Authority: T.C.A. §70-1-206. Administrative History: Original rule certified May 8, 1974.*

Amendment

1660-02-07-.04 OLD HICKORY LAKE. Is hereby amended by name corrections, adding prohibited towing devices, and adding 12 zones that are currently marked public access areas that are not listed in the rule. As amended the rule shall read:

(1) Vessels are prohibited in the ~~Metro-Nashville Park~~ Old Hickory Beach Swimming Area located on the southwest side of Old Hickory Lake in cove nearest the dam and delineated by a line of informational buoys.

(2) Vessels being operated in the cove adjacent to and south of ~~the area~~ Old Hickory Beach Swimming Area shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(3) Vessels being operated in the cove adjacent to the Rockland Day Use Area which is located near Old Hickory Dam and Lock in Sumner County and delineated by a line of informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(4) Vessels being operated on Old Hickory Lake within the area, as delineated by a line of informational buoys, adjacent to Walton's Ferry Access in Sumner County near River Mile 220.8, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(5) Vessels being operated on Old Hickory Lake in the portion of Shutes Branch known as Langfords Cove, south of the highway bridge and the area adjacent to Shutes Branch Recreation Area, both as delineated by informational buoys, in Wilson County, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(6) Unauthorized vessels are prohibited from entering that designated area adjacent to the DuPont Loading Dock located at River Mile 218.

(7) Vessels being operated on Old Hickory Lake within the Laguardo Recreation Area in Spencer Creek (River Mile 236) shall ~~operate at a "Slow—No Wake" speed.~~ be operated as follows:

(a) Motorboats shall operate at a "Slow – No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(c) Vessels are prohibited in the swimming area

(8) Vessels being operated on Old Hickory Lake in the area known as Fetherling Cove located at River Mile 218.5 in Sumner County and delineated by informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(9) Vessels being operated on Old Hickory Lake within the area adjacent to the Lock 3 Access in Sumner County near River Mile 218, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(c) Vessels are prohibited in the swimming area

(10) Vessels being operated on Old Hickory Lake within the area adjacent to the Sanders Ferry Park Access in Sumner County near River Mile 222, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(11) Vessels being operated on Old Hickory Lake within the area adjacent to the Mallard Point Access located in Drakes Creek in Sumner County, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(12) Vessels being operated on Old Hickory Lake within the area adjacent to the Stark Knob Access in Sumner County near River Mile 225.5, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(13) Vessels being operated on Old Hickory Lake within the area adjacent to the Saundersville Access in Sumner County near River Mile 228.2, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(14) Vessels being operated on Old Hickory Lake within the area adjacent to the Avondale Access in Sumner County near River Mile 229.4, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(15) Vessels being operated on Old Hickory Lake within the area adjacent to the Cages Bend Campground Access in Sumner County near River Mile 234, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(16) Vessels being operated on Old Hickory Lake within the area adjacent to the Station Camp Access located in West Fork Station Camp Creek in Sumner County, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(17) Vessels being operated on Old Hickory Lake within the area, adjacent to the Bull Creek Access in Sumner County near River Mile 239.6, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices

(18) Vessels being operated on Old Hickory Lake within the area adjacent to the Lone Branch Access located in Cedar Creek in Wilson County, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices

(19) Vessels being operated on Old Hickory Lake within the area adjacent to the Cedar Creek Campground Access located in Cedar Creek in Wilson County as delineated by a line of informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(c) Vessels are prohibited in the swimming area.

(20) Vessels being operated on Old Hickory Lake within the area adjacent to the Burton Road Access located in Spencer Creek in Wilson County, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow-No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

*Authority: T.C.A. §69-9-209. Administrative History: Original rule certified May 8, 1974. Amendment filed May 28, 1975; effective June 28, 1997. Amendment filed February 6, 1978; effective March 8, 1978. Amendment filed July 2, 1979; effective August 16, 1979. Amendment filed August 1, 1990; effective September 15, 1990.*

Amendment

1660-02-07-.06 PICKWICK LAKE is hereby amended by adding inner tube as a prohibited device and language changes for consistency. The amended rule shall read as follows:

(1) Vessels being operated on Pickwick Lake within the Winn Springs Cove area, as delineated by a line of informational buoys, near River Mile 214 in Hardin County, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(2) Vessels being operated within Slate Rock Creek, Sulphur Creek, and Caney Creek, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

~~(2) Motorboats shall not tow a person on water skis, surfboard, or similar devices within Slate Rock Creek.~~

~~(3) Motorboats shall operate at a "Slow—No Wake" speed within Sulphur Creek, Caney Creek and Slate Rock Creek.~~

*Authority: T.C.A. §§70-1-206 and 69-10-209. Administrative History: Original rule certified May 8, 1974. Amendment filed May 28, 1975; effective June 28, 1975. Amendment filed June 9, 1978; effective July 10, 1978. Amendment filed October 4, 1989; effective November 18, 1989.*

Amendment

1660-02-07-.07 CENTER HILL LAKE. is hereby amended by adding inner tube as a prohibited device and language changes for consistency. The amended rule shall read as follows:

(1) Vessels being operated on Center Hill Reservoir within the Floating Mill Park Recreation Area as delineated by a line of informational buoys shall be operated, as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

~~(b) The use of water skis, surfboards or similar devices is prohibited.~~

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(2) Vessels being operated on Center Hill Lake within the area adjacent to Sand Beach, Rock Island State Park, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skies, surfboard, inner tube, or similar device.

(3) Vessels being operated on Center Hill Lake within the Ragland Bottom, Johnson Chapel, and Hurricane Bridge Recreation Areas, as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

*Authority: T.C.A. §70-1-206 and 69-9-209. Administrative History. Original rule certified May 8, 1974. Amendment filed July 9, 1978; effective July 10, 1978. Amendment filed October 4, 1989; effective November 18, 1989.*

Amendment

1660-02-07-.09 WATAUGA LAKE is hereby amended by deleting one zone where an access area is no longer used and adding inner tube as a prohibited device. The amended rule shall read as follows:

~~(1) Vessels operated on Watauga Lake at Watauga Point Recreational Area (WRM 40.1L) and Watauga Dam Reservational Ramp (WRM 37.5R), as delineated by a line of informational buoys, shall be operated as follows:~~

~~(a) Motorboats shall operate at a "Slow—No Wake" speed.~~

~~(b) Motorboats shall not tow a person on water skis, surfboard, or similar devices.~~

(1)~~(2)~~ All vessels are prohibited from U.S. Forest Service Watauga Point Recreation Swim Area (WRM 40.1L) and U.S. Forest Service Shook Branch Swim Area (WRM 37L) as delineated by line of "No Boating" buoys.

(2) ~~(3)~~ Vessels being operated on Watauga Reservoir at U. S. Forest Service's Rat Branch Boat Ramp (WRM 37.0L) as delineated by a line of informational buoys, shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar device.

*Authority: T.C.A..§§69-9-209 and 70-1-206. Administrative History: Original rule certified May 8, 1974. Amendment filed October 21, 1991; effective December 5, 1991. Amendment filed August 10, 1995; effective October 24, 1995. Amendment filed January 5, 2001; effective March 22, 2001.*

Amendment

1660-02-07-.10 TIMS FORD LAKE is hereby amended by adding inner tube as a prohibited device and language changes for consistency. One zone was deleted. The amended rule shall read as follows:

(1) Vessels being operated on Tims Ford Lake within a portion of Hasty Hollow Cove and Tennessee Elk River Development Association's Campground Cove (River Mile 153) as delineated by a line of informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow—No Wake" speed.

(b) ~~The use of~~ Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(2) Vessels being operated within Travis Hollow at River Mile 140 on Tims Ford Reservoir, shall be operated as follows: ~~operate at a "Slow—No Wake" speed.~~

(a) Motorboats shall operate at a "Slow – No Wake" Speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(3) Vessels being operated in an area delineated by signs and/or buoys near the mouth of Rock Creek and Elk River Mile 162 shall be operated as follows: ~~operate at a "Slow—No Wake" speed; The use of~~

(a) Motorboats shall operate at a "Slow – No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices within the "Slow—No Wake" area.

~~(4) Vessels are prohibited in the swimming area near Holiday marina which is delineated by information buoys and wholly surrounded by the Marina "No—Wake Zones."~~

(4) ~~(5)~~ Vessels are prohibited in the swimming area located in the Dry Creek embayment adjacent to the Highway 50 bridge.

(5) ~~(6)~~ Vessels being operated on Tims Ford Lake in the Dry Creek section which is located adjacent to State Highway 50 in Franklin County and delineated by informational buoys shall be operated as follows:

(a) Motorboats shall operate at a 'Slow—No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar device.

(6) ~~(7)~~ Vessels being operated on Tims Ford Lake in Boiling Fork Creek near the State Highway 130 bridge as delineated by signs and/or buoys shall be operated as follows:

(a) Vessels shall operate at a "Slow—No Wake" speed.

(b) ~~The use of~~ Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(7) ~~(8)~~ Vessels being operated in the area delineated by signs and/or buoys at the Tims Ford Reservation access ramp, Elk River mile 133.6L shall operate ~~at a "Slow No Wake" speed.~~ as follows:

(a) Vessels shall operate at a "Slow - No Wake" speed

(b) ~~The use of~~ Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices within the "Slow—No Wake" area.

*Authority: T.C.A. §§69-9-209 and 70-1-206. Administrative History. Original rule certified May 8, 1974. Amendment filed November 4, 1976; effective December 4, 1976. Amendment filed June 9, 1978; effective July 10, 1978. Amendment filed June 11, 1981; effective July 27, 1981. Amendment filed July 12, 1985; effective August 11, 1985. Amendment filed June 8, 1989; effective July 23, 1989. Amendment filed August 29, 1990; effective October 13, 1990. Amendment filed august 9, 1993; effective October 23, 1993. Amendment filed March 10, 1995; effective May 24, 1995.*

Amendment

1660-02-07-.11 SPECIAL AREAS is hereby amended by adding prohibited devices on Great Falls Reservoir and spelling corrections. The amended rule reads as follows:

(1) All motorboats being operated within 300 feet of a commercial dock or marina shall be operated at a "slow, no-wake speed" unless otherwise marked and approved under 1660-2-6-.01, or a specific rule and regulation.

(a) The measurement shall be made from the last structure associated with the dock or marina except as noted above.

(b) For this rule, a commercial marina is defined as any permanent facility accessible by boat which:

1. offers goods or services to the general public in exchange for currency or other consideration.

2. has a valid business license, if required, and a Tennessee Tax Identification number.

3. is permitted by the U.S. Corps of Engineers, and the Tennessee Valley Authority if applicable, as a commercial boat dock or marina.

(2) No person shall operate or use any vessel, within the area designated and appropriately marked as a hazardous area, below any dam and/or lock unless each person aboard is wearing a U. S. Coast Guard approved flotation device, Type I, Type II, Type III or Type V.

(a) This regulation is not intended to affect regulations promulgated by other governmental agencies, federal or state, related to activities that may or may not be conducted within said hazardous area.

(3) Vessels being operated within 300 yards of the Tennessee Wildlife Resources Agency access ramp on Indian Creek will be operated at a "Slow—No Wake" speed.

(4) Vessels being operated on Deer Creek located at River Mile 125 on Kentucky Lake shall operate at a "Slow—No Wake" speed within the embayment area.

(5) ~~Water skiing is prohibited~~ Motorboats being operated on Great Falls Reservoir in the Rocky River Embayment from its mouth upstream ~~to Blanks Bridge~~ shall not tow a person on water skis, surfboard, inner tube or similar device.

(6) Vessels being operated on Crooked Creek located at River Mile 121.5 on Kentucky Lake shall operate at a "Slow—No Wake" speed from the mouth of the Tennessee River to the Crooked Creek embayment.

(7) Vessels being operated within the buoyed area in Eagle Creek located at river mile 1 on the Big Sandy River, from a point east of Big Eagle picnic area, west to the west boundary of Buchanan's boat dock, shall operate at a "Slow—No Wake" speed.

*Authority: T.C.A. §§70-1-206 and 69-9-209. Administrative History: Original rule certified May 8, 1974. Amendment filed November 20, 1975; effective December 20, 1975. Amendment filed November 4, 1976; effective December 4, 1976. Amendment filed June 8, 1977; effective July 8, 1977. Amendment filed February 6, 1978; effective March 8, 1978. Amendment filed April 20, 1988; effective June 4, 1988. Amendment filed June 8, 1989; effective July 23, 1989. Amendment filed January 28, 2002; effective April 13, 2002. Amendment filed April 26, 2004; effective July 10, 2004.*

Amendment

1660-02-07-.19 NICKAJACK RESERVOIR is hereby amended by adding prohibited devices. The amended rule shall read as follows:

(1) All vessels utilizing Nickajack Reservoir in an area around Nickajack Cave Bridge, as delineated by buoys and/or signs, shall operate at a "Slow—No Wake" speed and shall not tow a person on water skis, surfboard, inner tube or similar devices.

(2) All vessels being operated within the sites delineated by informational buoys and/or signs, described below shall be operated at a "Slow—No Wake" speed and shall not tow a person on water skis, surfboard, inner tube or similar devices.

(a) Site #1—Maple View Public Use Area located on the south bank of the reservoir at approximately Tennessee River Mile 425.

(b) Site #2—Running Water Bridge under Highway 156 located at approximately Tennessee River Mile 419.5.

(c) Site #3—Shellmound Recreation Area beach, boat ramp and pier located on the north bank of the reservoir at approximately Tennessee River Mile 425.5.

(d) Site #4—Marion County Park boat ramp located between Hwy. 41 and Interstate 24 on the north bank of the reservoir at approximately Tennessee River Mile 429.

*Authority: T.C.A. §§70-1-206 and 69-9-209. . Administrative History: Original rule filed April 9, 1984; effective may 9, 1984. Amendment filed May 11, 1990; effective June 25, 1990.*

Amendment

1660-02-07-.25 CHEROKEE RESERVOIR (CHEROKEE DAM) is hereby amended by deleting one zone that is no longer necessary to protect property and by adding inner tube as a prohibited device. The amended rule shall read as follows:

(1) Vessels being operated on Cherokee Reservoir at Cherokee Dam, within the cove delineated by a line of informational buoys and signs, in Jefferson County, shall operate as follows:

(a) Motorboats shall operate at a "Slow—No wake" speed.

(b) Motorboats shall not tow persons on water skis, surfboards, inner tube, or similar devices.

(2) All vessels are prohibited in the TVA Swimming Area at Cherokee Dam Reservation Beach (HRM 53.2L) as delineated by a line of "No Boating" buoys.

~~(3) All vessels are prohibited from the Shields Creek Embayment from the U. S. 11 W Highway northward. This area will be delineated by signs and a line of "No Boating" buoys.~~

*Authority: T.C.A. §70-1-206. Administrative History: Original rule filed May 11, 1990; effective June 25, 1990. Amendment filed October 21, 1991; effective December 5, 1991*

Amendment

1660-02-07-.26 MELTON HILL RESERVOIR is hereby amended by adding prohibited devices and spelling correction. The amended rule shall read as follows:

(1) All vessels are prohibited in the TVA Swimming Area at Melton Hill Reservoir Beach (CRM 23.5L) as delineated by a line of "No Boating" buoys.

(2) Vessels being operated on Melton Hill Lake at Melton Hill Dam Boat Ramp(CRM 23.4L) as delineated by a line of information buoys shall operate as follows:

(a) Motorboats shall operate at a "Slow – No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube or similar devices.

(3) All vessels are prohibited from Clark Center Recreation Park Swimming Beach (CRM 37.5R) as delineated by a line of "No Boating" buoys.

(4) Vessels being operated on Melton Hill Reservoir at Clark Center ~~Creation~~ Recreation Park (CRM 37.5R) as delineated by a line of informational buoys or signs, shall operate at a "Slow—No Wake" speed. Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar devices.

*Authority: T.C.A.. §§69-9-209 and 70-1-206. Administrative History: Original rule filed October 21, 1991; effective December 5, 1991. Amendment filed March 10, 1995; effective May 24, 1995.*

Amendment

1660-02-07-.32 CORDELL HULL LAKE is hereby amended by adding five (5) zones that are currently marked public access areas that were not in the rule: The amended rule reads as follows:

(1) All motorboats being operated within ~~the sight described below shall be operated at a "Slow—No Wake" speed and shall not tow a person on water skis, surfboardor similar device.~~ 75 feet either side of the bridge on Tennessee State Highway 53 just west of the Jackson-Smith County Line at the mouth of Dillard Creek (a.k.a. Indian Creek), Cumberland River Mile (CRM) 331.5 as designated by a line of buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(2) Vessels being operated near the cove adjacent to the Defeated Creek Campground which is located near the mouth of Defeated Creek on Cordell Hull Reservoir and delineated by a line of informational buoys at CRM 316.8 shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(3) Vessels being operated near the area known as Defeated Creek Day Use area and ramp as delineated by a line of informational buoys located at Defeated Creek River Mile (DCRM) 2.0 shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(4) Vessels being operated near the Indian Creek Campground and ramp located 1.5 miles upstream from the Hwy 53 bridge as delineated by a line of informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(5) Vessels being operated near the Salt Lick Campground located approximately 1.0 mile upstream from the confluence of Salt Lick Creek and Cumberland River, CRM 337.6, and delineated by a line of informational buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

(6) Vessels being operated on Cordell Hull Lake in the portion of Flynn's Lick Creek adjacent to Camp Discovery as delineated by a line of buoys shall be operated as follows:

(a) Motorboats shall operate at a "Slow- No Wake" speed.

(b) Motorboats shall not tow a person on water skis, surfboard, inner tube, or similar device.

*Authority: T.C.A. §§70-1-206 and 69-9-209. Administrative History: Original rule filed April 29, 1996; effective July 8, 1996.*

Amendment

1660-02-07-.35 WOLF RIVER EMBAYMENT (Mud Island Harbor) is hereby amended by a name change and adding prohibited devices. The amended rule reads as follows:

(1) All vessels operating in that portion of the Wolf River from the mouth (WRM 0) upstream to the Interstate 40 bridge, as delineated by signs or buoys, shall operate at a "slow, no-wake speed" and shall not tow a person on water skis, surfboard, inner tube or similar devices.

*Authority: T.C.A. Sections 70-1-206 and 69-9-209. Administrative History: Original rule filed January 5, 2001; effective March 22, 2001.*

* If a roll-call vote was necessary, the vote by the Commission on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent |
|---|---|---|---|---|
| William L. Brown | ✓ | | | |
| Jim Bledsoe | ✓ | | | |
| Harold Cannon | | | | ✓ |
| Bill Cox | ✓ | | | |
| Jeffrey H. Griggs | ✓ | | | |
| Jeff McMillin | ✓ | | | |
| Tom Rice | | | | ✓ |
| Jim Ripley | | | | ✓ |
| Julie Schuster | ✓ | | | |
| Clayton Stout | ✓ | | | |
| James Stroud | ✓ | | | |
| Trey Teague | ✓ | | | |
| Jamie Woodson | ✓ | | | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Tennessee Fish and Wildlife Commission on 02/15/2013 (mm/dd/yyyy), and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 12/21/2012

Rulemaking Hearing(s) Conducted on: (add more dates). 02/15/2013

Date: 2-21-13

Signature: Ed Carter

Name of Officer: Ed Carter

Title of Officer: Executive Director

LISA CRAWFORD NOTARY PUBLIC TENNESSEE DAVIDSON COUNTY

Subscribed and sworn to before me on: 2-21-13

Notary Public Signature: Lisa Crawford

My commission expires on: 5-5-15

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All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

R E Cooper Jr

Robert E. Cooper, Jr.
Attorney General and Reporter

4-17-13
Date

**Department of State Use Only**

Filed with the Department of State on: 4/26/13

Effective on: 7/25/13

Tre Hargett
Secretary of State

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## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Labor and Workforce Development |
| DIVISION: | Occupational Safety and Health |
| SUBJECT: | Federal Standards |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Sections 4-3-1411, 50-3-103, and 50-3-201 |
| EFFECTIVE DATES: | September 28, 2013 through June 30, 2014 |
| FISCAL IMPACT: | There is no anticipated increase or decrease in state and local government revenues and expenditures resulting from promulgation of the proposed rules and amendments to the existing rules. |
| STAFF RULE ABSTRACT: | The amendments to the current rules adopt and reference the latest occupational safety and health standards and exceptions, if any, in the applicable parts of Title 29, Code of Federal Regulations. Since the last amendments to the rules, there have been no substantive changes to the Occupational Safety and Health Standards. |

**Regulatory Flexibility Addendum**
Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

An economic impact statement regarding the amendments in this rule proposal is not required under the provisions of the Regulatory Flexibility Act of 2007. As stated in Section 6 of Public Chapter 464, "This part shall not apply to rules that are adopted on an emergency or pubic necessity basis under Title 4, Chapter 5, Part 2, that are federally mandated, or that substantially codify existing state or federal law." Under the statutory authority of 29 U.S.C. § 667, Tennessee has an approved state plan that provides for the development and enforcement of occupational safety and health standards. In accordance with the Tennessee Occupational Safety and Health State Plan, when a federal occupational safety and health standard is promulgated under 29 U.S.C. § 655 Tennessee generally adopts the federal standard relating to the same issue. The plan specifies that the state of Tennessee will adopt the federal standards or an equivalent state requirement within six (6) months of the standard's promulgation by federal OSHA. In addition, T.C.A. §50-3-201 authorizes the Commissioner of Labor and Workforce Development to adopt either state or federal occupational safety and health standards.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

This rule does not have a projected impact on local governments.

**Department of State**
**Division of Publications**
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**For Department of State Use Only**

Sequence Number: 04-05-13
Rule ID(s): 5471-5473
File Date: 4/3/13
Effective Date: 9/28/13

# Proposed Rule(s) Filing Form

*Proposed rules are submitted pursuant to T.C.A. §§ 4-5-202, 4-5-207 in lieu of a rulemaking hearing. It is the intent of the Agency to promulgate these rules without a rulemaking hearing unless a petition requesting such hearing is filed within sixty (60) days of the first day of the month subsequent to the filing of the proposed rule with the Secretary of State. To be effective, the petition must be filed with the Agency and be signed by twenty-five (25) persons who will be affected by the amendments, or submitted by a municipality which will be affected by the amendments, or an association of twenty-five (25) or more members, or any standing committee of the General Assembly. The agency shall forward such petition to the Secretary of State.*

| | |
|---|---|
| **Agency/Board/Commission:** | Department of Labor and Workforce Development |
| **Division:** | Division of Occupational Safety and Health |
| **Contact Person:** | Larry Hunt |
| **Address:** | 220 French Landing Drive |
| **Zip:** | 37243-1002 |
| **Phone:** | (615) 741-7036 |
| **Email:** | Larry.Hunt@tn.gov |

**Revision Type (check all that apply):**
X Amendment
___ New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0800-01-01 | Occupational Safety and Health Standards for General Industry |
| **Rule Number** | **Rule Title** |
| 0800-01-01-.06 | Adoption and Citation of Federal Standards |
| | |

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0800-01-06 | Occupational Safety and Health Standards for Construction |
| **Rule Number** | **Rule Title** |
| 0800-01-06-.02 | Adoption and Citation of Federal Standards |
| | |

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0800-01-07 | Occupational Safety and Health Standards for Agriculture |
| **Rule Number** | **Rule Title** |
| 0800-01-07-.01 | Adoption and Citation of Federal Standards |
| 0800-01-07-.02 | Exceptions to Adoption of Federal Standards |

Proposed Amendments with Changes Red-Lined

Chapter 0800-01-01

Rule 0800-01-01-.06 Amended

Paragraph (2) of Rule 0800-01-01-.06 Adoption and Citation of Federal Standards is amended by changing the date from "January 1, 2013" to "July 1, 2013".

Existing Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1910, as of ~~January 1, 2013~~ except as provided in Rule 0800-01-01-.07 of this chapter.

Proposed Amended Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1910, as of July 1, 2013 except as provided in Rule 0800-01-01-.07 of this chapter.

Authority: T.C.A. §§ 4-3-1411 and 50-3-201.

Chapter 0800-01-06

Rule 0800-01-006-.02 Amended

Paragraph (2) of Rule 0800-01-06-.02 Adoption and Citation of Federal Standards is amended by changing the date from "January 1, 2013" to "July 1, 2013".

Existing Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1926, as of ~~January 1, 2013~~ except as provided in Rule 0800-01-06-.03 of this chapter.

Proposed Amended Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1926, as of July 1, 2013 except as provided in Rule 0800-01-06-.03 of this chapter.

Authority: T.C.A. §§ 4-3-1411, 50-3-103 and 50-3-201.

Chapter 0800-01-07

Rule 0800-01-07-.01 Amended

Paragraph (2) of Rule 0800-01-07-.01 Adoption and Citation of Federal Standards is amended by changing the date from "January 1, 2013" to "July 1, 2013".

Existing Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1928, as of ~~January 1, 2013~~ except as provided in Rule 0800-01-07-.02 of this chapter.

Proposed Amended Rule:

(2) The Commissioner of Labor and Workforce Development adopts the federal occupational safety and health standards codified in Title 29, Code of Federal Regulations, Part 1928, as of July 1, 2013 except as provided in Rule 0800-01-07-.02 of this chapter.

Authority: T.C.A. §§4-3-1411 and 50-3-201.

Rule 0800-01-07-.02 Amended

Paragraph (1) of Rule 0800-01-07-.02 Exceptions to Adoption of Federal Standards in 29 CFR Part 1928 is amended by changing the date from "January 1, 2013" to "July 1, 2013".

Existing Rule:

(1) As of ~~January 1, 2013~~, there are no exceptions.

Proposed Amended Rule:

(1) As of July 1, 2013, there are no exceptions.

Authority: T.C.A. §§4-3-1411 and 50-3-201.

* If a roll-call vote was necessary, the vote by the Agency on these rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| | | | | | |

I certify that this is an accurate and complete copy of proposed rules, lawfully promulgated and adopted by the (*board/commission/other authority*) on 02/28/2013 (*date as mm/dd/yyyy*), and is in compliance with the provisions of T.C.A. § 4-5-222. The Secretary of State is hereby instructed that, in the absence of a petition for proposed rules being filed under the conditions set out herein and in the locations described, he is to treat the proposed rules as being placed on file in his office as rules at the expiration of sixty (60) days of the first day of the month subsequent to the filing of the proposed rule with the Secretary of State.

Date: 2/28/13

Signature: Karla Davis

Name of Officer: Karla Davis

Title of Officer: Commissioner of Labor and Workforce Development

Subscribed and sworn to before me on: February 28, 2013

Notary Public Signature: Elaine Davis

My commission expires on: July 8, 2013

ELAINE DAVIS STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY

All proposed rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

Robert E. Cooper, Jr.
Attorney General and Reporter

3-25-13
Date

**Department of State Use Only**

Filed with the Department of State on: 4/3/13

Effective on: 9/28/13

Tre Hargett
Secretary of State

RECEIVED 2013 APR -3 PM 2:31 DEPT. OF STATE SECRETARY OF STATE

## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Health |
| DIVISION: | Board of Pharmacy |
| SUBJECT: | Controlled Substance Monitoring |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Section 53-10-303(f). |
| EFFECTIVE DATES: | July 1, 2013 through June 30, 2014 |
| FISCAL IMPACT: | Minimal |
| STAFF RULE ABSTRACT: | Rule 1140-11-.01 Definitions - is being amended by adding definitions for "client", "controlled substance(s)", "hardship", "healthcare practitioner", "healthcare practitioner extender", and "law enforcement personnel"; and further amended by changing the definitions of "commissioner" and "department" to refer to the department of health (rather than commerce and insurance), the definition of "dispense" to include mailing a substance into the state, and the definition of "prescriber" to specify the types of healthcare practitioners included.<br><br>Rule 1140-11-.02 Access to Database – is being amended to state that all prescribers and dispensers shall be registered in the database, but not veterinarians. The rule now refers to the procedure set out in T.C.A. § 53-10-306 for the formatting requirements of released information. The new rule also expands those to whom information from the database may be released to include a prescriber, supervising physician of the prescriber, dispenser or pharmacist, county medical examiner, certain state officials whose duties relate to TennCare; a quality improvement committee of a hospital, a healthcare practitioner extender, a manager of any investigation or prosecution unit of a health related board, committee or governing body, certain personnel of the department of mental health and substance abuse services, or a person who has the patient's written permission. The rule provides for the release of database information to law enforcement personnel engaged in an official investigation if pre- |

approved by the law enforcement agent's supervisor. A list of pre-approved law enforcement officials is required to be sent to the board of pharmacy by December 1 each year. The rule sets out the application requirements for pre-approval and designates how database information may be shared among law enforcement officials and retained. The rule also sets out a procedure for each district attorney general to audit and verify the database requests.

Rule 1140-11-.04 Submission of Information – is amended to add specific requirements of the information that a dispenser or dispenser's agent is required to submit to the database, require submission every seven days, and specify to which controlled substances the rule applies. The rule refers to an updated version of the Telecommunications Format for Controlled Substances and allows the committee to grant an undue hardship waiver from the electronic reporting requirement.

Rule 1140-11-.05 Practice Sites – Electronic Access – is a proposed new rule requiring each practice site where a controlled substance is prescribed or dispensed to provide electronic access to the database. The rule also creates a $100 a day civil penalty for violations.

Rule 1140-11-.06 Prescriber and Dispenser Responsibilities – is a proposed new rule which requires all dispensers and prescribers or their designated healthcare practitioner's extenders to check the database prior to dispensing or prescribing certain controlled substances at the beginning of treatment and annually thereafter. The rule also provides for limited circumstances in which the check of the database is not required.

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

Public Hearing Comments
Controlled Substance Monitoring Database Rules
March 7, 2013

Megan Frazier Grosvenor spoke on behalf of the Tennessee Veterinarians Medical Association. Ms. Frazier commented on Rules 1140-11-.01(k), 1140-11-.01(o); 1140-11-.04(6); 1140-11-.05; and1140-11-.06. Ms. Frazier requested that changes be made to the rules to reflect the 2012 amendment to Tenn. Code Ann. § 53-10-304(d), which specifically exempts veterinarians from reporting to the Controlled Substance Monitoring Database, provided that, "Any drug dispensed by a licensed veterinarian; provided, that the quantity dispensed is limited to an amount adequate to treat the non-human patient for a maximum of forty-eight (48) hours."

In keeping with this amendment, Ms. Frazier asked that revisions be made the definition of hardship, as defined in 1140-11-.01(k); the definition of patient, as defined in 1140-11-.01(o), that veterinarians be exempted from the requirements of proposed rule 1140-11-.04(6) ,1140-11-.05(1); and 1140-11.06(1).

In response to the Tennessee Veterinarians Medical Association's concerns, the following changes have been made to the Controlled Substance Monitoring Database Emergency Rules:

The definition of hardship in Rule 1140-11-.01(k), has been changed, to read as follows:

> "Hardship" means a situation where a dispenser, including a veterinarian, does not have an automated recordkeeping system capable of producing an electronic report of the required data in the format established by the American Society for Automation in Pharmacy Telecommunications Format for Controlled Substances. "Hardship" may also include any other situations as determined by the Committee in its sole discretion.

The definition of 1140-11-.01(o) has been amended to read as follows: "Patient" means a person or an animal who is receiving medical treatment from a prescriber."

The definition "client" is added to as definition (b) to section 1140-11-.01 and all other subsequent definitions are renumbered. The definition of "client" is defined as, "Client" means the owner or custodian of any animal under the care of a licensed veterinarian."

Rule 1140-11-.04(1)(c) has also been amended to read as follows:

(1) Each dispenser or dispenser's agent shall, regarding each controlled substance dispensed, submit to the database all of the following information:
  (a) Prescriber identifier;
  (b) Dispensing date of controlled substance;
  (c) Patient identifier and/or client identifier;
  ...

Ms. Baeteena Black spoke on behalf of the Tennessee Pharmacists Association.
Ms. Black made public comment about the provisions of 1140-11-.02 Access to Database. Ms. Black stated that the Tennessee Pharmacists Association was concerned that access to the database may not be given, absent a written request and that the language utilized in the current rule was language previously used prior to the enactment of the Patient Safety Act of 2012 and asked that the rule be updated. The rule currently reads as follows:

(3) The persons listed in paragraph (2) of this rule shall have access to the information contained in the database by submitting a request for information in writing or by electronic means to the Committee on a form developed by the Committee and in compliance with the

procedures developed by the Committee. The Committee shall not disseminate any information from the database without the submission of this written request, unless the dissemination of the information is directed by Court Order.

In response to Ms. Black's concerns, 1140-11-.02(3) has been deleted from the rules.

A comment received from Julia Morris, General Counsel of Vanderbilt University, was read into the record at the Rulemaking Hearing. Ms. Morris commented that under Rule 1140-11-.01 (m) : Healthcare Practitioner extender" it states " [t]he prescriber or dispenser shall be responsible for all actions by the agents." Ms. Morris commented that it was her belief that such a rule would open up prescribers and dispensers to vicarious liability. Ms. Morris also sought clarification regarding the ratio of extenders to prescribers and the ability of extenders to function for multiple prescribes. Further, Ms. Morris asked whether or not the patient was required to receive a copy of database print out and whether or not such print-out would be part of the medical record.

To address Ms. Morris' concerns regarding vicarious liability, Rule 1140-11-.01(m) has been amended to read identically to the current statute regarding this issue:

(m) "Healthcare practitioner extender" means any registered or licensed healthcare professional, and up to two (2) unlicensed persons designated by the prescriber or dispenser, who act as agents of the prescriber or dispenser. The prescriber or dispenser shall be responsible for all actions taken by the agents, pursuant to this part."

**Regulatory Flexibility Addendum**
Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

Regulatory Flexibility Analysis

Pursuant to the regulatory Flexibility Act of 2007, 2007 Pub. Acts, c. 464, § 4, eff. June 21, 2007, the Department of Health submits the following regulatory flexibility analysis:

(1) The extent to which the rule may overlap, duplicate, or conflict with other federal, state, and local governmental rules:

The amended rule does not overlap, duplicate, or conflict with other federal, state, and local governmental rules.

(2) Clarity, conciseness, and lack of ambiguity in the rule:

The amended rule exhibits clarity, conciseness, and lack of ambiguity in the rule.

(3) The establishment of flexible compliance and reporting requirements for small businesses:

All reporting requirements are the same for small and large businesses and are designed to insure that complete and accurate data are reported to the database.

(4) The establishment of friendly schedules or deadlines for compliance and reporting requirements for small businesses:

There are no such requirements contained in the amended rule. However, the Department is taking steps to educate stakeholders on the staged implementation of the Prescription Safety Act, the sunset period for the Act, and the availability of a waiver for entities covered by the Act who lack internet access.

(5) The consolidation or simplification of compliance or reporting requirements for small businesses:

The reporting requirements allow for complete and accurate data to be reported to the database and the reporting requirement is the same for both small and large businesses.

(6) The establishment of performance standards for small businesses as opposed to design or operational standards required in the proposed rule:

The amended rule does not establish design or operational standards.

(7) The unnecessary creation of entry barriers or other effects that stifle entrepreneurial activity, curb innovation, or increase costs:

The amended rule creates no entry barriers or other effects that would stifle legitimate entrepreneurial activity, curb innovation, or increase costs for legitimate businesses. This law does, by design, aim to increase costs and stifle entrepreneurial activity and innovation by "pill mill" operators and other prescribers involved in inappropriate prescribing.

## Economic Impact Statement

**(1)** The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule:

Dispensers, pharmacies and other healthcare facilities that are required to report information pertaining to controlled substances dispensed pursuant to the Controlled Substance Monitoring Act of 2002. Currently there are approximately 2,191 small businesses, pharmacists and dispensers subject to the proposed rule and these persons and businesses would bear the cost of the program change addressed in the proposed rule.

**(2)** The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record:

The amended rule may require expenditures by the dispensers, pharmacies and other healthcare facilities reporting to the database. However, many affected businesses are currently capable of complying with the proposed rule. Those impacted small businesses which are not currently capable of reporting in the new format would be required to obtain the new version of the reporting software.

**(3)** A statement of the probable effect on impacted small businesses and consumers:

The amended rule will have some effect on impacted small businesses and consumers. There may be change in treatment methods for pain, as well as an increase in referrals to specialists. Additionally, there may be a decrease in drug diversion, and a decreased willingness to prescribe controlled substances for pain.

**(4)** A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business:

There is no less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule.

**(5)** A comparison of the proposed rule with any federal or state counterparts:

Federal: The Commissioner is not aware of any Federal Counterparts:
State: The Commissioner is aware of similar rules in other states, including Kentucky and Virginia.

**(6)** Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule:

It is not possible to exempt the impacted small businesses from all or any part of the requirements contained in the proposed rule because the impacted small businesses are required to report under the Controlled Substance Monitoring Act of 2002. However, there is a hardship waiver for covered entities when internet access is unavailable to them.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

These rule amendments and new rule are not expected to have an impact on local governments.

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**For Department of State Use Only**

Sequence Number: 04-03-13
Rule ID(s): 5468
File Date: 4/2/13
Effective Date: 7/1/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Department of Health |
| **Division:** | |
| **Contact Person:** | Stefan Cange, Assistant General Counsel |
| **Address:** | Plaza One, Suite 210, 220 Athens Way, Nashville, Tennessee |
| **Zip:** | 37243 |
| **Phone:** | 615-741-1611 |
| **Email:** | Stefan.Cange@tn.gov |

**Revision Type (check all that apply):**
x Amendment
x New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 1140-11 | Controlled Substance Monitoring Database |
| **Rule Number** | **Rule Title** |
| 1140-11-.01 | Definitions |
| 1140-11-.02 | Access to Database |
| 1140-11-.04 | Submission of Information |
| 1140-11-.05 | Practice Sites- Electronic Access |
| 1140-11-.06 | Prescriber and Dispenser Responsibilities |

**RULES**
**OF**
**THE TENNESSEE BOARD OF PHARMACY**

**CHAPTER 1140-11**
**CONTROLLED SUBSTANCE MONITORING DATABASE**

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| | | 1140-11-.05 | Practice Sites – Electronic Access |
| | | 1140-11-.06 | Prescriber and Dispenser Responsibilities |


## 1140-11-.01 DEFINITIONS.

~~(1) The following definitions shall be applicable to this chapter:~~

~~(a) "Board" means the Board of Pharmacy created by Tenn. Code Ann., Title 63, Chapter 10;~~

~~(b) "Commissioner" means the Commissioner of Commerce and Insurance;~~

~~(c) "Committee" means the controlled substance monitoring database advisory committee created by Tenn. Code Ann. § 53-10-303;~~

~~(d) "Controlled substance dispensed identifier" means the National Drug Code Number of the controlled substance;~~

~~(e) "Database" means the controlled substance database created by Tenn. Code Ann., Title 53, Chapter 10, Part 3;~~

~~(f) "Department" means the Department of Commerce and Insurance;~~

~~(g) "Dispense" means to physically deliver a controlled substance covered by this chapter to any person, institution or entity with the intent that it be consumed away from the premises in which it is dispensed. "Dispense" does not include the act of writing a prescription by a practitioner to be filled at a pharmacy licensed by the Board;~~

~~(h) "Dispenser" means any health care practitioner who has authority to dispense controlled substances, pharmacists, and pharmacies that dispense to any address within this state;~~

~~(i) "Dispenser identifier" means the Drug Enforcement Administration Registration Number of the dispenser as defined in Tenn. Code Ann. §53-10-302(7);~~

~~(j) "Patient" means a person, animal or owner of an animal who is receiving medical treatment from a prescriber;~~

~~(k) "Patient identifier" means the patient's full name; address; including zip code; date of birth; and social security number or an alternative identification number as defined by this rule;~~

~~(l) "Person" means any individual, partnership, association, corporation and the state of Tennessee, its departments, agencies and employees, and the political subdivisions of Tennessee and their departments, agencies and employees;~~

(Rule 1140-11-.01, continued)

~~(m) "Prescriber" means any health care practitioner who has the authority to issue prescriptions for controlled substances;~~

~~(n) "Prescriber identifier" means the Drug Enforcement Administration Registration Number of the prescriber as defined by this rule.~~

(1) The following definitions shall be applicable to this chapter:

(a) "Board" means the Board of Pharmacy created by T.C.A., Title 63, Chapter 10, part 3;

(b) "Client" means the owner or custodian of any animal under the care of a licensed veterinarian.

(c) "Commissioner" means the Commissioner of Health;

(d) "Committee" means the Controlled Substance Database Committee created by T.C.A., Title 53, Chapter 10, part 3;

(e) "Controlled substance(s)" means a drug, substance, or immediate precursor in Schedules I through VI as defined or listed in the Tennessee Drug Control Act, compiled in T.C.A., Title 39, Chapter 17, part 4;

(f) "Controlled substance dispensed identifier" means the National Drug Code Number of the controlled substance;

(g) "Database" means the controlled substance database created by T.C.A., Title 53, Chapter 10, part 3;

(h) "Department" means the Department of Health;

(i) "Dispense" means to physically deliver a controlled substance covered by this chapter to any person, institution or entity with the intent that it be consumed away from the premises in which it is dispensed. It does not include the act of writing a prescription by a practitioner to be filled at a pharmacy. For purposes of this part, physical delivery includes mailing controlled substances into this state;

(j) "Dispenser" means any health care practitioner who is licensed and has current authority to dispense controlled substances;

(k) "Dispenser identifier" means the Drug Enforcement Administration Registration Number of the dispenser as defined in T.C.A. § 53-10-302(8);

(l) "Hardship" means a situation where a dispenser, including a veterinarian, does not have an automated recordkeeping system capable of producing an electronic report of the required data in the format established by the American Society for Automation in Pharmacy Telecommunications Format for Controlled Substances. "Hardship" may also include other situations as determined by the Committee in its sole discretion;

(m) "Healthcare practitioner" means:

1. a physician, dentist, optometrist, veterinarian, or other person licensed, registered, or otherwise permitted to prescribe, distribute, dispense or administer a controlled substance in the course of professional practice; or

(Rule 1140-11-.01, continued)

2. a pharmacy, hospital or other institution licensed, registered, or otherwise permitted to distribute, dispense, or administer a controlled substance in the course of professional practice;

(n) "Healthcare practitioner extender" means any registered or licensed healthcare professional, and up to two (2) unlicensed persons designated by the prescriber or dispenser, who act as agents of the prescriber or dispenser. The prescriber or dispenser shall be responsible for all actions taken by the agents, pursuant to this part;

(o) "Law enforcement personnel" means agents of the Tennessee Bureau of Investigation, agents of a judicial district drug task force, federal law enforcement officers commissioned by a federal government entity, certified law enforcement officers certified pursuant to T.C.A. § 38-8-107, and certified law enforcement officers in other states;

(p) "Patient" means a person or an animal who is receiving medical treatment from a prescriber;

(q) "Patient identifier" means the patient's full name; address including zip code; date of birth; and social security number or an alternative identification number as defined by this rule;

(r) "Person" means any individual, partnership, association, corporation and the state of Tennessee, its departments, agencies and employees, and the political subdivisions of Tennessee and their departments, agencies and employees;

(s) "Prescriber" means an individual licensed as a medical doctor, podiatrist, dentist, optometrist, veterinarian, osteopathic physician, a physician assistant who has authority to issue prescriptions for controlled substances, or an advanced practice nurse with a certificate of fitness to prescribe;

(t) "Prescriber identifier" means the Drug Enforcement Administration Registration Number of the prescriber as defined by this rule.

***Authority:*** *T.C.A. §§53-10-302 and 53-10-303(f).* ***Administrative History:*** *Original rule filed December 22, 2005; effective March 7, 2006.*

**1140-11-.02 ACCESS TO DATABASE.**

~~(1) The following persons shall have access to the controlled substance database with regard to a patient:~~

~~(a) the prescriber who is currently issuing the patient a controlled substance or controlled substances or who anticipates issuing the patient a controlled substance or controlled substances;~~

~~(b) the dispenser who is currently dispensing a controlled substance or controlled substances to the patient or who anticipates issuing the patient a controlled substance or controlled substances;~~

~~(c) a person who has the patient's written permission to have access to the patient's records in the database;~~

~~(d) the manager of any investigations or prosecution unit of a health-related board, committee or other governing body that licenses practitioners who has access to the database with the committee's permission pursuant to Tenn. Code Ann. §53-10-308, may release the database information that that such manager receives to the state of Tennessee health-related boards,~~

(Rule 1140-11-.01, continued)

~~health-related committees, the department, the department of health and representatives of health-related professional recovery programs; or~~

~~(e) a district attorney who obtains an order from circuit or criminal court ordering the release of the information contained in the database, in compliance with Tenn. Code Ann. §53-10-306.~~

~~(2) The persons listed in paragraph (1) of this rule shall have access to the information contained in the database by submitting a request for information in writing or by electronic means to the Committee on a form developed by the Committee and in compliance with the procedures developed by the Committee. The Committee shall not disseminate any information from the database without the submission of this written request, unless the dissemination of the information is directed by Court Order.~~

(1) All prescribers with DEA numbers who prescribe controlled substances, and all dispensers in practice who provide direct care to patients in Tennessee for more than fifteen (15) calendar days per year, shall be registered in the database. New licensees shall have up to thirty (30) calendar days after notification of licensure to register in the database. Licensed veterinarians who never prescribe a controlled substance in an amount intended to treat a non-human patient for more than forty-eight (48) hours shall not be required to register in the database.

(2) Information sent to, contained in, and reported from the database in any format shall be made available only as provided for in T.C.A. § 53-10-306 and to the following persons in accordance with this chapter:

(a) A prescriber conducting medication history reviews who is actively involved in the care of a patient or a bona fide prospective patient; a prescriber or supervising physician of the prescriber conducting a review of all medications dispensed by prescription attributed to that prescriber; or a prescriber having authority to prescribe or dispense controlled substances, to the extent the information relates specifically to a current or bona fide prospective patient of the prescriber, to whom the prescriber has prescribed or dispensed, is prescribing or dispensing, or considering prescribing or dispensing any controlled substance. Each authorized individual under this paragraph shall have a separate identifiable authentication for access;

(b) A dispenser or pharmacist not authorized to dispense controlled substances conducting drug utilization or medication history reviews who is actively involved in the care of a patient; or a dispenser having authority to dispense controlled substances to the extent the information relates specifically to a current or bona fide prospective patient to whom that dispenser has dispensed, is dispensing, or considering dispensing any controlled substance. Each authorized individual under this paragraph shall have a separate identifiable authentication for access;

(c) A county medical examiner appointed pursuant to T.C.A. § 38-7-104 when acting in an official capacity as established in T.C.A. § 38-7-109;

(d) Personnel of the following entities actively engaged in analysis of controlled substances prescription information as part of their assigned duties and responsibilities directly related to TennCare:

1. The Office of the Inspector General;

2. The Medicaid Fraud Control Unit; and

3. The Bureau of TennCare's Chief Medical Officer, Associate Chief Medical

(Rule 1140-11-.01, continued)

Directors, Director of Quality Oversight, and Associate Director of Pharmacy.

(e) A quality improvement committee, as defined in T.C.A. § 68-11-272, of a hospital licensed under T.C.A. title 68 or title 33, as part of the committee's confidential and privileged activities under T.C.A. § 68-11-272(b)(4) with respect to the evaluation, supervision or discipline of a healthcare provider employed by the hospital or any of its affiliates or subsidiaries, who is known or suspected by the hospital's administrator to be prescribing controlled substances for the prescriber's personal use;

(f) A healthcare practitioner extender, who is acting under the direction and supervision of a prescriber or dispenser, and only to the extent the information relates specifically to a current or bona fide prospective patient to whom the prescriber or dispenser has prescribed or dispensed, or considering prescribing or dispensing any controlled substance. Each authorized individual under this paragraph shall have a separate identifiable authentication for access, and the prescriber or dispenser shall cancel the healthcare practitioner extender's access to the database upon the end of the agency relationship;

(g) A manager of any investigation or prosecution unit of a health related board, committee or other governing body that licenses practitioners, who has access to the database with the committee's permission pursuant to T.C.A. § 53-10-308. Such manager may release the database information to the state of Tennessee health related boards, health related committees, the department, and representatives of health-related professional recovery programs;

(h) The following personnel of the Department of Mental Health and Substance Abuse Services, who are actively engaged in analysis of controlled substance prescription information, as part of their assigned duties and responsibilities. These personnel shall have access to prescription information for specific patients. Additionally, aggregate controlled substances prescribing information may be provided to these personnel and may be shared with other personnel of the Department of Mental Health and Substances Abuse Services as needed to fulfill the assigned duties and responsibilities:

1. The Chief Pharmacist;

2. The State Opioid Treatment Authority (SOTA) or SOTA designees; and

3. The Medical Director; or

(i) A person who has the patient's written permission to have access to the patient's records in the database.

(3) Law enforcement personnel engaged in an official investigation and enforcement of state or federal laws involving controlled substances or violations of T.C.A. Title 53, Chapter 10, part 3 may access information contained in the database pursuant to this chapter.

(4) Law enforcement agencies and personnel seeking or receiving information from the database pursuant to this section shall comply with the following requirements:

(a) Any law enforcement agency or judicial district drug task force that requires one (1) or more of its officers or agents to have the authorization to request information from the database shall first pre-approve each such officer. Pre-approval shall be by the applicant's supervisor, who shall be either the chief of police, county sheriff, or the judicial district drug task force district attorney general in the judicial district in which the agency or task force has jurisdiction. By December 1 of each year, each district

(Rule 1140-11-.01, continued)

attorney general shall send to the board of pharmacy a list of applicants authorized to request information from the database from that general's judicial district for the next calendar year.

(b) If the Tennessee Bureau of Investigation (TBI) requires one (1) or more of its agents to have the authorization to request information from the database, each such agent shall first be pre-approved by the agent's immediate supervisor and division head. Approved applicants shall be sent to the board of pharmacy by the TBI director. By December 1 of each year, the TBI director shall send to the board of pharmacy a list of applicants authorized to request information from the database from the bureau for the next calendar year.

(c) An application submitted by law enforcement personnel shall include at least the following:

1. Applicant's name; title; agency; agency address; agency contact number; agency supervisor; and badge number, identification number or commission number, and the business email address of each applicant officer or agent, the appropriate district attorney general and, if a TBI agent, the TBI director and their email addresses; and

2. Signatures of the applicant, the applicant's approving supervisor and the district attorney general of the judicial district in which the applicant has jurisdiction or the approving TBI division head and the TBI director.

(d) When requesting information from the database, law enforcement personnel must provide a case number corresponding with an official investigation involving controlled substances.

(e) Law enforcement personnel, including judicial district drug task force agents and TBI agents, who are authorized to request information from the database, shall resubmit their identifying application information that was submitted pursuant to subparagraph (4)(c) to the appropriate district attorney general or to the TBI director, by November 20 of each year. Such resubmitted applications shall be sent by the appropriate district attorney general or the TBI director to the board of pharmacy by December 1 each year. If during the calendar year, a name is added to the list, removed from the list, or information about a person on the list changes, the appropriate district attorney general or TBI director shall immediately notify the board of pharmacy of any changes to the list submitted or in the information submitted for each officer or agent on the list application.

(5) Information obtained from the database may be shared with other law enforcement personnel or prosecutorial officials, only upon the direction of the officer or agent who originally requested the information, and may only be shared with law enforcement personnel from other law enforcement agencies who are directly participating in an official joint investigation.

(6) Any information obtained from the database that is sent to a law enforcement official or judicial district drug task force agent shall also be sent to the district attorney general of the judicial district in which such officer or agent has jurisdiction. Likewise, any database information sent to a TBI agent shall also be sent to the TBI director.

(7) Information obtained from the database by law enforcement personnel shall be retained by the law enforcement personnel's respective department or agency. The information obtained from the database shall not be made a public record, notwithstanding the use of the information in court for prosecution purposes. Information obtained from the database shall be maintained as evidence in accordance with each law enforcement agency's respective procedures

(Rule 1140-11-.01, continued)

relating to the maintenance of evidence.

(8) If a law enforcement officer, judicial district drug task force agent, or TBI agent has probable cause to believe, based upon information received from a database request, that a prescriber or pharmacist may be acting or may have acted in violation of the law, the officer or agent shall consult with the board of pharmacy inspector's office if a pharmacist is believed to have acted or is acting unlawfully or to the health related boards' investigations unit if a prescriber is believed to have acted or is acting unlawfully.

(9) At least every six (6) months, the board of pharmacy shall send a list to each district attorney general containing all requests made for database information during the previous six (6) months. The list shall include the name of the requesting officer or agent, the officer or agent's agency, the date of the request, and the nature of the request, including the case number, for each officer or agent making a request in such district attorney's judicial district. Likewise, a list shall be sent to the TBI director for all TBI agents making requests during the previous six (6) months.

(a) Each district attorney general and the TBI director shall use the list to verify database requests made during the preceding six (6) month period, and conduct an audit in accordance with T.C.A. § 53-10-306(j)(2). Verification of all database requests on the list received by each district attorney general and the TBI director must be sent back to the board of pharmacy within sixty (60) days of receipt. Where database information requests do not correspond to an investigation in the applicable jurisdiction or if the information requested was not relevant or pertinent to such an investigation, the district attorney general or TBI director shall so note on the verified list and shall investigate and make a report to the board of pharmacy within sixty (60) days.

(b) The results of the audit shall be discoverable by a prescriber, dispenser, or healthcare practitioner extender charged with violating any state or federal law involving controlled substances or under a notice of charges proffered by an appropriate licensing board for a violation of any law involving controlled substances, but only the results pertaining to that prescriber, dispenser, or healthcare practitioner extender are discoverable. If, however, there is an active criminal investigation involving a prescriber, dispenser, or healthcare practitioner extender, or the prescriber, dispenser, or healthcare practitioner extender is under investigation by any investigations or prosecution unit of the appropriate licensing board, the results of the audit shall not be discoverable by the prescriber, dispenser, or healthcare practitioner extender during either such period.

***Authority:*** *T.C.A. §§53-10-303(f), 53-10-304(b), 53-10-305(e), 53-10-306, and 53-10-308.* ***Administrative History:*** *Original rule filed December 22, 2005; effective March 7, 2006.*

**1140-11-.03 ALTERNATIVE IDENTIFICATION OF PATIENTS.**

(1) If a patient does not have a social security number or refuses to provide his or her social security number to be used as a patient identifier, then the board shall use the patient's driver's license number or telephone number as the patient identifier in the database.

(2) If a patient does not have a social security number, a driver's license number or a telephone number, then the board shall use the number "000-00-0000" as the patient identifier in the database.

(3) If a patient or a patient's agent refuses to provide his or her social security number, driver's license number or telephone number to his or her prescriber or dispenser, then the board shall use the number "999-99-9999" as the patient identifier in the database.

(Rule 1140-11-.03, continued)

(4) If a patient's social security number is not available, then the board shall use the social security number, driver's license number or telephone number of the person obtaining the controlled substance on behalf of the patient as the patient identifier in the database or the numbers "000-00-0000" (does not have the data) or "999-99-9999" (refusal to provide data), as applicable.

(5) If a patient is a child who does not have a social security number, then the board shall use the parent's or guardian's social security number, driver's license number, telephone number, or number "000-00-0000" (does not have data) or number "999-99-9999" (refusal to provide data) as the patient identifier in the database.

(6) If a patient is an animal, then the board shall use the owner's social security, driver's license number, telephone number, or number "000-00-0000" (does not have data) or number "999-99-9999" (refusal to provide data) as the patient identifier in the database.

***Authority:*** *T.C.A. §§53-10-303(f) and 53-10-305.* ***Administrative History:*** *Original rule filed December 22, 2005; effective March 7, 2006.*

**1140-11-.04 SUBMISSION OF INFORMATION.**

~~(1) A dispenser who is licensed in the State of Tennessee, who is dispensing controlled substances within or from outside of the State of Tennessee and who is treating patients in the State of Tennessee with controlled substances shall submit the required information to the Committee pursuant to Tenn. Code Ann. §53-10-305(a).~~

~~(2) The dispenser shall submit the data that is required by Tenn. Code Ann. §53-10-305 in one of the following forms:~~

~~(a) an electronic device compatible with the Committee's receiving device or the receiving device of the Committee's agent;~~

~~(b) double-sided, high density micro floppy disk;~~

~~(c) one-half (1/2) inch, nine (9) track sixteen hundred (1,600) or six thousand two hundred and fifty (6,250) BPI magnetic tape; or~~

~~(d) other electronic or data format approved by the Committee.~~

~~(3) The dispenser shall transmit the data that is required pursuant to Tenn. Code Ann. §53-10-305(a) in the May, 1995 version of the Telecommunications Format for Controlled Substances established by the American Society for Automation in Pharmacy (ASAP).~~

~~(4) If the dispenser does not have an automated recordkeeping system capable of producing an electronic report of the required data in the format established by the ASAP, then the dispenser may request a waiver from the electronic reporting requirement from the Committee.~~

~~(5) If the Committee grants the dispenser a waiver from the electronic reporting requirement, then the dispenser shall comply with an alternative method of reporting the data as determined by the Committee, such as submitting the required data in writing on a form approved by the Committee.~~

(1) Each dispenser or dispenser's agent shall, regarding each controlled substance dispensed, submit to the database all of the following information:

(a) Prescriber identifier;

(Rule 1140-11-.03, continued)

(b) Dispensing date of controlled substance;

(c) Patient identifier and/or client identifier;

(d) Controlled substance dispensed identifier;

(e) Quantity of controlled substance dispensed;

(f) Strength of controlled substance dispensed;

(g) Estimated number of days' supply;

(h) Dispenser identifier;

(i) Date the prescription was issued by the prescriber;

(j) Whether the prescription was new or a refill; and

(k) Source of payment.

(2) The information in the database, as required by paragraph one (1) above, shall be submitted at least once every seven (7) days for all controlled substances dispensed during the preceding seven (7) day period.

(3) The data required by this rule shall be submitted to the database by any dispenser, or dispenser's agent, who dispenses a controlled substance contained in Schedules II, III, and IV, and Schedule V controlled substances identified by the Committee as demonstrating a potential for abuse.

(4) The reporting requirement shall not apply for the following:

(a) A drug administered directly to a patient;

(b) Any drug sample dispensed;

(c) Any drug dispensed by a licensed veterinarian; provided, that the quantity dispensed is limited to an amount adequate to treat the non-human patient for a maximum of forty-eight (48) hours;

(d) Any facility that is registered by the United States drug enforcement administration as a narcotic treatment program and is subject to the recordkeeping provisions of 21 CFR 1304.24; or

(e) Any drug dispensed by a licensed healthcare facility; provided, that the quantity dispensed is limited to an amount that is adequate to treat the patient for a maximum of forty-eight (48) hours.

(5) The dispenser, or dispenser's agent, shall submit the data that is required by T.C.A. § 53-10-305 in one of the following forms:

(a) An electronic device compatible with the Committee's receiving device or the receiving device of the Committee's agent; or

(b) Other electronic or data format approved by the Committee.

(Rule 1140-11-.03, continued)

(6) The dispenser shall transmit the data that is required, pursuant to T.C.A. § 53-10-305, in the 2009 version of the Telecommunications Format for Controlled Substances established by the American Society for Automation in Pharmacy (ASAP).

(7) If the dispenser does not have an automated recordkeeping system capable of producing an electronic report of the required data in the format established by the ASAP, or for whom electronic reporting would cause an undue hardship as determined by the Committee, then that dispenser may request a waiver from the electronic reporting requirement from the Committee. The waiver may be valid for two (2) years from ratification by the Committee.

(8) If the Committee grants the dispenser a waiver from the electronic reporting requirement, then the dispenser shall comply with an alternative method of reporting the data as determined by the Committee, such as submitting the required data in writing on a form approved by the Committee.

***Authority:*** *T.C.A. §§53-10-303(f) and 53-10-305.* ***Administrative History:*** *Original rule filed December 22, 2005; effective March 7, 2006.*

1140-11-.05 Practice Sites – Electronic Access.

(1) Each person or entity operating a practice site where a controlled substance is prescribed or dispensed to a human patient shall provide for electronic access to the database at all times when a prescriber or dispenser provides healthcare services to a human patient potentially receiving a controlled substance.

(2) This rule shall not apply to dispensers who are not required to report, pursuant to T.C.A. § 53-10-304(d) or § 53-10-305(g).

(3) A violation of paragraph one (1) above is punishable by a civil penalty not to exceed one hundred dollars ($100) per day assessed against the person or entity operating the practice site; provided, however, that the penalty shall only be imposed when there is a continued pattern or practice of not providing electronic access to the database

Authority: T.C.A. §§ 53-10-303(f) and 53-10-310.

1140-11-.06 Prescriber and Dispenser Responsibilities (Effective April 1, 2013).

(1) All prescribers or their designated healthcare practitioner's extenders, unless otherwise exempted by T.C.A., Title 53, Chapter 10, part 3, shall check the database prior to prescribing one of the controlled substances identified below in paragraph (3) to a human patient at the beginning of a new episode of treatment and shall check the database for the human patient at least annually when that prescribed controlled substance remains part of treatment.

(2) Before dispensing, a dispenser shall have the professional responsibility to check the database or have a healthcare practitioner extender check the database, if the dispenser is aware or reasonably certain, that a person is attempting to obtain a Schedule II-V controlled substance, identified by the Committee as demonstrating a potential for abuse for fraudulent, illegal, or medically inappropriate purposes, in violation of T.C.A. § 53-11-402.

(3) The controlled substances which trigger a check of the database pursuant to paragraph (1) above include, but are not limited to, all opioids and benzodiazepines.

(4) Prescribers are not required to check the database before prescribing or dispensing one of the controlled substances identified in paragraph (3) above or added to that list by the

(Rule 1140-11-.03, continued)

Committee if one (1) or more of the following conditions is met:

(a) The controlled substance is prescribed or dispensed for a patient who is currently receiving hospice care;

(b) The Committee has determined that prescribers in a particular medical specialty shall not be required to check the database as a result of the low potential for abuse by patients receiving treatment in that medical specialty;

(c) The controlled substance is prescribed or dispensed to a patient as a non-refillable prescription as part of treatment for a surgical procedure that occurred in a licensed healthcare facility;

(d) The quantity of the controlled substance which is prescribed or dispensed does not exceed an amount which is adequate for a single, seven-day treatment period and does not allow a refill.

Authority: T.C.A. §§ 53-10-303(f) and 53-10-310.

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| NA | | | | | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Commissioner of Health on March 26, 2013, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 01/10/13

Rulemaking Hearing(s) Conducted on: (add more dates). 03/07/13

Date: 3-26-2013

Signature:

Name of Officer: John J. Dreyzehner, MD, MPH, FAOCEM

Title of Officer: Commissioner Department of Health

BARBARA E. WEST STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY

MY COMMISSION EXPIRES: May 5, 2015

Subscribed and sworn to before me on: March 26, 2013

Notary Public Signature: Barbara E. West

My commission expires on: 05/05/2015

All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

Robert E. Cooper, Jr.
Attorney General and Reporter

3-28-13
Date

**Department of State Use Only**

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Filed with the Department of State on: 4/2/13

Effective on: 7/1/13

Tre Hargett
Secretary of State

## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Tennessee Higher Education Commission |
| DIVISION: | Division of Postsecondary School Authorization (DPSA) |
| SUBJECT: | Authorization and Regulation of Postsecondary Institutions and Their Agents |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Sections 49-7-2005, and 49-7-2014 |
| EFFECTIVE DATES: | September 28, 2013 to June 30, 2014 |
| FISCAL IMPACT: | Minimal |
| STAFF RULE ABSTRACT: | 1540-01-02-.01 - 1540-01-02-.26 This rule provides a concise listing of the authorization and regulation of postsecondary institutions and their agents as compiled by the Division of Postsecondary School Authorization of the Tennessee Higher Education Commission. The proposed revision of the rules does the following: |

- Amends the name from "the Postsecondary Education Institution Committee" to "the Committee on Postsecondary Educational Institutions";

- Reorganizes the rules to insert the name of the Committee, as stated in T.C.A. § 49-7-207 and alters the language to use consistent language, such as "the Act" as well as aid in the implementation of other rules provisions;

- Amends, revises, deletes or creates definitions for terms including, but not limited to: accreditation, agent, agent's permit, articulation agreement, college, committee, credentials distance learning, postsecondary educational institution, SACS commission on colleges, or solicitation;

- Revisions also incorporate changes made during the 2008 rulemaking process. In October 2011, the Davidson County Chancery Court declared the 2008 rulemaking revisions void and of no effect as a result of a procedural error;

- Adds the statutory authority for the exemptions allowed for the agent's permit requirement of T.C.A. § 49-7-2009;

- Clarifies that instructions and programs that use "university" or "college" in the institution name must meet the definition of "university" or "college" pursuant to the rules and unaccredited institutions using college in their institution name should include a qualifier;

- Amends the deadline for the institution's applications, what constitutes a complete application and clarifies the procedures for fire and sanitation inspections, change in ownership, new programs or program revisions, change of address, the change of an institution name or the discontinuance of a program;

- Amends the regulations for specific school types such as non degree and degree granting institutions, distance learning, bartending schools, truck driving schools, modeling schools; deletes the rule on computer training;

- Revises and clarifies which institution must file reauthorization and length of the reauthorization period, based on the type of institution;

- Adds language explaining how liberal arts schools or professional school may request a waiver and clarifies how institutions should act until a waiver is granted;

- Adds language to the institution's catalog concerning cash discounts in order to ensure all students receive the policy and protects the institution in the event of a complaint;

- Simplifies the admission requirements for degree and non-degree programs;

- Requires institutions to use a pre-enrollment checklist; clarifies what must be in the checklist to ensure students receive the required information by signing an enrollment agreement; institutions must provide students a written disclosure about the transference of credits and the institutions cash discount policy; amends the definition of tuition; and clarifies that students enrolled in a single class rather than an entire program shall receive a customized pre-enrollment checklist.

- Mandates all institutions seeking authorization to maintain a business account with a financial institution that is federally insured;

- Clarifies the length of time the institution must maintain a record of written student complaints; requires the institution to maintain a master list of information for students enrolling at the institution, including, but not limited to the :

    - date of registration or enrollment;
    - full name of the student;
    - the social security number or unique student identification number; and
    - the transferability of credit disclosure statement and proof that the student meets the institution's admission requirements;

- Institutions must maintain and provide to the Commission the qualifications of all personnel; amends the rule to allow an instructor is qualified to teach all program levels beneath the highest level for which the instructor is qualified;

- Prohibits unaccredited institutions from accepting funds for tuition or fees prior to the days before the schedule start date of the class or program;

- Revises the Fair Consumer Practices to allow:

    - Institutions to provide a discount for cash payments, provided, that the institution has a written policy for a cash discount and the student indicates receipt and understanding of the policy by signing the pre-enrollment checklist;
    - Institutions to award scholarships, tuition waivers or other awards as along as the criteria for receipt of the award is in writing, the institution has a form and procedure to verify eligibility and the amount of the award is a flat dollar amount or subject to calculation; and
    - Defines fair consumer practices and the procedure for investigating a written complaint;

- Updates the THEC web address; prohibits institutions from using the THEC logo on any promotion and institutional material; explains what information must be included in radio advertisements;

- Allows the temporary authorization of an institution to either enroll students or begin providing education instruction within 90 days and institutions for a regular

authorization must be reauthorized annually on forms supplied by the Commission;

- Reduces the amount of time in which an institution must notify THEC of its intent to close; requires the institution to submit a closure plan in order for THEC to protect the financial and educational interests of students; requires student teachouts to be within a specific geographical location of the closing institution; and clarifies the process for submitting transcripts and financial aid records to THEC upon the closure of an institution and how a student may obtain a copy of the student's transcript;

- Restates the requirement pursuant to T.C.A. § 49-7-2018(e) that any institution authorized on or after July 1, 2006, is required to pay into the Tuition Guarantee Fund for six years; and

- Requires the Commission to return to authorized institutions any reserve balance at the end of a fiscal year that is more than $1,500,000, but no funds will be remitted to an institution with less than $25; creates a mechanism by which an institution can request a refund of all, or a portion, of fees paid if it decides to withdraw a pending application.

**Regulatory Flexibility Addendum**
Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

(1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule:

The Tennessee Higher Education Commission (THEC) represents that the businesses affected by these rule revisions are non-exempt postsecondary educational institutions. THEC opines that as of March 2012 approximately 110 or 56% of the non-exempt postsecondary educational institutions may be small businesses.

(2) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record:

THEC represents that the additional reporting, recordkeeping and other administrative costs required for compliance with the proposed rule revisions is minimal. Similarly, the rule revisions do not require small business institutions to procure any professional skills that the institution would not already need to comply with the rules.

(3) A statement of the probable effect on impacted small businesses and consumers:

THEC represents the following:

- The adoption of the new rule titled "Return of Regulatory Fees" may result in a refund to small businesses and such refund may be passed down, in whole or in part, to the students through lower fees or tuition.
- The revision to rules .13 and .11 may cause a small business to create a separate pre-enrollment checklist and revise the enrollment agreement and/or catalog. THEC notes that many of the institutions that are small businesses already use a separate pre-enrollment checklist and will need only to revise the existing checklist. Additionally, the catalog will only need to be revised if the institution chooses to implement a cash discount, which may in fact benefit institutions and students. Lastly, the revisions to these forms will benefit students by providing more accurate and complete disclosures.
- The revision to rule .14 should benefit small business institutions by alleviating the financial burden of submitting audited financial statements.

(4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business:

THEC represents that this is not applicable because the proposed rule revisions are not burdensome, intrusive or costly.

(5) A comparison of the proposed rule with any federal or state counterparts:

THEC represents that there are no federal or state counterparts to the proposed rule revisions.

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule:

THEC represents that this question is not applicable because the proposed rule revisions are not burdensome, intrusive or costly. Moreover, exemption from the rules noted in response to number (3) would operate to deny small businesses the benefit of the refund and the waiver of the audit requirement and deny students the benefits of more accurate and complete disclosures.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

THEC represents that the proposed rule revisions will not have a financial impact on local governments.

**Department of State**
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Sequence Number: 04-02-13
Rule ID(s): 5467
File Date: 4/1/13
Effective Date: 9/28/13

# Proposed Rule(s) Filing Form

*Proposed rules are submitted pursuant to T.C.A. §§ 4-5-202, 4-5-207 in lieu of a rulemaking hearing. It is the intent of the Agency to promulgate these rules without a rulemaking hearing unless a petition requesting such hearing is filed within sixty (60) days of the first day of the month subsequent to the filing of the proposed rule with the Secretary of State. To be effective, the petition must be filed with the Agency and be signed by twenty-five (25) persons who will be affected by the amendments, or submitted by a municipality which will be affected by the amendments, or an association of twenty-five (25) or more members, or any standing committee of the General Assembly. The agency shall forward such petition to the Secretary of State.*

**Agency/Board/Commission:** Tennessee Higher Education Commission
**Division:** Division of Postsecondary School Authorization (DPSA)
**Contact Person:** Julie M. Woodruff, Director of Regulatory Affairs & Complaint Resolution, DPSA
**Address:** Parkway Towers, Suite 1900, 404 James Robertson Parkway, Nashville, TN
**Zip:** 37243-0830
**Phone:** (615) 253-8857
**Email:** julie.woodruff@tn.gov

**Revision Type (check all that apply):**
X Amendment
X New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 1540-01-02 | Authorization and Regulation of Postsecondary Institutions and Their Agents |
| **Rule Number** | **Rule Title** |
| 1540-01-02-.02 | Role of the Commission, Committee and Staff |
| 1540-01-02-.03 | Definitions |
| 1540-01-02-.05 | Exemption |
| 1540-01-02-.06 | Minimum Authorization Standards and Requirements |
| 1540-01-02-.07 | Institutional Applications |
| 1540-01-02-.08 | Regulations for Specific School Types |
| 1540-01-02-.09 | Annual Reauthorization |
| 1540-01-02-.10 | Required Minimum Standards |
| 1540-01-02-.11 | Institutional Catalog |
| 1540-01-02-.12 | Admissions Standards |
| 1540-01-02-.13 | Enrollment Agreements and Disclosure Standards |
| 1540-01-02-.14 | Financial Standards |
| 1540-01-02-.15 | Institutional and Student Records |
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| 1540-01-02-.19 | Fair Consumer Practices and Student Complaints |
| 1540-01-02-.20 | Advertising and Solicitation |
| 1540-01-02-.21 | Authorization Status |
| 1540-01-02-.23 | Institutional Closure |

| | |
|---|---|
| 1540-01-02-.24 | Tuition Guarantee Fund (TGF) |
| 1540-01-02-.26 | Return of Regulatory Fees |

RULES OF
TENNESSEE HIGHER EDUCATION COMMISSION

CHAPTER 1540-01-02
AUTHORIZATION AND REGULATION OF
POSTSECONDARY EDUCATION INSTITUTIONS AND THEIR AGENTS

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1540-01-02-.01 PREFACE [NO PROPOSED AMENDMENTS]

1540-01-02-.02 ROLE OF THE COMMISSION, COMMITTEE AND STAFF

(1) Role of the Commission:

(a) The Tennessee Higher Education Commission at each quarterly meeting shall consider recommendations from the Commission staff and/or Committee on Postsecondary Educational Institutions ~~Committee~~ regarding all authorizations, awarding educational credentials (including authority to grant degrees) and any other matter at the request of the Commission's Executive Director.

(b) No institution may solicit, recruit, award credentials or operate as a postsecondary educational institution until such authorization is granted by affirmative vote of the Commission.

(2) Role of the Executive Director:

(a) The Executive Director is empowered to take any urgent action, based on these rules and the Act, necessary to conduct this consumer protection regulatory function, during the periods between authorization action meetings of the Commission, subject to ratification by the Commission provided that:

1. the Executive Director shall give written notice of such action to the affected party;

2. the Executive Director shall instruct the affected party that they may notify the Commission within ten (10) business days if the aggrieved party desires a hearing and review by the Commission, and that otherwise the action shall be deemed final;

3. at the same time the Executive Director shall give written notice of the action to members of the Commission.

(b) Whenever the Commission ~~authorization~~ staff cannot resolve a complaint or dispute to the administration of these rules, the Executive Director upon a written request from an aggrieved party which in the view of the Executive Director is justifiable, will provide a review and/or hearing for parties involved prior to presentation of the unresolved complaint or dispute to the Commission.

(c) On the advice of the Committee on Postsecondary Educational Institutions, the Executive Director, in consultation with the Commission, is authorized to recommend the waiving of deadlines or regulations developed pursuant to this Chapter, upon well-documented extraordinary cause, where necessary to carry out the provisions of this part in the public interest and where consistent with ~~T.C.A. §49-7-2001 et seq~~the Act.

(d) The Executive Director may exempt a program or activity from authorization or from compliance with a specific regulation if such an exemption can be demonstrated to be in the public good or interest. Such exemptions should be temporary and narrow in scope and be subject to annual review.

(e) The Executive Director is empowered to act in the following matters, subject to a hearing and review by the Commission upon the request of the aggrieved party in the manner provided by T.C.A. § 49-7-2010(b).

1. Assess fines under this Part.

2. Intervene to alter, place conditions on, suspend or revoke, in full or in part, an institution's or agent's authorization to operate.

3. Issue temporary, conditional, limited, or probationary authorization.

(f) Advise the Tennessee Student Assistance Corporation to notify the appropriate lending and guarantee agencies of the institution's closure.

(3) Role of the Committee on Postsecondary Educational Institutions~~Postsecondary Education Institution Committee~~:

(a) The Committee on Postsecondary Educational Institutions ~~Committee~~ shall meet quarterly or at other times on the call of the Chairman of said Committee or pursuant to the call of the majority of Committee members, to serve as an advisory committee to the Commission, and make recommendations on:

1. all initial applications for temporary authorization;

2. all applications for regular authorization;

3. all applications for reauthorization;

4. the awarding of educational credentials; and

5. such other matters relating to the ~~Postsecondary Education~~ Act at the request of the Commission's Executive Director~~;~~.

(b) The Committee~~,~~ and, as needed, other experts appointed by the Executive Director, shall participate in institutional site visits for purposes of evaluating compliance with legislation and rules~~;~~.

(c) The Committee shall exercise such powers and undertake such obligations as are delegated to it by the Commission under the provisions ~~of Part 20 of this chapter~~the Act. Such delegations shall include the authority to initiate and conduct on-site institutional reviews and investigations and the formulation of rules of procedure and performance standards for authorization and institutional performance, which actions shall be subject to review, approval and/or disapproval by the Commission.

(d) The Chairman of the Committee may appoint sub-committees as needed.

(4) Role of the Commission staff:

(a) Designated Commission staff members shall oversee and administer for purposes of compliance the Act and these rules ~~TCA §49-7-2001 et seq. and the related Postsecondary Regulations chapter 1540-1-2~~.

(b) ~~Beginning July 1, 1997, the office and~~ The Commission staff responsible for oversight of the Act and these rules~~TCA §49-7-2001 et seq. and the related Postsecondary Regulations chapter 1540-01-02~~ shall be officially referred to as the Tennessee Higher Education Commission, ~~Office~~ Division of Postsecondary School Authorization ~~(Professional, Business, Vocational and Career)~~.

(c) Commission staff shall ~~P~~perform site visits to review, inspect and investigate as necessary, institutions seeking, holding or required to hold a certificate of authorization for verification of compliance. Site visits may be conducted for ~~This includes but is not limited to~~ initial authorization for new institutions, new program reviews, authorization inspections for non-exempt ~~Tennessee~~ institutions, follow up to written and signed complaints or adverse publicity or any situation that may adversely affect students or consumers.

(d) Investigate as necessary all ~~non-~~unauthorized postsecondary educational activities ~~operating in Tennessee~~ to verify adherence to the Act and these rules ~~by all institutions not exempted by the Act~~.

(e) Establish a deadline for submission of initial authorization ~~packages~~applications, new program applications and any other materials to be included on the agenda for each quarterly meeting of the ~~Postsecondary~~ Committee. ~~(Institutional Applications (1540-01-02-.07)).~~

(f) Share with state or federal agencies information for institutions seeking, holding or required to hold a certificate of authorization and unauthorized educational operations. Provide state or federal agencies information pertaining to school closures under any condition. Share with appropriate accrediting bodies any adverse action taken by the Executive Director or Commission.

Authority: T.C.A. §§ 49-7-2005 and 49-7-2014.

1540-01-02-.03 DEFINITIONS

(1) The following definitions are complementary to definitions in T.C.A. § 49-7-2003 and have the following meanings, unless the context clearly indicates otherwise:

(a) "Ability-to-benefit student" as used in these regulations, in contrast to the use of that term for federal financial aid or other purposes, means students, regardless of financial condition, who do not possess a high school diploma or GED, but who have demonstrated that they can profit materially or personally from a certain course of study.

(b) "Academic" as used in the description of a program or institution means that which is organized primarily for academic training or transfer.

(c) "Accreditation" is a non-governmental, peer evaluation of educational institutions and programs. Private educational associations of regional and national scope have adopted criteria reflecting the qualities of a sound educational program and have developed procedures for evaluating institutions or programs. These criteria determine whether or not institutions or programs are operating at basic levels of quality. The Commission only recognizes accrediting agencies that are recognized by the U.S. Department of Education.

(~~c~~d) "Act" means the Postsecondary Education Authorization Act of 1974, Tennessee Code Annotated 49-7-2001, et seq. as amended.

(~~d~~e) "Adverse action" means action taken by the Executive Director or Commission to penalize, limit, change, suspend or cause to cease activity that is in non-compliance with the Act and these rules. Such adverse action may include but not be limited to fines of $500 per violation per day; suspension of activity; conditional authorization or revocation.

~~(e) "Agent" means a person employed full- or part-time by the institution, whether the institution is located within or without the state of Tennessee, to act as representative, solicitor, broker, or independent contractor to directly procure or induce people to become students or enrollees for the institution at an off-campus location.~~

(f) "Agent" means any person owning any interest in, employed by or representing for remuneration a postsecondary educational institution, who, by solicitation in any form, outside of the institution, enrolls or seeks to enroll a student for education offered by an authorized institution, or offers to award educational credentials, for remuneration, on behalf of any such institution for any such purpose.

(g) "Agent's permit" means a nontransferable written authorization issued to a natural person by the Commission which allows that person to act as an agent.

(h) "Articulation agreement" means an arrangement between two higher education institutions approved and signed by authorized institutional representatives and constructed by faculty in the discipline that equates for transfer of a defined set or block of academic credits that will meet requirements of a specified academic degree program major at the degree-awarding institution.

(~~f~~i) "Associate's degree" means a credential issued to students who complete a vocational or academic program or curriculum consisting of at least 60 semester credit hours or 90 quarter credit hours of instruction, or equivalent.

(~~g~~j) "Authorization to operate" means permission ~~or licensure~~ to operate for a specified time in a specified place(s). An institution or agent awarded a letter or certificate of authorization in Tennessee shall not use terms to interpret the

letter or certificate which specify or connote greater approval than simple permission to operate. Terms which may not be used include, but are not limited to, "accredited," "supervised," "endorsed," and "recommended by the Commission."

(~~h~~k) "Authorization site visit" means an institutional site visit conducted by Commission staff or Postsecondary Committee members to verify compliance with ~~Postsecondary Education Authorization Act of 1974, Tennessee Code Annotated §49-7-2001, et.seq. as amended~~ the Act and these rules ~~chapter 1540-1-2 of the Postsecondary Regulations~~. The authorization visit is commonly called a 'site visit'.

(~~i~~l) "Bachelor's degree" means a credential issued to students who complete a vocational or academic program or curriculum consisting of at least 120 semester credit hours or 180 quarter hours, or equivalent.

(~~j~~m) "Certificate program" generally means one or more technical courses usually completed in one to twenty-six weeks, or up to and including 500 contact hours normally with a single skill objective.

(~~k~~n) "Certified" when used to modify audit refers to an audit in accordance with Generally Accepted Auditing Standards (GAAS) and in accordance with the auditing standards set forth in the book, "Government Auditing Standards" issued by the Comptroller of the United States (often referred to as the "yellow book" standards). If, however, the entity is required for other reasons to have conducted a certified audit in accordance with O.M.B., Circular A-133, such an audit shall be an acceptable substitute for the audit required pursuant to these regulations.

(~~l~~o) "Closed enrollment" means instruction provided between an educator or educational service to a group or business on a private contractual bases, whereby public solicitation does not occur and the instructional provider is given a list of enrollees to train at no cost to the students.

(~~m~~p) "College" means (1) a unit of a university offering specialized degrees or (2) a postsecondary institution offering courses of study leading to a degree ~~traditional undergraduate college degrees. Some examples of traditional degrees are: Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts~~.

(~~n~~q) "Commission" means the Tennessee Higher Education Commission.

(r) "Committee" means the Committee on Postsecondary Educational Institutions.

(~~o~~s) "Contact Hour" or "~~(~~clock hour"~~)~~ refers to actual directed or supervised instructional time, not to be less than 50 minutes for every 60 minutes of time.

(~~p~~t) "Credentials" means degrees, diplomas, certificates, transcripts, reports, documents, or letters of designation, marks, appellations, series of letters, numbers, or words which signify, purport, or are generally taken to signify enrollment, attendance, progress or satisfactory completion of the requirements or prerequisites for education at a postsecondary educational institution. ~~refers to educational credentials which include but are not limited to: certificates, diplomas, letters of designation, degrees, transcripts or any other papers generally taken to signify progress or completion of education/training~~

~~at a postsecondary educational institution.~~

(u~~q~~) "Degree" means letters of designation or credential or a title from a postsecondary level program acceptable to and so authorized by the Commission and/or an accrediting body recognized by the U.S. Department of Education. Typically used in some form is the term 'associate', 'bachelor', 'masters' or 'doctor' in the credential designation.

(v~~r~~) "Diploma program" means a program of instruction offering technical and some basic course work. Some general or peripheral courses may be included. The program shall generally range for more than 500 contact hours but less than contact requirements for the Associates degree.

(w) "Distance learning" means a system and process that connects learners with distributed learning resources through delivery systems at a distance such as correspondence, video tape, audio tape, telecommunications, computer resources, computer network system or an electronic delivery system, where there is physical separation of the instructor and student.

(x~~s~~) "Doctoral degree" means a credential issued to students who complete a program consisting of a bachelor's degree plus at least 90 semester hours or 135 quarter hours of graduate credit or equivalent.

(y~~t~~) "Enrollment" refers to those students who have completed the institution's application forms, submitted a financial deposit where required, and have actually attended one or more sessions of class(es), or, in the case of ~~home study~~Distance Learning programs, received one or more lessons.

(z~~u~~) "Educational service" means an individual or business established to provide services such as, but not limited to, a testing service, test preparation or a business that assists people in gaining academic credit for life experience, ~~non-~~unaccredited courses or non-college training.

(aa~~v~~) "General education courses" means~~are general education core or~~ academic subjects intended to broaden communication/language skills, contribute to the intellectual growth of the student ~~and~~or give balance to the total program beyond the area of vocational or professional concentration~~,~~.

(bb~~w~~) "Independent certified public accountant (C.P.A.)" means a C.P.A. not associated with the institution or its owners, especially in such a way that a conflict of interest or appearance of conflict arises.

~~(x) "Institute" means a postsecondary institution offering courses of study and training not usually associated with traditional liberal arts degrees. Appropriate credentials awarded would include applied science degrees, certificates, and diplomas such as the Associate of Applied Science (A.A.S).~~

(cc~~y~~) "Institutional director" means the institutional executive designated by the institution to assume responsibility for ensuring that the conduct of the institution and its agents is within these rules and the Act. Further, the institutional director will serve as the official contact for all business conducted between the institution and the Commission and maintain complete authorization files. Additional responsibilities and qualifications are listed in Rule 1540-01-02-.16.

(dd) "Instructional site" means a non-residential facility that is commercially zoned and utilized for the training of students.

~~(z) "Long Distance Learning" means a system and process that connects learners with distributed learning resources through delivery systems at a distance such as correspondence, video tape, audio tape, telecommunications, computer resources, computer network system or an electronic delivery system, where there is physical separation of the instructor and student.~~

(ee~~aa~~) "Master's degree" means a credential issued to students who complete a program consisting of a bachelor's degree plus at least 30 semester credit hours or 45 quarter credit hours, or equivalent.

(ff~~bb~~) "Non-exempt institution" means all postsecondary institutions not specifically exempted under provisions of T.C.A. §49-7-2004 of the Act or Section 1540-01-02-.05 of these rules and means all instructional sites which must have separate authorization~~ unless, in the view of the Commission, the instructional locations are in sufficient proximity for facilitation of support services and administration~~.

(gg~~cc~~) "Out-of-state", as applied to describe an authorized postsecondary educational institution, means an institution that maintains its primary campus in another state, but has physical presence in Tennessee.

(hh~~dd~~) "Physical presence" means actual presence within the state of Tennessee for the purpose of conducting activity related to: a postsecondary educational institution; an educational service; dissemination of educational credentials; enrollment; solicitation or advertising. Physical presence as further outlined for purposes of authorization shall include but not be limited to:

1. An instructional site within the state.

2. Instruction within or originating from Tennessee designed to impart knowledge with response utilizing teachers, trainers, counselors etc., or computer resources, or computer linking (e.g. internet), or any form of electronic telecommunications;

3. Dissemination of an educational credential from a location within the state;

4. An agent, recruiter, institution or business that solicits for enrollment or credits or for the award of an educational credential;

5. Advertising, promotional material or public solicitation in any form that targets Tennessee residents or uses local advertising markets in the state for institutions seeking, holding or required to hold a certificate of authorization.

~~(ee) "Postsecondary education institution" means an entity which maintains a place of business within Tennessee, or solicits business in Tennessee, and which offers or maintains a course or courses of instruction or study, or at which place of business such a course or courses of instruction or study are available through field instruction, classroom instruction or by long distance learning or both to a person or persons for the purpose of training or preparing the person~~

~~for a field of endeavor in a business, trade, technical, service or industrial occupation, for a vocation, or for the award of an educational credential, except as excluded by the provisions of these rules and the Act.~~

(ii) "Postsecondary educational institution" includes, but is not limited to, an academic, vocational, technical, online/distance learning, business, professional, or other school, college, or university, or other organization or person, offering educational credentials, or offering instruction or educational services primarily to persons who have completed or terminated their secondary education or who are beyond the age of compulsory high school attendance, for attainment of educational, professional, or vocational objectives.

(jj~~ff~~) "Quarter" is a period of instruction into which the academic year may be divided. A quarter must consist of at least ten (10) weeks.

(kk~~gg~~) "Quarter credit hour" means a measurement of scholastic attainment earned by receipt of instruction of one classroom lecture hour per week for one quarter or two hours of laboratory experience per week for one quarter, or three hours of intern/externship experience per week or the equivalent number of hours.

(ll~~hh~~) "Residential~~ce~~ course" means a course in which the student comes to an institutional campus or instructional site as opposed to a course where the student stays at home (i.e., ~~Long~~ Distance Learning).

~~(ii) "SACS Commission on Colleges" means the Commission of the Southern Association of Colleges and Schools which accredits degree-granting postsecondary institutions.~~

(mm~~jj~~) "School" means (1) A unit within a college or university that offers specialized instruction (e.g.~~i.e.~~, a school of engineering). (2) An institution that offers specialized instruction in areas (~~i.e.~~ e.g., driving, modeling, basic travel training) not usually associated with college or university education. Appropriate credentials awarded would include certificates and/or diplomas. Institutions using the name of "school" do not usually offer degrees.

(nn~~kk~~) "Semester" is a period of instruction into which the academic year may be divided. A semester must consist of at least 15 weeks.

(oo~~ll~~) "Semester credit hour" means a measurement of scholastic attainment earned by receipt of instruction of one classroom lecture hour per week for one semester or two hours of laboratory experience per week for a semester, or three hours of intern/externship experience per week or the equivalent number of hours.

(pp~~mm~~) "Solicitation" means contact, written or verbal, on behalf of an institution for the purpose of supplying information in an attempt to enroll Tennessee residents ~~inducing or attempting to induce a resident of Tennessee to sign, at any off-campus location, an enrollment agreement to attend a postsecondary educational institution~~.

(qq) "These rules" or "these regulations" means all rules contained in Rule Chapter 1540-01-02.

(rr) "Traditional degree" shall mean degrees including, but not limited to: Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Business Administration, Bachelor of Science, Bachelor of Fine Arts, Master of Arts, Master of Science, Master of Fine Arts, Master of Business Administration,

Doctor of Philosophy, Doctor of Psychology, and Doctor of Education.

(ssnn) "Tuition" shall mean, but not be limited to, any money or fee involving the student, actually charged by the institution and or tracked as a bookkeeping item for directly related to the instruction-/-training provided (e.g., per credit hour cost and equipment fee). Tuition does not include student activity fees or fees paid to third parties for products or services related to the training. These fees may be referred to as "other fees."

(ttoo) "Unearned tuition" means at any given time, the total of refunds due former students, all tuition and fees that have or will be collected from students prior to graduation and which would be refundable pursuant to 1540-01-02-.17 of these rules, and any tuition and fees collected in advance from prospective students.

(uupp) "University" means a postsecondary institution that provides facilities for teaching and research, offers traditional undergraduate and graduate degrees at the baccalaureate and higher level, and is organized into largely independent colleges or schools offering undergraduate, graduate, and/or professional programs. Some examples of traditional degrees are: Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts, Master of Arts, Master of Science, Master of Fine Arts, Master of Business Administration, Doctor of Philosophy, and Doctor of Education.

(vvqq) "Vocational" in description of a program or institution means that which is organized primarily for job entry or upgrading of job skills that would result in a new job title or position.

Authority: T.C.A. §§ 49-7-2003 and 49-7-2005.

1540-01-02-.04 DETERMINATION FOR REQUIRED AUTHORIZATION [NO PROPOSED AMENDMENTS]

1540-01-02-.05 EXEMPTION

(1) T.C.A. § 49-7-2009 includes general descriptions of institutions and programs that are exempt from the provisions of the Act and these rules. Institutions and programs meeting the specific provisions below shall be considered exempt pursuant to the general exemption descriptions of T.C.A. § 49-7-2009. In addition to institutions exempt by Tennessee Code Annotated, Chapter 49-7-2004, the following institutions are exempt from the annual reporting and the provisions of these regulations:

(a) any entities offering eEducation, instruction or training that isare:

1. maintained or given by an employer or group of employers, for employees or for persons they anticipate employing without charge, including payroll deduction or minimum length of employment, except that the employer/institution may accept funds provided through a state or federal program that provides adequate institutional and/or programmatic review as determined by Commission staff; or

2. maintained or given by a U. S.U.S. Department of Labor or state recognized labor organization, without charge, toorganization to its membership/ or apprentices or without charge, except that the institution may accept funds provided through a state or federal program that provides adequate institutional and/or programmatic review as

determined by Commission staff; or

3. financed and/or subsidized by public funds, without charge to the students, having a closed enrollment; or

4. given under a contract agreement, having a closed enrollment, at no cost to the student and does not offer ~~degrees or~~ educational credentials ~~such as but not limited to diplomas or special certifications~~ that in the opinion of the Commission are specifically directed toward new or additional vocational, professional or academic goals.

(b) Programs, seminars or workshops that are recreational or avocational, including motivational or enrichment programs, as determined by Commission staff shall be considered exempt from authorization requirements. Upon review by Commission staff, a provider that presents the instruction in such a way as to suggest a vocational end may be required to become authorized, or clarify through public advertising that the program, seminar, or workshop is in fact recreational or avocational.

(c) Short-term programs, seminars or workshops that are solely for professional enhancement as determined by Commission staff shall be considered exempt from authorization requirements. Education, training or instruction resulting in specialized certifications clearly used to denote technical, professional or vocational proficiency toward an additional vocational goal or new job title must be authorized for operation.

(d) Programs that operate under Part 61 of the Federal Aviation Regulations and that provide only avocational training are exempt. Aviation programs that operate entirely under Part 141 of the Federal Aviation Regulations and programs that operate under Part 61 of the Federal Aviation Regulations and that provide vocational training are non-exempt. Oversight of these aviation schools will in no way conflict with oversight provided by the Federal Aviation Administration. While the FAA oversight ensures adequate curricula and safety of the student, the Commission's oversight is focused on protection of the personal and financial interests of the student.

(e) Intensive review courses designed solely to prepare students for graduate or professional school entrance exams and professional licensure exams. The latter shall include, but not be limited to, intensive review courses for certified public accountancy tests, the examination for professional practice in psychology, and the bar examination.

(f) Training designed to prepare students for credit-by-examination tests may be considered exempt from authorization requirements. The exemption is contingent on the entity's agreement to indicate in all promotional materials that the training is for test preparation for credit-by-examination tests and refrains from any misleading representations. Such representations include:

1. suggesting that the training results in receipt of an educational credential, such as a degree;

2. listing anticipated salary amounts; and

3. suggesting that the entity is accredited.

(g) Eleemosynary institutions, including bona fide religious institutions, that:

1. offer instruction or training and do not offer degrees of any type;

2. do not suggest that postsecondary credit may be awarded by another party or transfer in educational credentials from another source; and

3. do not offer diplomas/certificates, including those that in the opinion of the Commission replicate letters of designation or degrees.

(h) Businesses offering limited computer training in hardware, software, delivery systems or any related technology for clients or customers (closed enrollment) directly related to a sale of equipment or services are exempt from the provisions of authorization.

(i) Businesses offering short-term computer training in common software or basic computer hardware that is intended for enrichment or professional enhancement are exempt from the provisions of authorization unless in the opinion of the Commission courses using various software are offered concurrently toward a vocational goal, e.g., word processing software offered toward secretarial goals.

(2) To operate within exemption status, the following guidelines shall be used:

(a) Institutions that clearly qualify as exempt~~ion~~ under the Act and~~or~~ these ~~regulations~~ rules after Commission staff review shall be considered exempt from authorization without a vote of the Commission.

(b) ~~Institutional~~ Any institution or program exemption is subject to annual Commission staff review and/or revocation any time the activity deviates from the original determination factors for exemption.

~~(c) Exemptions secured under this section of the rules are effective for each authorization year beginning on July 1, except as individuals or groups of institutions are notified prior to June 15 preceding any authorization year by a letter from the Executive Director of the Commission which shall state the bases for removal of any exemption.~~

(~~d~~c) Exemptions can be revoked or amended by the Commission staff as they pertain to individual institutions whenever it is determined by the Commission staff that an institution exempted by the Act or these ~~regulations~~ rules has not acted in accordance ~~to~~with the purpose of T.C.A. § 49-7-2002~~, 'Legislative intent'~~.

(3) ~~Institutions or educational providers seeking an exemption status (or not wanting to pursue authorization) that in the opinion of Commission staff do not clearly qualify under the exemption categories given in the Act and these rules will be required to complete an Exemption Request Form. The form shall include but not be limited to~~To request an exemption, institutions shall submit a descriptive narrative describing how the institution and/or program(s) qualifies for an exemption. The request shall include a citation to the exemption provision relied on in the Act and/or these rules and documentation supporting the requested exemption such as: copies of all institutional materials; brochures; advertising; state charter or business license; and organizational ties and/or contracts with other educational provider~~s and a descriptive narrative of how the organization qualifies for exemption specifically citing the Act and/or rules~~. Upon receipt of an exemption request, Commission staff shall make a written determination and

provide a date by which an aggrieved institution may submit a request for further review by the Executive Director. Such date shall not be earlier than ten business days after the date of the letter.

~~(a) Based upon the submitted material Commission staff shall make a written determination of institutional status.~~

(4) If the institution is aggrieved by a ~~that~~ determination concerning exemption status, the ~~party~~institution may ~~appeal~~ seek review as provided for in ~~the manner provided by~~ Rule 1540-01-02-.02(2)(b) and T.C.A. § 49-7-2010(b). Any request for review shall be in writing, signed, list each instance where Commission staff erred, and provide a detailed explanation of each error, including references to specific statutes or rules. Requests for review shall be received through hand delivery, mail, electronic mail or facsimile. A request may be denied if it is not received in a timely manner as set forth is paragraph (3).

Authority: T.C.A. §§ 49-7-2002, 49-7-2004, 49-7-2005, 49-7-2006, 49-7-2008.

1540-01-02-.06 MINIMUM AUTHORIZATION STANDARDS AND REQUIREMENTS

(1) Institutions authorized to operate or seeking authorization to operate in Tennessee must meet the minimum requirements stated in ~~Tennessee Code Annotated~~T.C.A. § 49-7-2006 and as further defined in these ~~regulations~~rules.

(2) Meet the definition of a postsecondary educational institution as given in the Act and/or these rules~~postsecondary regulations~~.

(3) Have physical presence in the state as given in these rules~~regulations~~.

(4) The institution is properly registered with the Tennessee Department of State or, in the case of a general partnership or sole proprietorship, has a local business license~~Establish a charter or business license in the state of Tennessee for the proposed institution~~.

(5) Financial stability to start up and initially operate a postsecondary educational institution demonstrated through a certified audit or statement acceptable to the Commission of the resources to be utilized in the school.

(6) ~~Ability to s~~Secure a~~n~~ continuous institutional surety bond or like security described in ~~rule~~ Rule 1540-01-02-.07~~(7)~~.

(7) Have an educational program(s) consistent with standards in Tennessee for length, content and quality for the educational credential offered in compliance with the Act and these rules~~regulations~~.

(8) All programs must include training and substantive content to attain outcomes stated as the program purpose and mission of the institution.

(9) No principal party, owner or administrator involved with the proposed institution has ever been associated with a postsecondary educational institution that ceased operation with resulting loss of time or money for enrollees or had institutional authorization to operate in a state revoked or had a felony conviction involving moral turpitude, fraud or a capital crime.

(10) Before an institution is granted temporary authorization, the following requirements and standards required of an approved ~~school~~ institution must be met in preauthorization and

maintained operationally.

(a) Complete all required initial authorization materials in package provided by the Commission staff with payment of all corresponding fees.

(b) Verification of a stable physical presence and/or a physical site acceptable to the Commission and these rules.

(c) Establish and maintain all o~~O~~perational and a~~A~~dministration s~~S~~tandards, such as educational, financial, admissions, enrollment, instructor, etc., as given in these rules.

(d) New or revised programs must conform ~~with~~to all requirements given in these rules under New Program or Change in Program, Rule 1540-01-02-.07.

(e) Compliance for each of the educational credential(s) offered by the applicant institution, with requirements as given under Non Degree Granting Institutions or Degree Granting Institutions, Rule 1540-01-02-.08.

(f) Demonstrate compliance for branch sites or expansion of programs by prior approval or prior notification with the institution's accrediting body wherever necessary to be consistent with the requirements of the accrediting body and the federal regulations.

(11) No out~~-~~of~~-~~state institution will be considered for authorization if it is not authorized in the state where primarily located.

(12) Any institution based primarily outside of Tennessee which proposes to set up a branch in Tennessee and is not accredited by an agency recognized by the Commission must forward reasons why resources would not best be spent on accreditation at the current site.

(13) An exception to any part of ~~the Minimum Authorization Standards~~this rule must be reviewed on an individual basis by the Commission.

(14) ~~School~~ Institution Name:

(a) No postsecondary educational institution under the Act and these rules may use the word "university" in ~~their~~ its name unless the ~~school~~institution meets the definition of university as set forth in these rules and has been ~~so~~ approved by a regional accrediting body so recognized by the ~~U. S.~~U.S. Department of Education.

(b) No postsecondary educational institution under the Act and these rules may use the word "college" in ~~their~~ its name unless:

1. The institution meets the definition of college as set forth in these rules;

2. The institution ~~the school~~ has been ~~so~~ approved by an ~~regional~~ accrediting body recognized by the ~~U. S.~~U.S. Department of Education to offer degree level programs; and

3. The institution offers or is seeking to offer at least one (1) degree program. ~~or~~

(c) An unaccredited institution or institution that does not meet the requirements in subparagraph (b) may not use "college" in its name unless:

1. For institutions authorized prior to October 1, 2006, the institution name includes ~~uses~~ an appropriate qualifier along with the word "college", such as "career", "vocational", "business", "technical", "art" etc., or in the case of a religious institution, "Bible" or a denominational term or~~.~~

2. For institutions authorized on or after October 1, 2006, the institution name includes an appropriate qualifier preceding the word "college," such as "career," "vocational," "business," "technical," "art" or in the case of a religious institution, "Bible" or a denominational term.

(d~~c~~) All institutions ~~authorized after July 1, 1997~~ using "college" in accordance with item 14(b~~c~~) above, must achieve ~~regional or national~~ accreditation from an accrediting body recognized by the ~~U. S.~~U.S. Department of Education in a timely manner while demonstrating consistent good faith efforts toward achieving that goal. Institutions that fail to make good faith efforts toward accreditation or to achieve accreditation in a timely manner shall be required to remove "college" from the institutional name.

~~1. New institutions authorized after July 1, 1997 that demonstrate in the application process, that the school is capable by program length, content, adequate physical site and administrative capability of achieving accreditation, may initially use "college" in the institutional title as outlined in 1540-01-02-.06(14)(b) above.~~

~~2~~1. Institutions may use "Junior College" as a qualifier in the name of the institution provided that the institution has a current articulation agreement with a regionally accredited college or university. Loss of the articulation agreement will require removal of "Junior" as a qualifier, to be replaced on a schedule agreeable to the Commission with an institutional name in compliance with these rules.

~~3. Institutions that fail to make good faith efforts toward accreditation or achieve accreditation in a timely manner shall be required to remove "college" from the institutional title.~~

~~4. The Executive Director may consider an exception to 1540-01-02-.06(14)(a), (b) given above for special or unique circumstances. Institutional waivers will be null and void with a change in ownership.~~

(15) A sign, acceptable to the Commission, must be affixed to the building and/or the main entrance door indicating the name of the institution.

Authority: T.C.A. §§ 49-7-2002, 49-7-2004, 49-7-2005, 49-7-2006, 49-7-2008.

1540-01-02-.07 INSTITUTIONAL APPLICATIONS

(1) Application deadline:

(a) Institutions seeking initial authorization or approval of new programs must submit the appropriate application by the deadline date established by Commission staff.

(~~a~~b) Incomplete submissions as given below in paragraph (2), Authorization - What Constitutes a Complete Application, ~~or~~ applications submitted after the established deadline, or applications that are not typed may be deferred to the next quarterly meeting at the discretion of staff.

(~~b~~c) Institutions that voluntarily or involuntarily defer an application before the Committee will have two additional Committee/Commission meetings to complete, correct and/or submit the application by that established deadline date. Failure to complete the application process in the established time extension will require a new application and loss of all previously paid fees.

1. Exceptions must be requested in writing and granted by the Executive Director.

(2) Authorization - What Constitutes a Complete Application:

(a) ~~Prior to operation, which includes advertising, recruitment and solicitation, i~~Institutions seeking or required to hold an authorization must submit on forms provided by the Commission, a completed and typed application which includes at least the following:

1. a title or name of the institution in compliance with these rules;

2. proof that the institution is properly registered with the Tennessee Department of State or, in the case of a general partnership or sole proprietorship, a copy of the institution's local business license~~a copy of the Tennessee state charter as filed with the Secretary of State (incorporated) or local business license (sole proprietorship)~~;

3. ~~ownership and/or controlling officers~~name(s), home address(es), and phone number(s) of all owner(s), controlling officer(s), and/or members of the board of directors;

4. address and general description of facilities;

5. list of instructional equipment for each program specifying whether each item is ~~(~~owned or leased~~)~~;

6. qualifications for instructional staff and ~~supervisors~~administrative personnel, see Rule 1540-01-02-.16;

7. designation of an institutional director for each site responsible for authorization contracts and maintenance of records and all other duties as described under ~~Personnel and Instructor Qualifications (~~Rule 1540-01-02-.16~~)~~;

8. ~~definition~~ description of any administrative structure above the institutional director with the signature of the official that will notify the Commission if the institutional director is replaced;

9. a check or money order payable to the State Treasurer for Tennessee for such fees as prescribed under these rules;

10. institutional surety bond as described by ~~rule~~Rule 1540-01-02-.07 and~~or as prescribed by~~ T.C.A. § 49-7-2013;

11. a copy of the enrollment ~~contract or~~ agreement described in ~~these regulations~~Rule 1540-01-02-.13;

12. a copy of the pre-enrollment checklist described in Rule ~~Enrollment Disclosure Standards (~~1540-01-02-.13~~) checklist if not incorporated within the enrollment agreement (contract)~~;

13. information pertaining to institutional facilities ownership, length of any lease and time in present quarters. Information must include total square feet, available floor space for conducting programs, and subtotals for classrooms, offices, and library space (with number of volumes held)~~. Instructional equipment (specify owned or leased) must be listed and described. Current verification of fire and sanitation inspections of educational facilities (and student housing owned by institution) must be filed as described in 1540-01-02-.07 of these rules~~;

14. current verification of fire and sanitation inspections of educational facilities and student housing that is owned, leased or otherwise operated by the institution;

~~14~~15. a draft or copy of the institutional catalog as described in Rules~~(see~~ 1540-01-02-.11, .12, .17 and .19~~)~~;

~~15~~16. a complete description of the proposed educational programs in compliance with the Act and these rules;

~~16~~17. a complete syllabus for each course proposed that demonstrates sufficient content and depth for the proposed level of the program and credential offered;

~~17~~18. any specific requirements as outlined under degree granting and/or non degree granting sections of ~~these regulations~~Rule 1540-01-02-.08;

~~18~~19. if participating in federal student financial aid programs, a copy of the most recent audits or program reviews of such programs by any applicable non-profit, state or federal agencies, including, but not limited to, any student guarantee agency and the ~~United States~~U.S. Department of Education;

~~19~~20. evidence of institutional financial stability as follows:

(i) sufficient finances to establish and conduct proposed operation;

(ii) audited financial statements consistent with generally accepted accounting principles and signed by a certified public accountant not associated with the institution or its owners;

~~20~~21. the balance sheet in the financial statement must reflect owner's (proprietorship, partnership, corporation, other, etc.) assets and liabilities.

(3) Each application for a certificate of authorization or change of ownership must be signed by the applicant and signature(s) must correspond with required names on surety bonds. If the applicant is a partnership, all partners must sign. If the applicant is a corporation, it must be signed and certified by the president and secretary; all officers of

the corporation must be listed.

(4) A separate application for authorization, which is site specific, must be made for each location~~ located outside of reasonable walking distance from the main site. The Commission staff may make reasonable exceptions for narrow purpose, highly structured programs at multiple locations where, in view of the Commission, administrative requirements are limited and precise~~.

(5) The applicant institutional director must sign and date, on forms provided by the Commission, the director's intention to:

(a) conduct the institution in accordance with the Act and these rules~~ established by the Commission~~;

(b) advertise or solicit using institutional employees familiar with these rules;

(c) advise the Commission within a reasonable time in advance if the controlling officers change or the school ceases operation;

(d) notify the Commission of staff changes by forwarding staff information forms for new staff and informational letter for staff terminations;

(e) advise the Commission of any application to operate in another state (Tennessee institutions only);

(f) sign significant operational documents (such as those vouching for accuracy of staff information, moral character, program revisions, etc.); and

(g) forward, if participating in federal financial aid programs, a copy of each audit of such programs by applicable state and federal agencies, applicable non-profit, state or federal agencies, including, but not limited to, the Tennessee Student Assistance Corporation and the ~~United States~~U.S. Department of Education.

(6) Bond Requirements for Institutions:

(a) Institutions ~~not exempted from surety bond provisions,~~ must, on forms provided by the Commission, secure for student indemnification purposes, from a surety company authorized to do business ~~an insurance company licensed~~ in Tennessee, a surety bond for the penal sum of:

1. ten thousand dollars ($10,000) for in-state institutions, out-of-state public institutions and all institutions providing primarily religious instruction and

2. twenty thousand dollars ($20,000) for all other institutions, including out-of-state private ~~education~~ institutions.~~, including branch campuses as specified in T.C.A. 49-7-2013, except as follows:~~

~~1. In-state institutions with substantially less unearned tuition or student exposure than $10,000 may post a surety bond equal to 125% of the maximum unearned tuition or student exposure rounded upward to the nearest thousand dollars (prior written administrative agreement by the Commission staff is required)~~.

(~~7~~b) Out-~~-~~of-~~-~~state institutions must, on forms provided by the Commission, secure a surety bond for agents in the penal sum of five thousand dollars ($5,000) per agent from a surety company authorized to do business in Tennessee with the applicant institution as principal. Such applications must be accompanied by verification by the issuing agency that the individual seeking a permit is covered by a five thousand dollars ($5,000) surety bond.

(~~8~~c) All ~~B~~bonds provided by institutions under ~~Section~~ Rule 1540-01-02-.07(7) must be accompanied by the name, office address, and phone number of the issuing insurance company representative and the bond must be site specific.

(~~9~~d) All ~~B~~bonds provided by institutions under ~~Section~~ Rule 1540-01-02-.07(7) must be identified on the top half of the first page by the name and the address of the institution. Bonds and verification of bonds should be forwarded to the Commission by institutional directors, and not directly from issuing companies.

(~~10~~e) An irrevocable letter of credit secured by a ~~C~~certificat~~es~~ of deposit or a cash deposit with a bank may be accepted in lieu of the bond, pending ~~with~~ approval of the Commission staff. Such deposits are subject to the same terms and conditions provided for in the surety bond requirement under this regulation.

(~~11~~7) Fire and Sanitation Inspections:

(a) Initial authorization, change of ownership, and renewal ~~A~~applicant institutions must secure, from appropriate local agencies, documentation that fire and sanitation codes are met by the proposed instructional facilities. If such inspections are unavailable, the institution must present a copy of a recent letter from the local inspection agency indicating that such inspections are unavailable.

(b) ~~Tennessee i~~Institutions ~~seeking initial authorization and renewal~~ must maintain and provide upon request by Commission staff documentation in their authorization records that a fire and sanitation inspection has been successfully passed during the past twelve months ~~and, further, the institution must notify the Commission of the most recent inspection dates as part of the renewal application. If such inspections are unavailable, the institution must present a copy of a recent letter from the local inspection agency indicating that such inspections are unavailable.~~

~~(c) Out-of-state institutions must forward to the Commission a copy of fire and sanitation inspection reports and these reports must be made at least every twelve months.~~

(~~d~~c) Commission staff may seek supplemental fire and/or sanitation reports from appropriate local or state agencies.

(~~12~~8) ~~New Ownership /~~ Change in Ownership:

(a) The following constitutes ~~new~~ a change in ownership:

1. in the case of ownership by an individual, when more than 50% of the institution has been sold or transferred;

2. in the case of any other ownership structure~~by a partnership or a corporation~~, when more than 50% of the institution or of the owning ~~partnership or corporation~~entity has been sold or transferred;

3. when the board of directors, officers, shareholders, or similar governing body has been changed to such an extent as to significantly alter the management and control of the institution.

(b) A person or persons purchasing an institution authorized to operate shall comply with all the requirements for securing an initial, new authorization including new program applications for each program. In addition, a copy of the sales contract(s), bill(s) of sale, deed(s), and all other instruments necessary to transfer ownership of the institution shall be submitted to the Commission.

(c) Commission staff should be notified of any anticipated change of ownership prior to the change. In the event of a change of ownership, greater that 50%, a new owner or governing body must ~~notify the Commission within 10 days after the change in ownership and~~ request from the Executive Director conditional authorization to operate until temporary authorization can be acquired under the ~~standard~~ established standard procedure by recommendation of the Committee for Postsecondary Educational Institutions and affirmative vote of the Commission.

(d) The sale or transfer of ownership interest after the death of an owner of an institution to either a family member or another current owner~~stockholder of the corporation~~ is not considered a change in ownership.~~, and t~~ The ~~executive~~ Executive ~~director~~ Director may determine that other transfers should also be excluded from these requirements.

(~~13~~9) New Program or ~~Change in~~ Program Revisions:

(a) Vocational program names and objectives must generally coincide with or be equated with the Dictionary of Occupational Titles published by the U.S. Department of Labor and/or the Classification of Instructional Programs published by the U.S. Office of Education, National Center for Education Statistics.

~~(b) New institutions proposing to offer programs similar to those conducted by Tennessee institutions under the Tennessee desegregation plan must submit a description of the anticipated effect of the proposal on the racial composition of higher education institutions in Tennessee.~~

(b~~c~~) ~~New~~ Iinstitutions must submit a rationale with supporting data to justify initiation of programs proposed.

(~~d~~c) Authorized institutions must submit to the Commission a ~~supplementary~~ New Program ~~application~~ Application if additional programs are proposed during any authorization year and the program must be ~~authorized~~ approved prior to providing or offering instruction, including advertising and solicitation~~operation, which includes advertising or solicitation~~. Applications must be received by the quarterly deadline established by Commission staff to be included on the ensuing Committee and Commission agenda.

(~~e~~d) The following shall apply to all program revisions, including tuition and fee changes:

1. All program revisions must be submitted on Program Revision Forms provided by the Commission and approved by Commission staff prior to implementation. All program revisions shall be submitted thirty (30) to

ninety (90) days prior to the proposed effective date.

2. ~~Ongoing i~~Institutions that revise an approved program~~make changes to an existing program(s) previously approved by the Commission~~ must file a New Program Application if program changes exceed 25% within the past twelve months~~in one calendar year,~~ or if in the opinion of staff a significant change has occurred. ~~Changes of less than 25% should be reported by letter as a file item to the Commission detailing changes made.~~

3. Tuition and fee revisions that in the opinion of the Commission are excessive, unreasonable and exceed initial disclosure to the student may result in an in-depth audit of the institution at the institution's expense to assure the Commission of financial stability.

4. All changes must be reflected in the institutional catalog.

~~(f)~~ 5. Institutions shall not arbitrarily add a course or courses to an existing program in which a student would incur additional time and expense beyond the catalog requirements at the time of enrollment.~~,~~ ~~unless the~~ Any course addition must be~~is~~ in response to: demonstrated educational necessity; a reasonable program completion period had elapsed; state approval agencies; recognized accrediting agencies or for requirements of professional certifications or licenses. Under approval conditions, the institution shall provide written notification to the Commission and give adequate notice to all students affected prior to any change.

(~~14~~10) ~~New Location /~~ Change of Address:

(a) ~~A~~an application from an authorized institution to reflect a ~~new location~~change of address shall be ~~filed~~ submitted to the Commission staff thirty (30) days prior to moving and shall include all documents designated by the Executive Director as being necessary with the appropriate fee. Documents shall include, but are not~~not necessarily~~ limited to:

~~(~~1.~~)~~ evidence of satisfactory health inspection,

~~(~~2.~~)~~ evidence of satisfactory fire inspection,

~~(~~3.~~)~~ copy of an executed lease or proof of ownership, and

4. all physical material and building requirements given under Initial Authorization.

(b) Approval may be issued after the new facilities have been inspected and the application is complete.

(c) If a move is beyond 10 miles and a student is prevented from completing the training at the new location as determined by the Executive Director, a full refund of all moneys paid and a release from all obligations will be given to the student or loan holder.

(d) Within thirty (30) days of approval of any change of address, the institution shall submit a bond or bond rider reflecting the institution's current address.

(11) Change of Institution Name:

(a) An application from an authorized institution to reflect a change of name shall be submitted to Commission staff thirty (30) days prior to changing the institution's name and shall include all documents designated by the Executive Director as being necessary and the appropriate fee.

(12) Discontinuance of Program:

(a) Institutions that discontinue any approved program must complete a Program Deletion Form.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, 49-7-2007, 49-7-2008, 49-7-2013.

1540-01-02-.08 REGULATIONS FOR SPECIFIC SCHOOL TYPES

(1) General:

(a) Institutions offering programs of legal interest to other state agencies must, if directed by the Commission staff, provide information necessary for the dual review of the program. ~~(~~For example, any institution proposing a teacher education program for the purpose of teacher licensure must also be reviewed by the Department ~~State Board~~ of Education~~)~~.

(b) Authorized institutions that promote, advertise or use prepared materials of any person, group or entity that offers vocational/professional certifications (that are not part of the institution~~school~~'s authorized educational credential) or certification exams, (e.g., national certifying exam for Phlebotomy) must demonstrate to the Commission clear benefit to the students prior to usage. The Commission upon review may ~~rule to~~:

1. allow promotion and usage because of benefits to the student;

2. allow promotion and usage but with clear disclosure to the students with language such as, "this certification is voluntary and is not required for employment in the state of Tennessee' or 'this certification is voluntary and is not necessarily used as a standard of recognition for employment within the industry";

3. deny usage. ~~(~~see ~~Prohibitive Acts~~Rule 1540-01-02-.18~~)~~.

~~(c) Unauthorized institutions that promote, advertise or use prepared materials of any entity that offers vocational/professional certifications may be required to become authorized for such activity.~~

(~~d~~c) Institutions must adhere to all copyright laws and observe intellectual property rights in conducting the school.

1. Using video tapes or other forms of telecommunication as a large portion of the contact hours in a program or on a per class basis for the purpose of granting educational credit, must have implied consent by purchase or the written consent of that instructor and/or the institution that produced the educational material, prior to incorporating them into the curriculum.

(2) Non Degree Granting Institutions:

~~(a) Non-degree programs which are designed primarily for job entry or upgrading of skills must be described in clock (contact) hours.~~

(~~b~~a) Non-degree programs typically prepare individuals for employment and do not require courses beyond those specific to the job or ~~its~~ field with program length sufficient to effect outcomes.

1. Institutions must provide a minimum program length that adequately prepares students for entry-level employment.

2. Program lengths that exceed standard or currently acceptable times or program periods established by ~~regulations~~ rules and/or statues must justify expansion of training in terms of exceptional student benefits. Such programs may also be required to review curriculum to evaluate consolidation of classes and course material.

(3) Degree Granting Institutions:

~~(a) New institutions seeking authorization to offer degrees in the state of Tennessee or new program applications for a degree program must submit the application by the deadline date established by Commission staff, which shall be 45 to 60 days prior to the quarterly meeting of the Committee on Postsecondary Educational Institutions.~~

(~~b~~a) All degrees offered must be approved by name and designation by the Commission. No institution may offer traditional ~~liberal arts~~ degrees or professional degree designations ~~such as those given in the definitions under "college" and "university"~~ unless previously approved by a recognized regional accrediting body. An exception may be approved by the Executive Director upon recommendation of Commission staff. Any request for exception shall be made in writing and include proof of the following:

1. ~~An exception may be approved by the Executive Director upon recommendation of Commission staff.~~ The institution is accredited by a U.S. Department of Education approved accreditor for the specific degree level;

2. The program is accredited by an appropriate accrediting agency if such accreditation is necessary for employment in or licensure by the state; and

3. The institution has articulation agreements with two (2) regionally accredited institutions with physical locations in the Southeast region and the agreements are applicable to at least one of the institutions' physical locations in the Southeast region.

(~~c~~b) Authorization to offer any degree in the state will require either institutional accreditation as defined in these regulations or authority to grant degrees by affirmative vote of the Commission. Accredited institutions shall be deemed during initial authorization to have met the minimum requirements to offer degrees.

(~~d~~c) ~~Non-~~Unaccredited institutions seeking authority to grant degrees in the state must meet in addition to the requirements in these regulations for temporary or regular authorization, the additional fee as given in these regulations and demonstrate compliance with, but not limited to the following standards:

1. the operation shall incorporate instructional procedures, texts and materials appropriate to the purpose, curriculum and standards of postsecondary degree-granting institutions offering similar programs in the state;

2. Twenty-five percent (25%) to fifty percent (50%) of the total program, depending on the degree offered, must be in general education courses and should be indicated separately in the curriculum presented;

3. provide a syllabus for each course offered;

4. maintain library resources and holdings that shall contain up-to-date titles, be available and accessible to all enrolled students and commensurate with the proposed degree level;

5. demonstrate~~ion~~ that the degree and the program ~~has~~have merit and value academically, professionally or vocationally in Tennessee;

6. master's and doctorate level degrees must demonstrate in the curriculum and outcomes increasing levels of critical, analytical and interpretive thinking, use of primary documents or resources and independent research skills.

(~~e~~d) Undergraduate degree programs must include at least twenty-five percent (25%) to fifty percent (50%) of the program in general education courses unless the institution can demonstrate program accreditation requirements which are less.~~er or for a non accredited institution offering or proposing an associate degree level, demonstrate to the Commission that because of the occupational/technical nature of the program that a student would not benefit in the job from general education courses and demonstrate the need to use that 25% of the program for job skills courses.~~ Unaccredited institutions proposing to offer associate degree level programs which are technical in nature, and have less than twenty-five percent (25%) of general education courses must demonstrate to Commission staff the benefit to students. All general education courses must be taught by holders of baccalaureate degrees with at least twenty-five percent (25%) of the general education staff with earned master's degrees or equivalent.

(~~e~~f) Graduate degree programs, in addition to staffing and study time requirements in these rules, must provide experienced research staff to direct graduate research papers, provide a program of sufficient length and arrangement to facilitate student to student and student to staff exchange of ideas, provide appropriately credentialed staff in collateral areas, and provide access to a wide range of current reference materials in the subject field.

~~(g) Degree program admission policies must be at least the following:~~

~~1. undergraduate degrees must require a high school diploma or equivalency, and~~

~~2. graduate degrees must require at least a baccalaureate degree from an institution judged to be appropriate by the Commission.~~

(4) ~~Long~~ Distance Learning:

(a) Required authorization of ~~long~~ distance learning institutions shall be reviewed based upon Commission staff evaluation of physical presence. Computer networks or other electronic delivery systems or other forms of long distance learning that might have institutional components in multiple locations outside of this state will be reviewed based upon origination of but not limited to any of the following from Tennessee: instruction, institutional administration or issuance of an educational credential.

1. No ruling by the Commission regarding authorization or exemption of a ~~long~~ distance learning provider will be interpreted to limit review by any other state agency concerning issues of consumer protection and disclosure.

(b) All authorized ~~long~~ distance learning institutions must provide to a student a ~~printed~~ catalog~~,~~ and a signed copy of the pre-enrollment checklist and enrollment agreement ~~enrollment disclosure statement and a contract~~ as required in these ~~regulations~~rules. Institutions that enroll students by means such as computer network or telecommunications must provide evidence that the student has acknowledged receipt of the required information.

(c) ~~Home study or long d~~Distance learning institutions must meet directly and indirectly all requirements of the Act and these ~~regulations~~ rules and must seek authorization for a specific location, assign specific administrative responsibilities at each separately authorized site to a director for adequate and appropriate staffing to serve the stated purpose and to make reports as directed by these rules, and as requested by the Commission staff.

(d) ~~Long d~~Distance learning courses or programs must consist of at least the following:

1. a preliminary lesson or set of instructions on how to study by the ~~home study~~distance learning method, or adequate study instructions per assignment;

2. current and accurate text or lesson materials; and

3. instructional service or individualized feedback on each unit assignment which must be based on examination questions or problem assignments which thoroughly stress the important phases of the subject presented.

4. demonstration that instruction in each course including general education courses is presented by a qualified instructor(s), and that required student evaluation or feedback for each course or lesson is also by a instructor qualified in that specific course or subject matter area.

5. evidence that adequate library or research resources are available to all students that may enroll appropriate to the type and level of the educational program and credential offered.

6. educational goals and overall program goals are achievable through

~~long~~ distance learning and that graduates of distance education exhibit skills and knowledge equivalent to resident programs of a similar nature.

(5) Bartending Schools:

(a) Pursuant to ~~TCA~~T.C.A. § 49-7-115, all ~~schools~~ institutions involved in training in the areas of management, operation, procedures or practice of dispensing alcoholic beverages or bartending shall include instruction in the problems of alcohol abuse and the effect of alcohol consumption on highway safety.

(6) Truck Driving (CDL) Schools:

(a) Authorized truck driving schools may advertise in the 'help wanted' section of the newspaper classifieds provided that the advertisement adheres to all other regulations given in Rule 1540-01-02-.20 and within the advertisement it clearly indicates with specific language that this is a "school advertisement", "advertisement for training" or a "training opportunity with [school's name]".

(b) Advertisements may refer to truck lines or carriers by name with the written permission of that company and use language such as "training agreement with", "training contract with" or "exclusive training for [carrier's name] in Tennessee". If a school mentions or alludes to multiple training agreements with carriers, the advertisement must give a specific number and have prior approval from Commission staff. All claims related to carriers must be documented and on file at the school.

(7) Modeling Schools:

(a) Modeling schools that also operate a placement or talent agency must maintain clear separation in function including when ~~and~~ advertising the agency and~~from~~ the ~~school~~institution.

(b) Talent seminars, interviews or 'talent searches' may not be used to enroll individuals in modeling schools or training.

(c) Schools that operate as a 'finishing school', exclusively for personal deportment or for enrichment may not advertise or conduct courses that implies or suggests vocational modeling or related goals.

~~(8) Computer Training:~~

~~(a) Businesses offering limited computer training in hardware, software, delivery systems or any related technology for clients or customers (closed enrollment) directly related to a sale of equipment or services are exempt from the provisions of authorization.~~

~~(b) Businesses offering short term computer training in common software or basic computer hardware that is intended for enrichment or professional enhancement are exempt from the provisions of authorization unless in the opinion of the Commission courses using various software are offered concurrently toward a vocational goal. (e.g. word processing software offered toward secretarial goals).~~

~~(c) Businesses offering specialized certifications clearly used to denote technical, professional or vocational proficiency toward an additional vocational goal or~~

~~new job title must be authorized for operation of that training in the state.~~

(~~9~~8) Teacher Training (K-12) or Licensing or Recertification:

(a) The Tennessee ~~State Board~~Department of Education or the Commission may request a dual review of any institution or business with physical presence in Tennessee offering courses related to but not limited to teacher (K-12) licensing, recertification or career ladder. ~~For accredited institutions with teacher education programs using long distance learning (but using targeted direct mail advertising), the Commission may grant a waiver for authorization if State Board of Education or a local public school district has accepted, endorsed or approved for graduate credit transfer any portion of the program. Such a waiver shall not be granted for any institution outside of the provisions stated above and may be individually retracted if in the opinion of the Commission the advertising is misleading regarding outcomes or credits earned.~~

~~(10) Seminars / Workshops:~~

~~(a) Seminars or workshops of short duration that are motivational, enrichment, recreational, avocational or solely for professional enhancement as determined by Commission staff shall be considered exempt from authorization requirements.~~

~~(b) Upon review by Commission staff a seminar/workshop provider regardless of length that presented the instruction in such a way to suggest a vocational end may be required to become authorized in the state, or clarify through public advertising that the seminar/workshop is in fact enrichment or recreational.~~

Authority: T.C.A. §§ 49-7-2003, 49-7-2005, and 49-7-2008.

1540-01-02-.09 ANNUAL RENEWAL FOR AUTHORIZATION

(1) All ~~unaccredited~~ authorized institutions ~~and institutions under Temporary or Conditional Authorization~~ must submit ~~an annual report or renewal~~a reauthorization application on a form provided by Commission staff. The annual reauthorization year will be from July 1 through June 30. ~~and~~ The annual reauthorization application ~~or reports submitted~~ is due each October 15 and must be accompanied by an annual fee as prescribed by these rules.

(2) ~~Accredited institutions under Regular Authorization will be granted upon affirmative vote of the Commission an authorization certificate for each site for a period of up to six years. The Commission, when possible will tie the authorization period to the accrediting body's granting of accreditation/reaffirmation cycle and require each October 15 (in lieu of the Commission's annual renewal package) the most recent annual reporting documents submitted to the accrediting agency along with any minimum forms required by the Commission.~~

~~(3) Annual reports or renewal~~ Reauthorization applications postmarked after October 15 or other due date will be assessed a late renewal fee as described in Rule 1540-01-02-.25 ~~FEES~~.

(~~4~~3) For ~~unaccredited~~ all authorized institutions ~~and institutions under Temporary or Conditional Authorization~~, unless otherwise required by Commission staff, the ~~annual report or renewal~~ reauthorization application must be accompanied by the following:

(a) any changes or additions to information previously submitted as part of the basis for authorization;

(b) copy of current catalog with major changes cited;

(c) the latest financial statement for the most recent institutional fiscal year as given under ~~Financial Standards,~~Rule 1540-01-02-.14 and shall include:

1. a balance sheet (statement of financial position);

2. an income statement (statement of the results of institutional operation including, but not limited to, gross amount of tuition and fees earned and total refunds during the fiscal year);

(d) a renewal fee (check or money order) made payable to the State of Tennessee for such fees as stated under these regulations.

(e) an enrollment report for the first enrollment period on or after July 1 of previous year through and including the last enrollment on or before June 30 of the current year;

(f) a list of all institutional personnel including staff, instructors and agents;

(g) summary data for the most recent institutional fiscal year on students participating in state or federal aid programs;

(h) such other information or clarification deemed necessary by Commission staff for determination of authorization recommendations and study of institutional and/or enrollees or former enrollees.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, 49-7-2008 and 49-7-2014.

1540-01-02-.10 REQUIRED MINIMUM STANDARDS

(1) The institutional purpose and objectives must be stated in measurable potential outcomes in a catalog, bulletin, or brochure of the institution.

(2) In relation to the size and scope of the institutions, it shall furnish adequate student services to fulfill the mission of the school and provide counseling and~~/~~or resources necessary to support programs and claims of the institution. Such services must have staff available to students with the knowledge and skills to effect counseling, guidance and coordination in areas such as; academic standing and satisfactory progress; admissions; employment opportunities or placement; intern/externships; library; financial aid.

(3) Administrative capability must be demonstrated in the daily operational standards at the institution. Administrative capability includes, but is not limited to, ~~is~~ the ongoing effective coordination of federal, state and accreditation (where applicable) requirements in a positive and educationally enriching environment to the benefit of students. Indicators of the breakdown of administrative capability may include but not be limited to: reoccurring violations in the same area; numerous student complaints during the year; failure to correct compliance issues; frequent or sudden turnover in faculty or staff; multiple findings in several different areas during ~~a~~an institutional site visit.

(4) Institutions must annually report program completion rates and placement rates in a format approved by the Commission which may include accreditation standards or an average of comparable rates from Tennessee public institutions. If program completion rates are less than 66%, or if average program withdrawal rates are in excess of 33%, or if average placement rates are less than 75%, those rates shall be monitored, reported on, compared with those of similar institutions, and explained to the extent that it can be determined whether or not the low rate is an indicator of poor educational quality.

(5) Liberal arts schools or professional schools may request a waiver of the requirement to provide placement rates for programs for which the institution does not ~~that~~ typically ~~do not~~ report vocational placement data ~~may be required to report to the Commission either by testimonial, survey or by some other means that program completers have benefited from the instruction~~.

(a) Requests for waiver shall be made when filing a new program application or, for programs approved prior to the effective date of this rule, by submitting a letter requesting a waiver for each program.

(b) Requests for waiver shall include at a minimum an explanation as to why the institution does not typically report vocational placement data for that program.

(c) Institutions are required to gather the data required for reporting until such time as a waiver is granted.

(6) The maximum pupil to teacher ratios acceptable, without special permission from the Commission, are:

(a) lecture: 40-1;

(b) business laboratory: 50-1 (such as accounting, typing, shorthand);

(c) technical and vocational theory: 40-1;

(d) technical lab: 40-1 (such as computer programming, data processing) ~~and~~;

(e) vocational lab: 40-1 (such as auto mechanics, drafting, air conditioning) ~~.~~;

(f) class A truck cab: 4:1; and

(g) class B truck cab: 2:1.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006.

1540-01-02-.11 INSTITUTIONAL CATALOG

(1) Each institution must publish a catalog or brochure (a draft copy may be provided ~~for~~ in the initial ~~original~~ application) which must include at least the following information:

(a) the name and address of the institution;

(b) identifying data, such as catalog number and publication date;

(c) table of contents;

(d) names of owners and officers, including any governing boards, and faculty with credentials for position;

(e) the institutional calendar, including holidays, enrollment periods and the beginning and ending dates of terms, courses, or programs;

(f) the institutional enrollment procedures and entrance requirements, including late enrollment, if permitted;

(g) the institutional attendance policy including minimum attendance requirements, and the circumstances under which a student will be interrupted for unsatisfactory attendance and the conditions under which a student may be readmitted;

(h) the institutional policy covering satisfactory progress with an explanation of any grading system used and a description of any probation policy and a description of the institutional system for making progress reports to students;

(i) the institutional policy regarding student conduct, including causes for dismissal and conditions for readmission;

(j) a description of each program offered including objectives, costs, length, program components or course requirements, or in the case of correspondence instruction, the number of lessons;

(k) a description of the placement assistance available and, if none, so state;

(l) a description of the facilities and equipment used for educational programs and the address of training site;

(m) the policy concerning credit granted for previous education, training, and experience and, if none, so state;

(n) the refund and cancellation policy which must describe the procedure for determining the official date of termination;

(o) ~~in catalogs (except for out-of-state degree-granting institutions which choose to make no reference to the Commission) which describe educational programs conducted in Tennessee and with enrollment contracts used by programs outside of Tennessee,~~ a statement provided within the first four pages or in a designated state authorization section of the catalog ~~and on the signature page of enrollment contracts, which must~~that reads as follows:

~~The~~ (~~n~~Name of institution) is authorized by the Tennessee Higher Education Commission. This authorization must be renewed each year and is based on an evaluation by minimum standards concerning quality of education, ethical business practices, health and safety, and fiscal responsibility;

(p) a description of the student grievance procedure, a listing of the title, address, and telephone number of the institutional employee(s) designated to receive student complaints. If the institution used a mediation clause in its enrollment agreement, the catalog must describe the steps required of the student and/or the institution to initiate the mediation process. The address and telephone number of the Division of Postsecondary School Authorization~~licensure staff of the Commission~~ must be in the catalog for

grievances not settled at the institutional level;

(q) specific information pertaining to transferability of credit earned to another institution, with language sufficient to describe limitations on transfer of credit. Institutions have a responsibility to advise potential enrollees that transfer of credit is controlled by the receiving institution and that accreditation does not guarantee transferability. Suggested language is as follows:

"(name of institution) is a special purpose institution. That purpose is (fill in mission statement). This purpose does not include preparing students for further college study. Students should be aware that transfer of credit is always the responsibility of the receiving institution. Whether or not credits transfer is solely up to the receiving institution. Any student interested in transferring credit hours should check with the receiving institution directly to determine to what extent, if any, credit hours can be transferred."

(r) the cash discount policy, if offered to students.

(2) Use of supplemental pages must be done in a way as to ascertain that supplemental pages become an effective part of the catalog and must show an effective date and be presented to students prior to enrollment or payment of fees;

(3) Catalogs should be written in a way and at a level which enables prospective enrollees to make informed decisions;~~ and~~

(4) Less~~er~~ information~~ requirements~~ may be required to be included in the institutional catalog or brochure when the applicant can satisfactorily demonstrate to the Commission that some of the above are not applicable~~.~~; and

(5) Full-~~-~~time students should have a reasonable expectation to complete programs as printed in the institutional catalog at the time of enrollment.

Authority: T.C.A. §§ 49-7-2002, 49-7-2005, 49-7-2006 and 49-7-2008.

1540-01-02-.12 ADMISSIONS STANDARDS

(1) Institutions must adopt an admission policy that is based on the institution's objectives and that meets the following minimum requirements.

(a) Non-degree program admission policies must require the prospective student to have received a high school diploma, passed the General Education Development (GED) test, or passed an ability-to-benefit test as that term is described below.

(b) Degree program admission policies must be at least the following, as applicable.

1. undergraduate degree programs must require a high school diploma or General Education Development (GED) test and

2. graduate degree programs must require at least a baccalaureate degree from an institution judged to be appropriate by the Commission.

(2) The admissions policy for students must be based on the institution's objectives and must be publicly stated and administered as written. Institutions should not admit to programs leading to licensure students who the institution knows or, by the exercise of

reasonable care should know, would be ineligible to obtain licensure in the occupation for which they are being trained (ex., certain prior legal convictions render one ineligible to hold certain licenses). If a student ineligible for licensure desires to enroll in ~~such~~ a licensure program, regardless of license eligibility, the institution may admit such ~~a~~ student after the student submits, in writing for retention by the institution and review by Commission staff, a statement acknowledging such ineligibility. This provision~~, 1540-01-02-.12(1)~~ is not intended to speak contrary to institutions' options to enroll students as non-credit students, auditing students or continuing education students.

~~(2) Students without high school diploma or GED may be admitted as an Ability to Benefit student into non-degree programs that are customarily not accepted for college credit if the student has terminated secondary enrollment and is beyond the age of compulsory attendance, subject to the following conditions:~~

~~(a) Applicants without a high school diploma or GED shall be tested.~~

~~(b) An exception to these testing provisions, however, may be created for:~~

~~1. individual applicants to non-degree programs where the following four conditions are met:~~

~~(i) The student does not receive federal or state financial aid.~~

~~(ii) The student's high school transcript is unavailable.~~

~~(iii) The program is short term and the costs are low.~~

~~(iv) institutions or programs at an institution composed exclusively of subject matter that does not lend itself to an objective test, upon request, if approved by the Commission.~~

(3~~c~~) Any test administered for purposes of determining admission shall be a standardized test recognized nationally or by the U.S. Department of Education with minimally acceptable scores as referenced in the test material or by the U.S. Department of Education or only in cases where a standardized test is not available, a non-standardized test developed by institutional officials and approved by the Commission staff with minimally acceptable scores approved by the Commission staff.

(4) Additional requirements for the administration of ability-to-benefit tests:

(a~~d~~) Tests shall be administered in a secure environment (e.g., monitors present). Tests shall not be administered in a manner inconsistent with the manner (e.g., frequency) recommended by standardized test developers. Testing policies shall be stated along with the admissions policy published in the institutional catalog.

(b~~e~~) An agent is not allowed to administer the test, nor is anyone allowed to assist the applicant in answering the questions.

(c~~f~~) If the admission test reveals the student to be ineligible as an ability-to-benefit student, the student may be enrolled as a remedial student and may be charged for the remedial program on an hourly pro rata basis. The student is not obligated for the tuition and fees of the non-remedial regular program until the admission requirements are met. The minimum admission requirement for postsecondary education remains a high school diploma, GED, or a passing score on the admission exam.

(d~~g~~) Tests administered for purposes other than the determination of admissibility are not governed by ~~1540-01-02-.12(2)~~ this rule.

(e~~3~~) Institutions which admit enrollees on an ability-to-benefit basis, must submit all documents related to such admission policies to the Commission.

~~(4) Degree program admission policies must be at least the following:~~

~~(a) undergraduate degrees must require a high school diploma or equivalency, and~~

~~(b) graduate degrees must require at least a baccalaureate degree from an institution judged to be appropriate by the Commission.~~

Authority: T.C.A. §§ 49-7-2005, 49-7-2006 and 49-7-2008.

1540-01-02-.13 ENROLLMENT AGREEMENTS AND DISCLOSURE STANDARDS

(1) Accredited institutions that provide and administer a Title IV financial assistance program and grants will follow federal disclosure guidelines. Such institutions will not be required to duplicate any state disclosure item if that disclosure is part of federal or accreditation standards.

(2) Institutions prior to enrolling an individual shall require the prospective student to sign and date a pre-enrollment checklist~~form to be placed in the student file, which is either part of the enrollment contract or a pre- enrollment check list~~ verifying that the student:

(a) toured the institution (not applicable to institutions that deliver all instruction through distance learning);

(b) received an institutional catalog;

(c) was given the time and opportunity to review the institutional policies in the catalog;

(d) knows the length of the program for full-~~-~~time and part-~~-~~time students in academic terms and actual calendar time;

(e) has been informed of the total tuition and fee cost of the program;

(f) has been informed of the estimated cost of books and any required equipment purchases such as a stenography machine, computer, specialized tools, art supplies etc.;

(g) has been given a copy of the institutional cancellation and refund policy;

(h) has been given a copy of the completed transferability of credit disclosure statement required by T.C.A. § 49-7-144 and understands what 'transferability of credits' means and the specific limitations (if any) should the institution have articulation agreements;

(i) knows of their rights in a grievance situation including contacting the Tennessee Higher Education Commission by including on the form the following~~a~~ statement ~~in the following format~~:

1. ~~A statement:~~ "I realize that any grievances not resolved on the institutional level may be forwarded to the Tennessee Higher Education Commission, Nashville, TN 37243-0830, (615) 741-5293."

(j) has received the most recent withdrawal, completion and in-field placement data as calculated by the Commission by including:

1. the following statement: "For the program entitled, (program name), I have been informed that, for the July (year)/June (year) period, the withdrawal rate is (percent)%, the completion rate is (percent)%, and the in-field placement rate is (percent)%. Detailed statistical data for this program may be viewed by going to www.tn.gov/thec and clicking on the Authorized Institution Data button."; or

2. a copy of the report created for the institution by Commission staff and a statement that "the report can be viewed by going to www.tn.gov/thec and clicking on the Authorized Institution Data button"; and

~~(3) Also included, shall be documentation that the student received graduation placement data exactly as presented to the Commission during the last reauthorization cycle in the following format:~~

~~(a) A statement: "For the program entitled _____, I have been informed that the current withdrawal rate is _____%, or in the past 12 months _____ students enrolled in this program and _____ completed this program."~~

~~(b) A statement: "For the program entitled _____, I have been informed that for the students who graduated, the job placement rate is _____%, or in the past 12 months _____ were placed in their field of study out of _____ students who graduated from this program."~~

(k) has received and understands the institution's cash discount policy (applicable only to those institutions that have a cash discount policy).

(34) Institutions that receive a waiver pursuant to Rule 1540-01-02-.10(5) do not have to include the in-field placement rate for the program in the pre-enrollment checklist~~Liberal arts schools or professional schools that typically do not report vocational placement data may request a waiver of 1540-01-02-.13(3) above~~.

(~~5~~4) Institutions shall require a student enrolling to sign and date an enrollment agreement, which ~~An enrollment contract~~ shall include, but not be limited to, the following items:

(a) full and correct name and location of the institution;

(b) name, address and social security number or unique student identification number of the student;

(c) date training is to begin and program length;

(d) full-time or part-time status of the student;

(e) projected date of graduation/completion as a full-time or part-time student;

(f) program title;

(g) total cost of the program, including itemized separate costs for tuition (including costs of any books and equipment required to be purchased from the

institution), fees paid to the institution, and estimated costs for items such as books and ~~any~~ required equipment that students may purchase~~s~~ from the institution or a third party;

(h) cancellation and refund policy;

(i) verification that the student has received an exact signed copy of the agreement; and~~.~~

(j) a guarantee of the total cost of tuition and fees for 1200 contact hours or twelve (12) months from the time of enrollment.

~~(6) Institutions shall contractually guarantee total cost of tuition for 1200 contact hours or one calendar year from the time of enrollment for full and part time student.~~

(5) When enrolling a student in a single class that is part of an approved program, an institution may modify the pre-enrollment checklist and enrollment agreement as needed to substitute the word class (or other similar word) for the word program where necessary and to qualify any other language so that it applies to the specific class. In no event shall any modification result in less protection for or fewer disclosures to the student.

(~~7~~6) Programs less than 1200 clock (contact) hours must have an enrollment contract with a set total tuition and fees.

(~~8~~7) Programs longer than 1200 clock (contact) hours that increase tuition and fees ~~cost~~ after the initial 1200 clock (contact) hours or ~~one year~~twelve (12) month period, must provide counseling related to the ~~tuition~~ increase.

~~(9) Tuition increases that in the opinion of the Commission are excessive, unreasonable and exceeds initial disclosure to the student may result in an in depth audit of the institution at the school's expense to assure the Commission of financial stability.~~

Authority: T.C.A. §§ 49-7-2005, 49-7-2006 and 49-7-2008.

1540-01-02-.14 FINANCIAL STANDARDS

(1) Institutions administering Title IV financial assistance programs will maintain all required guidelines and standards.

(2) The Commission and its staff may share information with the Tennessee Student Assistance Corporation and other state and federal agencies as appropriate.

(3) The institution shall maintain financial and business practices in line with common business procedures utilizing standard accounting practices.

(4) The institution shall maintain and be prepared to demonstrate financial resources adequate to meet the following:

(a) facility maintenance and overhead;

(b) staff and faculty payroll;

(c) books, supplies and / or equipment utilized by students;

(d) general operating costs including printing and advertising;

(5) Institutions shall be able to demonstrate annual financial planning through a budget.

New degree granting program schools must establish financial planning that reflects at least a three year plan which includes anticipated income and expenses.

(6) All authorized institutions must file each year the most recent audited financial statement, certified by an independent certified public accountant for the most recent institutional fiscal year. For multi-campus institutions, or for institutions owned by one parent company, an audited consolidated corporate financial statement shall be routinely required. The staff, Committee, or Commission, however, may request additional campus or institution specific-information where needed to protect the public interest. The audited income statement must be compiled for each institution, or group of institutions owned by the same company, authorized to operate under the Act; the balance sheet must reflect owner's (proprietorship, partnership, corporation, other) assets and liabilities. In the preparation of these statements, it should be noted that goodwill is not generally considered a current asset unless it is being amortized; related parties must be disclosed; related party footnotes, debt agreements with owners, and supplemental footnotes on separate campuses or branches are expected. It should be noted whether or not tuition revenue is recognized up front or on a pro rata basis. Current financial statements on each site separately authorized under the Act must be filed annually for the most recent institutional fiscal year. ~~Within five years from initial temporary authorization, n~~Neither the ratio of current fund revenues to current fund expenditures nor the ratio of current assets to liabilities, both site specific and corporate, where applicable, shall be less than 1:1~~, without convincing explanation~~. Institutions that have annual gross tuition revenue of one million dollars ($1,000,000) or less may request a waiver of the audit contemplated by this section and provide the most recent financial information in a format acceptable to~~on forms provided by~~ the Commission.

(7) The institution must submit an operating statement and balance sheet to the Commission within four months of the end of the institutional fiscal year. In addition, if a regular or certified audit is available, it should be submitted within four months of the end of the institutional fiscal year as well.

(8) At any time, the Commission may require a certified audit of the institution when there are questions about the institution's financial stability.

(9) All institutions seeking authorization must maintain a business account with a financial institution that is federally insured in said institution's name.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006~~,~~ and 49-7-2015.

1540-01-02-.15 INSTITUTIONAL AND STUDENT RECORDS

(1) Records of enrollees, completers, and placements must be sufficient to verify data reported to the Commission~~provide annual auditable reports to the Commission from the master student registration list~~.

(2) A record of written student complaints must be maintained, including a copy of the complaint, subsequent documents, and a statement of the matter's disposition for a minimum of three (3) years from the conclusion of said complaint.

(3) Financial records of the institution must be maintained and open for inspection and copying by properly authorized officials of the Commission pursuant to compliance with confidentiality laws.

(4) Institutions administering financial aid programs must maintain a ledger and a record of financial aid administered which includes a chronological record of debits and credits

which is understandable to the enrollee.

(5) Each institution must maintain a master student registration list, in table format, consisting of at least the following information for any person who signs an enrollment agreement financially obligating that person or makes a down payment to attend, or both:

(a) registration/enrollment date;

(b) full name of the student;

(c) complete address~~ of student~~;

(d) telephone number;

(e) social security number or unique student identification number;

(f) name of course or program name and code;~~ and~~

(g) ~~current student~~ status of student ~~or date of dropout or completion, date of employment, employment status~~ (~~i.~~e.g., enrolled, withdrawn, leave of absence, or graduated)~~employed, unemployed, disabled, or deceased), where employed, including the name, address, and telephone number of the employer.~~;

(6) Institutions must maintain the following documentation in each enrolled student's file~~ or folder and shall include but not be limited to~~:

(a) transferability of credit disclosure statement required by T.C.A. § 49-7-144~~an admissions form that provides basic information such as student name, social security number, address, telephone number, program or area of application, projected entrance date, etc., and information relevant for determination that the student meets the minimum entrance requirements of the institution, (see 1540-01-02-.12). This information may be incorporated into the enrollment contract~~;

(b) proof that the student meets the institution's admission requirements. If a high school diploma or the equivalent is required, the institution shall have on file an official copy of the high school transcript, the equivalency certificate with scores which meet the state's minimum for passing, or an official transcript from a postsecondary educational institution or official documentation from the U.S. Department of Defense that indicates that the student received a high school diploma or GED (military documentation includes a DD Form 214 Certificate of Release or Discharge from Active Duty or Enlisted Record Brief); or if an ability-to-benefit basis, the institution shall have on file official records of such; ~~basis for admission (e.g., name and address of high school); if a high school diploma or the equivalent is required, for high school graduates or those with high school equivalency, the institution shall have on file an official copy of the high school transcript, or the equivalency certificate with scores which meet the state's minimum for passing; if an ability to benefit basis, the institution shall have on file official records of such; or if on an exception basis, documentation of such~~;

(c) pre-enrollment ~~disclosure statement or~~ checklist as given in these rules~~egulations~~ ~~(unless incorporated in the enrollment agreement)~~;

(d) a complete enrollment agreement as given in these ~~regulations~~rules;

(e) an up-to-date educational transcript for each enrollee in a form that permits easy and accurate review by the student, transfer schools, potential employers and authorized state or federal agencies. Transcripts must indicate the name and address of the institution and be signed by an appropriate institutional officer(s), (e.g., registrar, president, dean). The transcript shall be a permanent record of the student's progress and academic performance, which shall include, but not be limited to:

1. full and complete name of the institution;

2. full name of student;

3. social security number;

4. program or department of enrollment;

5. status of student (e.g., active; withdrawal; probation; leave of absence; graduate etc.);

6. an official date recorded for all student withdrawals, leaves of absence, and graduations;

7. beginning date or academic term with the year for each course attempted, with ~~an~~ a grade posted at the completion of the term or discrete contact hours for that course;

8. as applicable to the type of school, credit hours earned or contact hours completed;

9. actual name of each course (subject) with code numbers as given in institutional catalog;

10. indication of credits given by transfer from another institution or credit by exam;

11. cumulative Grade Point Average (GPA);

12. date the transcript was last updated and/or printed;

13. appropriate signature(s); and

(f) an exhibit of the institution's enforcement of standards acceptable to the Commission related to attendance, academic satisfactory progress, and proper documentation of any leave of absence (LOA) that may affect progress.

(7) ~~In lieu of hard copy educational transcripts, t~~The institution may maintain transcripts~~the above information~~ by electronic storage provided that there is at least one complete updated 'backup' copy in a separate system or location, Commission staff and other authorized groups have complete and easy access to review student transcripts during site visits and the institution can print out any or all transcripts upon request.

(8) For institutions with ~~well defined short term~~ programs ~~such as bartending and truck driving,~~ with no separation of courses by subject content, such as bartending and truck driving, an exact copy of the certificate of completion may be placed in the student file in

lieu of an academic transcript.

(9) Institutions must maintain a written record of the previous training and education of the applicant student which clearly indicates the appropriate credit which has been given by the institution for previous training and education.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, and 49-7-2016.

1540-01-02-.16 PERSONNEL AND INSTRUCTOR QUALIFICATIONS

(1) Institutions must provide and maintain qualified faculty and staff in order to fulfill the mission of the institution and all obligations to the students. As further described below, personnel qualifications must be submitted to the Commission on a School Personnel Application to be provided by the Commission staff, no later than ten (10) days after the hire date.

(a) Unaccredited institutions must submit to the Commission School Personnel Applications for all instructors and administrative personnel as that term is defined in this rule.

(b) Institutions accredited by an accrediting body recognized by the U.S. Department of Education must submit to the Commission School Personnel Applications for all administrative personnel as that term is defined in this rule. For each instructor, an accredited institution shall maintain on-site documentation supporting instructors meeting the minimum qualifications and shall complete a School Personnel Application at any time upon request from Commission staff.

(2) Administrative personnel and instructors shall meet all qualifications listed in this rule. Evidence of education, experience, or training (including official transcripts) for each personnel must be maintained on-site at the location. Institutions must submit a copy of this evidence at any time upon request from Commission staff.

(3) The method of administration and procedure for staff selection must be defined in a way that each employee has specific duties and responsibilities.

(~~3~~4) Administrative personnel generally encompass~~es~~ individuals that oversee areas as outlined in operational and administrative standards. This includes by function, but is not limited to titles of an institutional director; financial aid administrator; director of admissions; director of education; business officer or manager; director of student services (including counseling and placement) and the registrar. Support and clerical staff is not included as administrative personnel, but shall be included for reporting purposes on re-authorization forms annually.

(~~4~~5) Administrative personnel at authorized institutions must be graduates of an accredited college or university or have sufficient background and training in his/her area of responsibility.

(~~5~~6) Each institution must designate one person as the institutional director, who is responsible for the institution's program, the organization of classes, maintenance of the institutional facilities, maintenance of proper administrative records, signing documents pertaining to authorization and all other administrative matters related to authorization.

(~~6~~7) Institutional owners or the controlling board must ensure that each authorized site has an institutional director on that location for at least 50% of the operational time each week the school has students present unless other provisions have been approved by the

Commission staff.

(~~7~~8) The institutional director implicitly accepts knowledge of and responsibility for compliance with the Act and these regulations including but not limited to advertising, records, contracts, required benchmarks, annual deadlines and fee payments.

(~~8~~9) The institutional director at authorized institutions must be a graduate of an accredited college or university with at least one year experience in administration, institutional management, or the total years of administration/institutional management experience/higher education shall equal at least five years.

(~~9~~10) Directors of authorized institutions must maintain on site a separate current copy file of materials filed with the Commission as part of their current authorization which includes the application, documentation of appropriate bonding, financial reports, agent permit documentation, and fire and safety reports.

(~~10~~11) If the institution employs a director of education, that director shall meet the same requirements as an instructor as specified in these rules and shall also have either one year supervisory experience or a relevant post-bachelor's degree.

(~~11~~12) Instructors:

(a) Instructional staff for all institutions must be selected at a minimum on the basis of these rules~~credentials demonstrably higher, on the basis of experience and training, than the level to be taught~~.

(b) Instructors ~~in a trades~~in a trade related or specific skill areas must have documented proficiency and practical applied experience in that trade or skill.

(c) An instructor must hold the appropriate certificate, license, or rating if the subject is a trade requiring certificate, license, or rating.

(~~e~~d) An instructor must be qualified by education and experience/background ~~demonstrably higher than the level to be taught~~ and must meet the following qualifications as minimum requirements:

1. Minimum for doctorate level:

(i) Hold a doctorate degree from a college or university judged to be appropriate by the Commission and either:

(I) a doctorate degree with a major or concentration in the subject area to be taught; or

(II) a doctorate not in the subject area but with a minimum of one year of practical experience within the last five years in the subject area to be taught and completion of nine semester hours or 12 quarter hours of doctoral level courses in the subject.

2. Minimum for masters level:

(i) Hold a masters or higher degree from a college or university judged to be appropriate by the Commission and either:

(I) a masters or higher degree with a major or concentration in the subject area to be taught; or

(II) a masters or higher degree not in the subject area but with a minimum of one year of demonstrated practical experience within the last five years in the subject area to be taught and completion of nine semester hours or 12 quarter hours in graduate level courses in the subject.

3. Minimum for a baccalaureate level:

(i) Hold a baccalaureate or higher degree from a college or university judged to be appropriate by the Commission and either:

(I) a baccalaureate or higher degree with a major or concentration in the subject area to be taught; or

(II) a baccalaureate or higher degree not in the subject area but with a minimum of one year of demonstrated practical experience within the last five years in the subject area to be taught and completion of nine semester hours or 12 quarter hours in the subject. Additional years of documented experience in the subject area may be substituted for semester/quarter hour requirements.

4. Minimum for an associate level:

(i) Meet the minimum requirements for doctorate, masters or baccalaureate level; or

(ii) Hold an associate degree from a postsecondary institution judged to be appropriate by the Commission and either:

(I) an associate degree with a concentration in the subject to be taught and one year of practical experience; or

(II) an associate degree not in the subject area but with a minimum of two years of practical experience within the last five years in the subject area to be taught and satisfactory completion in a postsecondary educational institution of nine semester hours or 12 quarter credit hours in the subject area to be taught. Additional years of documented experience in the subject area may be substituted for semester/quarter hour requirements.

5. Minimum for diploma and certificate level:

(i) Meet the minimum requirements for doctorate, masters, baccalaureate or associate level; or

(ii) Hold a high school diploma or GED and a certificate of completion from a postsecondary institution judged to be appropriate by the Commission in a relevant subject area and a

minimum of three years of practical experience within the last seven years in the subject area to be taught. Additional years of documented experience in the subject area may be substituted for the postsecondary educational requirements.

~~(12) Evidence of qualifiable education, experience, or training (including official transcripts) for each instructor must be maintained on-site at the location.~~

(13) The Executive Director may approve a variance from the~~se~~ specific qualifications in paragraph (7) with sufficient justification and an assurance that the program quality will not be lessened. In such a situation the institutional director must submit written justification and documentation with the ~~personnel form~~School Personnel Application submission. In addition, the instructor must be institutionally evaluated at the close of the first instructional period for effectiveness and quality. This evaluation shall be made available to the Commission staff upon request.

(14) Instructors shall be evaluated at least annually by students, as well as the director or chief academic/instructional officer, and the institution shall have on file at the campus evidence of such evaluations.

(15) Agents ~~and Recruiters~~:

(a) ~~Institutional a~~Agents as defined by the Act and Rule 1540-01-02-.03~~these regulations~~ must submit an Agent Permit A~~a~~pplication, ~~on forms~~ a s provided by the Commission staff, ~~have authorization~~ and have received approval and an agent permit from Commission staff ~~and secure the appropriate bond~~ prior to any solicitation. The application~~nt~~ must be accompanied by the following:

1. ~~new applicants must forward~~ recommendations by two (2) reputable persons certifying that the applicant is of good character and reputation;

2. a check payable to the State Treasurer of Tennessee as required under these regulations;

3. a surety bond of five thousand ($5,000) per agent of an out-of-state institution or as specified in Rule 1540-01-02-.07 ~~of these rules~~; and

4. certification by the institutional director that the applicant will be directed to act in accordance with these regulations.

(b) Agent permits must be renewed every year. The expiration date of a permit is one year from the date of issue or termination of employment whichever occurs first.

(c) Agents must have separate permits to represent separate institutions unless ~~they are commonly held~~the institutions have common ownership such that the institutions present a common name to the public and have the same mission. Mutual agreement by institutions is required.

(d) All agents must verify by signature that they have read and are familiar with rules on advertising and solicitation and must verify intent to follow rules as set forth in Fair Consumer Practices.

(e) Institutional directors, not marketing offices, are responsible for actions of agents.

(f) The agent shall be under the control of the institution, and the institution is responsible for any representations or misrepresentations, expressed or implied, made by the agent.

(~~f~~g) Any student solicited or enrolled by a non-licensed agent is entitled to a refund of all moneys paid and a release of all obligations by the institution. Any contract signed by a prospective student as a result of solicitation or enrollment by a non-licensed agent shall be ~~may be null and void and~~ unenforceable at the option of the student. In cases where the institution is willing to honor the contract and the student wishes the contract enforced, it can be. However, in cases where the contract has been fully executed between the institution and the student, the student would not be entitled to a refund solely because he or she was solicited by a non-licensed agent.

(h) An agent is prohibited from inappropriate activities in procuring enrollees including, but not limited to the following:

1. administering the admission test;

2. advising students about financial aid other than informing the student of the general availability of financial assistance;

3. giving false, misleading, or deceptive information about any aspect of the institution's operation, job placement, or salary potential;

4. representing that a program has sponsorship, approval, characteristics, uses, benefits, or qualities which it does not have;

5. soliciting enrollments in a program which has not been approved by the Commission.

(i) An agent must display the current permit to all prospective students and other interested parties.

Authority: T.C.A. §§ 49-7-2002, 49-7-2005, 49-7-2006, 49-7-2009~~,~~ and 49-7-2011.

1540-01-02-.17 CANCELLATION AND REFUND POLICY[NO PROPOSED AMENDMENTS]

1540-01-02-.18 PROHIBTED ACTS

(1) Grant or offer to grant or infer through advertising, promotions or other representations that educational credentials or credits may be obtained through any postsecondary institution, business, person or educational service unless so authorized in the state.

(2) No school seeking, holding or required to hold authorization under the Act may call itself a university or use university in its name, unless prior to authorization in Tennessee such an institution has been so approved by a regional accrediting body recognized by the ~~U. S.~~U.S. Secretary of Education and the ~~U. S.~~U.S. Department of Education.

(3) No entity may publicize, promote or imply an accreditation that is not recognized by the ~~U. S.~~U.S. Department of Education.

(4) No school seeking, holding or required to hold authorization under the Act or these

regulations may publicize, promote or imply an academic, vocational, professional or educational certification from any entity without the approval of the Commission.

(a) Certifications held out to students that imply a special status, licensing or credential beyond the authorized award by the institution whether offered within the school or by an independent entity, where such certifications are not recognized or required by: the state and its laws or for employment purposes within the industry/profession, will require the approval of the Commission.

(5) For consumer disclosure and truth in advertising to all Tennessee citizens, an educational service, business or person must clearly identify the nature of the educational service offered and may not use broad language or phrases to imply that the service is a school, can award credits, degrees or other educational credentials.

(6) Unaccredited institutions shall not accept funds for tuition and fees prior to ten (10) business days before the scheduled start date of the class or program.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, 49-7-2007, 49-7-2008~~,~~ and 49-7-2013.

1540-01-02-.19 FAIR CONSUMER PRACTICES AND STUDENT COMPLAINTS

(1) Institutions may not discount tuition except that an institution may provide a discount for cash payments provided:

(a) the institution has a written policy in the catalog that includes the definition of cash and details the qualifications for receiving and the amount of a cash discount and

(b) the student verifies receipt and understanding of the policy in the pre-enrollment checklist.

(2) An institution may award a scholarship, tuition waiver or other award provided:

(a) the criteria for receiving the award are clearly defined in writing;

(b) the institution has a form and procedure to verify eligibility; and

(c) the amount of the award is a flat dollar amount or subject to calculation using a defined formula or scale.

(3) All institutions authorized by the Commission and their representatives shall be required to operate in accordance with fair consumer practices to ensure current and prospective students that nothing is hidden and verbal and written representations by the school are accurate, such that students can make appropriate decisions concerning their investment of time and money.

(~~2~~4) Fair consumer practices means honesty, fairness and disclosure to students in ~~the areas of~~areas including: recruitment, admissions, contractual agreements, student financial assistance, obligations to repay student loans, placement assistance and job placement rates, advertising, refund policies, the meaning and recognition of different types of accreditation, the transferability of the institution's credits to other postsecondary schools and also includes misrepresentation concerning competitor schools. Fair consumer practices include applying institution policies as written and presented to students.

(a) Information regarding fair consumer practices shall be included in the institution's usual publications such as the catalog and school brochures and must always be provided by institutional recruiters and agents.

(b) Accredited institutions may apply accreditation standards of fair consumer practices.

(~~3~~5) Findings by Commission staff and/or ongoing complaints by current or prospective students that show a pattern of misinformation, misrepresentation, lack of disclosure or discrepancies between verbal and written information, intimidation or coercion may require corrective public announcements or in the opinion of the Commission significant deviation from fair consumer practices may result in penal fines and/or conditional authorization or revocation of agent or institutional authorization.

(~~4~~6) Institutions authorized under these rules must report to the Commission in writing within 30 working days any unresolved written complaints about their operation of which they are knowledgeable (including media accounts of complaints). Such complaints shall be resolved or determined to be irresolvable by the institution within 30 working days of the receipt of the written complaint at the Commission offices. Complaints shall be considered as a factor in the decision when authorization to operate or continue in operation is sought.

(7) The investigation and further review of written complaints will occur in accordance with the following provisions:

(a) Complaints shall be signed and submitted through hand delivery, mail, electronic mail or facsimile.

(b) Commission staff shall investigate all written complaints.

(c) Any named institution and/or agent will receive a copy of the complaint and be provided an opportunity to respond to all allegations contained in the complaint.

(d) Any named institution and/or agent shall provide all information requested by Commission staff as part of the investigation.

(e) As part of the investigation process, Commission staff may work with the complainant and the named institution and/or agent to effectuate a settlement.

(f) Following the completion of the investigation, Commission staff shall provide to all parties written findings and conclusions, including any determinations with regard to the complainant's receipt of a refund or other monetary relief or the assessment of a fine or other adverse action. The written findings and conclusions shall contain a date by which an aggrieved party may submit a request for further review by the Executive Director as provided for in Rule 1540-01-02-.02(2)(b). Such date shall not be earlier than ten business days after the date of the findings and conclusions.

(g) Any request for review shall be in writing, signed, list each instance where Commission staff erred, and provide a detailed explanation of each error, including, where applicable, references to specific statutes or rules. Requests for review shall be received through hand delivery, mail, electronic mail or facsimile. A request may be denied if it is not received in a timely manner as set forth is subparagraph (f).

(h) Notwithstanding this paragraph, Commission staff may take appropriate action to investigate complaints in order to protect the public interest.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, 49-7-2007, 49-7-2008, and 49-7-2011~~49-7-2013~~.

1540-01-02-.20 ADVERTISING AND SOLICITATION

(1) Institutions authorized by the Tennessee Higher Education Commission may use the authorization in advertising, promotional material and on letterhead stationary using the following: "(name of school) is authorized for operation by the Tennessee Higher Education Commission." The entire statement must be used with the same size font and font type of print.

(2) The Tennessee Higher Education Commission logo may not be used in any school advertising, brochures, telecommunications or institutional material~~ without written approval~~.

(3) Institutions authorized by the Commission that have presence, advertise or offer instruction via internet, world wide web or other electronic telecommunication means must state on the first 'page' (as registered with standard web/internet search engines) viewed by the consumer, "[name of school] is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission".

(a) In the case of an internet site, within the required statement given above, "Tennessee Higher Education Commission" must be an electronic link to the agency's web site at www.tn.gov/thec/~~<www.state.tn.us/thec> or a picture/button link using a standardized approved Commission logo for school web sites~~.

(4) No statement shall be made that the institution or its courses of instruction have been accredited unless the accreditation is identified and that of an appropriate ~~nationally~~ recognized accrediting agency listed by the ~~United States~~U.S. Department of Education.

(5) No statement shall be made that the institution or its courses of instruction have been approved unless the approval can be substantiated by an appropriate certificate or letter of approval issued by the approving agency of the state or federal government.

(6) All advertisements, except for radio, placed by the institution or its representatives seeking prospective students must include and clearly indicate the full and correct name of the institution, its address, and the city where the institution is located; radio advertisements must include the full and correct name of the institution and the city and state where the institution is located.

(7) Institutions that advertise in formats that will be in the public domain for long periods (such as the telephone book directory), where such advertising, if in noncompliance, cannot be rewritten or retracted may be fined in accordance with the Act for each day, week or month the advertisement is in active circulation. Such fines shall not exceed $10,000.

(8) Printed bulletins or other promotional information must emphasize training available rather than amount and kinds of aid available.

(9) Promotion of the institution must be based on education programs, not student aid promotion, number of jobs available or educational credentials.

(10) No dollar amount or amounts will be quoted in any advertisement as representative or

indicative of the earning potential of graduates without prior approval by Commission staff.

(11) Institutions authorized to offer specialized courses or subjects not available to other institutions shall not advertise such courses in such manner to diminish the value and scope of courses offered by other institutions.

(12) Institutions or representatives shall not use a photograph, cut engraving, or illustration in bulletins, sales literature, or otherwise, in such a manner as to convey a false impression as to size, importance, or location of the institution, equipment, and facilities associated with that institution.

(13) Institutions or representatives shall not use endorsements, commendations, or recommendations by students in favor of an institution except with the consent of the writer and without any offer of financial compensation, and such material shall be kept on file and made a permanent record for the institution, and such endorsements shall bear the actual name or professional name of the student.

(14) Institutions or representatives shall not make deceptive statements concerning other institutional activities in attempting to enroll students.

(15) Every display-type newspaper advertisement, or other advertisement placed by the institution or its representatives, through direct mail, radio, television, or directories seeking prospective students, must clearly indicate that training is being offered, and shall not, either by actual statement, omission, or intimation, imply that prospective employees are being sought.

(16) Classified advertising seeking prospective students must appear under "instruction," "education," "training," or a similarly titled classification and shall not be published under any "help wanted" or "employment" classification.~~ ( S~~see ~~special school section~~ Rule 1540-01-02-.08~~(19)~~ for truck driving.~~)~~

(17) No advertisements of any type shall use the word "wanted," "help wanted," or the word "trainee," either in the headline or the body of the advertisement, nor shall any advertisement indicate in any manner that the institution has or knows of jobs or employment of any nature available to prospective students; only "placement assistance," if offered, may be advertised.

(18) No statement or representation shall be made that students will be guaranteed employment while enrolled in the institution or that employment will be guaranteed for students after graduation, nor shall any institution or representative thereof falsely represent opportunities for employment upon completion of any course of study.

(19) No school shall use job placement percentages or statistics in advertisements or recruitment materials except by written permission of the Commission.

(20) Should a placement service be advertised, adequate records shall be maintained by those institutions advertising such placement service which will reflect employment data. However, no institution shall advertise as an employment agency under the same or a confusingly similar name or at the same location of the school. No representative shall solicit students for an institution through an employment agency.

(21) The Commission staff at any time may require that an institution furnish proof to the Commission of any of its advertising claims. If proof acceptable to the Executive Director of the Commission cannot be furnished, a retraction of such advertising claims published in the same manner as the constitute cause for suspension or revocation of its

certificate of authorization.

(22) If student tuition loans are available at the institution, the school may advertise them only with the language "student tuition loans available" in type no larger than that used for the name of the school. This does not preclude disclosure of the institution's eligibility under the various state and federal loan programs.

(23) Promotional materials or agent solicitation practices must not state or infer that programs are available on a free tuition basis.

(24) No statement shall be made by an institution or its representatives that the programs and/or courses or tests are transferable to another institution without current documentation by an authorized official of the receiving institution.

(25) Claims by institutions in advertisements must be substantiated in Commission files prior to such claim.

(26) Claims must not be vague. For example, "award winning" institution should include full name of award in advertisement and specify year of any such attainment and source of award.

Authority: T.C.A. §§ 49-7-2005, 49-7-2006, 49-7-2007, 49-7-2008, 49-7-2013.

1540-01-02-.21 AUTHORIZATION STATUS

(1) Temporary Authorization:

(a) A temporary authorization may be issued following:

1. staff review of the completed application for authorization based on these rules;

2. site visitation of the proposed institutional facilities as deemed necessary and feasible by the Commission staff;

3. recommendation from the Committee on Postsecondary Education Institutions; and;

4. favorable Commission action.

(b) Institutions satisfactorily, as deemed by the Commission, completing the pre-operation requirements will be notified by letter of temporary authorization. Temporary authorization must be maintained for at least twenty-four months prior to eligibility for regular authorization on the basis of public Commission action.

(c) ~~Institutions accredited through an accrediting agency recognized by the United States Department of Education which have satisfactorily completed the specified time as an institution with temporary authorization will be considered for an authorization certificate for a period of six years. The Commission may select a shorter period, and in no case, is such school exempt from the annual reporting requirements given in these rules. (See Annual Renewal for Authorization).~~ Temporary authorization allows ninety (90) days for initiation of enrollment of students or instruction/education, and unless satisfactory reasons are forwarded by letter from the applicant for not beginning operation and

enrolling students, the temporary authorization may be withdrawn. All new institutions must submit a status report ninety (90) days after receipt of temporary authorization and submit annual reports on the annual reporting schedule which requires annual fees and reports due October 15 each year.

(d) The temporary authorization allows ninety days for initiation of actual operation and enrollment of students and unless satisfactory reasons are forwarded by letter from the applicant for not beginning operation and enrolling students, the temporary authorization may be withdrawn. All new institutions must submit a status report ninety days after receipt of temporary authorization and submit annual reports on the annual reporting schedule which requires annual fees and reports due October 15 each year.

(2) Regular Authorization:

(a) Institutions must be reauthorized annually on forms supplied by the Commission staff. ~~Institutions that complete the mandatory period of temporary authorization may cancel all bonds required at initial authorization.~~

~~(b) Institutions accredited through an accrediting agency recognized by the United States Department of Education completing temporary authorization will be considered for an authorization certificate for each site for a period of up to six years. The Commission, when possible will tie the authorization period to the accrediting body's granting of accreditation/reaffirmation cycle.~~

~~1. Such accredited institutions eligible for regular authorization will be allowed to submit for annual reauthorization each October 15, the most recent annual reporting documents submitted to the accrediting agency along with the minimum forms required by the Commission.~~

~~(c) Schools with no accreditation (or schools with an affiliation under an accrediting agency not recognized by the United States Department of Education) must be reauthorized annually on forms supplied by the Commission staff.~~

~~(d) Nothing in this section shall be construed to absolve institutions of annual fee requirements, response to complaints, site visits or any Commission request for additional information or materials.~~

(3) Conditional Authorization:

(a) A conditional authorization to operate is the issuance of authorization to operate, but with additional conditions, e.g., reporting requirements, on the meeting of certain performance standards, securing new or additional bonds, authorization to operate for a limited period of time such as during change of ownership or for the purpose of teaching out existing students. Such conditional authorization may be issued when deemed necessary to protect the public interest.

(b) As an alternative to revocation of authorization (c.f. TCA §49-7-2010 as amended), by making conditional its authorization to operate, the Executive Director may suspend or cause to cease any part of institutional activity such as enrolling additional students, advertising, or conducting specific classes or programs. Such cessation shall remain in effect until conditions precipitating the suspension of the activity are corrected with preventive measures in place and Commission staff have completed all related reviews and investigations.

(c) At the discretion of the Executive Director, the institution may be afforded the opportunity to "show cause" why a conditional authorization should not be imposed.

(d) An institution may voluntarily request conditional authorization including suspension of the operation, rather than expose the institution to adverse action or loss of authorization, for situations such as unexpected loss of lease and training site; extended travel or sabbatical. Voluntary suspension and the time period involved must be approved by Commission staff.

(e) Nothing in this section shall be construed to absolve institutions of their educational and financial obligations to currently enrolled students.

(4) Revocation of Authorization:

(a) Revocation of authorization is the immediate and complete withdrawal of the institution's authorization to enroll, advertise or operate a postsecondary educational school in the state.

(b) Grounds for immediate revocation of authorization to operate shall include but not be limited to:

1. loss of authorized instructional site without immediate notification to the Commission;

2. a principal party, owner or administrator involved with the institution who has ever been associated with a postsecondary educational institution that ceased operation with resulting loss of time or money for enrollees or had institutional authorization to operate in a state revoked or had a felony conviction involving moral turpitude, fraud or a capital crime;

3. a pattern of deceptive practices which include: hiding of any institutional records or documents; manipulation, alteration or falsification of materials required under the Act and these regulations which impugns administrative capability, fair consumer practices or operational standards;

4. failure to correct any situation that resulted in a show cause or conditional authorization within a reasonable time period to be determined by the Executive Director;

5. disregard for any specific directive issued by the Commission or the Executive Director;

6. failure to pay required fees, penalties or fines;

7. closing an institution without proper notification to the Commission.

8. knowledgeable or demonstrated pattern of deceptive solicitation.

(c) Revocation of authorization shall not relieve a school of complete compliance with the requirements in these regulations applicable to a school closing or ceasing operation, including but not limited to refunds to students, arranging instructional teach-outs and securing the disposition of student records.

Authority: T.C.A. §§ 49-7-2004, 49-7-2005, 49-7-2008, 49-7-2010.

1540-01-02-.22 CAUSES FOR ADVERSE ACTION [NO PROPOSED AMENDMENTS]

1540-01-02-.23 INSTITUTIONAL CLOSURE

(1) When an authorized postsecondary educational institution proposes to discontinue its operation, such institution shall notify the Commission staff within 24~~72~~ hours or on the first business day following the date of that decision and shall submit to Commission staff within ~~10~~ 3 days (or other deadline established by Commission staff) a plan to fulfill all obligations given below. Such plan shall include but not be limited to:

(a) Anticipated date to terminate teaching activity;

(b) Ending date of present term;

(c) A listing by name of all students in all programs. Such list shall include student's social security number, address, and phone number, program enrolled in, and estimated graduation dates;

(d) The status of all current refunds due (the amount of unearned tuition paid by each student and for which the school is obligated);

(e) A verified agreement with one or more local institutions able to provide sound education to all students in all programs;

(f) Disposition and servicing of all student records as required by T.C.A. § 49-7-2016~~.~~;

(g) A request for conditional authorization to operate where required~~.~~;

(h) Completion of obligations as designated by Commission staff by established deadlines~~.~~;

(i) Submission of any information or materials related to the closure requested by staff~~.~~; and

(j) Demonstration that current educational obligations by the institution will be met on behalf of the presently enrolled students.

(2) The institution which proposes to cease operations shall maintain sufficient and qualified faculty, staff, and equipment to teach all subjects to all currently enrolled students, regardless of the size of the class, until such time as the institution closes.

(3) Should the institution fail to make arrangements satisfactory to the executive director for the completion of the programs in which the currently enrolled students are enrolled and/or for the reimbursement of unearned tuition and fees, the institution shall be subject to fines as stipulated in T.C.A. § 49-7-2017.

(4) Institutions that close without proper notification to the Commission or that fail to comply with closure obligations given in this section (1540-01-02-.23) may be deemed retroactively by the Executive Director to have had the institutional authorization officially revoked. Such a revocation status shall be maintained as part of the Commission closure file on that institution and any individual(s) directly involved, including but not limited to the director, owner(s) and/or board chair.

(5) Student Completion of Education ("Teachouts"):

(a) The executive director may approve other institutions which are authorized under T.C.A. 49-7-2001 et seq. or exempt institutions to teachout students who were currently enrolled in an institution which ceases operation. An approved teachout institution shall:

1. offer the course of study or similar course of study as those offered at the closed institution;

2. exist or be provided in the same or reasonable geographic area as that in which the closed institution existed~~ or provide necessary transportation expenses~~;

3. provide the student the opportunity to complete his/her program at no additional cost than for which the student originally contracted at the closed institution;

4. accept any and all credits earned at the closed institution;

5. not reduce total course hours required for the student to graduate.

(b) If the closed or closing institution fails to provide an acceptable plan to the executive director, the Commission staff may work toward effecting teachout arrangements with other authorized institutions.

(c) Teachout plans may involve other institutions or be carried out by the terminating institution as circumstances may dictate.

(d) The teachout plan requirement is intended to supplement, not supplant, the provisions concerning the disposition of records when an institution closes, as indicated in T.C.A. § 49-7-2016.

(6) Disposition of Records:

(a) Any institution ceasing operation must secure student educational transcripts by an arrangement with an authorized institution or make them available to the Commission.

(b) When ~~financial aid and~~ academic transcripts from closed institutions are prepared for delivery to the ~~Tennessee Student Assistance Corporation and the Tennessee Higher Education~~ Commission, ~~such~~the transcripts~~ academic and financial records, each,~~ shall be alphabetized and ~~sorted and~~ separated by year. If necessary as a result of the number of transcripts, institutions should provide transcripts~~, in alphabetical order, and physically contained~~ to Commission staff in boxes fifteen (15) inches long, twelve (12) inches wide, ten (10) inches high with tops and ~~with~~ handles~~, consistent with State of Tennessee Archives regulations~~.

(c) ~~Financial aid transcripts must be organized, marked and boxed separately from academic transcripts~~Financial aid records shall be alphabetized and separated by year. If necessary as a result of the number of records, institutions shall provide the records in boxes fifteen (15) inches long, twelve (12) inches wide, ten (10) inches high with tops and handles.

(d) In the event that an Institution provides academic transcripts to the Commission, Commission staff will provide an official copy of a transcript to a student after the student has requested the transcript using the Student Request Form and paid the ten dollar ($10) fee as described in the form.

Authority: T.C.A. §§ 49-7-2002, 49-7-2005, 49-7-2016.

1540-01-02-.24 TUITION GUARANTEE FUND (TGF)

(1) "Tuition guaranty fund" or "TGF" or "~~fund'~~ fund" means the tuition guaranty fund created by ~~TCA~~T.C.A. § 49-7-2018.

~~(2) No institution organized as an in-state private postsecondary vocational education institution covered under the Act is exempt from the Tuition Guaranty Fund as described in TCA 49-7-2018.~~(2) All institutions authorized on or after July 1, 2006, shall pay into the Tuition Guarantee Fund for six consecutive years.

Authority: T.C.A. §§ 49-7-2005 and 49-7-2018.

1540-01-02-.25 FEES [NO PROPOSED AMENDMENTS]

1540-01-02-.26 Return of Regulatory Fees

(1) Following the year-end closing, the Commission shall return to authorized institutions as described herein any reserve balance as of the end of the fiscal year that is greater than one and a half million dollars ($1,500,000).

(a) No monies shall be returned if the amount due an institution is less than twenty-five dollars ($25.00).

(b) The percentage of the excess due an institution is calculated by determining the percentage of the total of all reauthorization fees paid by the institution during the fiscal year.

(c) Institutions that did not pay a reauthorization fee during the fiscal year shall not receive any share of the excess.

(d) Institutions that close or that have had their authorization to operate revoked prior to the end of the fiscal year shall forfeit any share of the excess.

(2) If an institution withdraws its pending application as a new institution, renewal applicant, or a new program within 3 working days from receipt, or prior to staff review and/or a site visit then all fees assessed shall be refunded. After three days and once staff review begins the following shall apply:

(a) For in-state schools making initial application, the Commission may retain 50% of the assessed fees if staff have reviewed the submitted materials and completed appropriate reports. Once the site visit has been conducted no rebate of assessed fees is possible.

(b) For out-of-state schools making initial application, the Commission may retain 100% of the assessed fees if staff have reviewed the submitted materials and completed appropriate reports.

(c) For any school that voluntarily or involuntarily deferred an application before the Committee and failed to complete the application process in the established time deadline given under Institutional Applications (1540-1-2-.07) shall forfeit all fees paid.

(d) Any other fee collected is nonrefundable once Commission staff have performed the associated review or work related to that fee.

Authority: T.C.A. §§ 49-7-2005 and 49-7-2014.

* If a roll-call vote was necessary, the vote by the Agency on these rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| Ms. Sue Atkinson | X | | | | |
| Mr. Charles W. Bone | X | | | | |
| Mr. Tre Hargett | | X | | | |
| Ms. Sharon L. Hayes | X | | | | |
| Mr. Gregory P. Isaacs | | | | X | |
| Mr. Cato Johnson | X | | | | |
| Mr. Jon Kinsey | X | | | | |
| Mr. David H. Lillard, Jr. | X | | | | |
| Mr. Charles Mann | X | | | | |
| Mr. Zachary Walden | X | | | | |
| Mr. AC Wharton, Jr. | | | | X | |
| Mr. Robert White, Chair | X | | | | |
| Mr. Justin P. Wilson | | | | X | |

I certify that this is an accurate and complete copy of proposed rules, lawfully promulgated and adopted by the Commission on 04/26/2012, and is in compliance with the provisions of T.C.A. § 4-5-222. The Secretary of State is hereby instructed that, in the absence of a petition for proposed rules being filed under the conditions set out herein and in the locations described, he is to treat the proposed rules as being placed on file in his office as rules at the expiration of sixty (60) days of the first day of the month subsequent to the filing of the proposed rule with the Secretary of State.

L.L. PERRIN STATE OF TENNESSEE NOTARY PUBLIC COUNTY OF DAVIDSON

Date: 7.16.12

Signature: [signature]

Name of Officer: Dr. Richard G. Rhoda

Title of Officer: Executive Director

Subscribed and sworn to before me on: July 16, 2012

Notary Public Signature: [signature]

My commission expires on: January 6, 2014

All proposed rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

[signature]
Robert E. Cooper, Jr.
Attorney General and Reporter

7-18-12
Date

RECEIVED 2013 APR -1 PM 4:08 SECRETARY OF STATE

**Department of State Use Only**

Filed with the Department of State on: 4/1/13

Effective on: 9/28/13

[signature]
Tre Hargett
Secretary of State

## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Environment and Conservation |
| DIVISION: | Water Resources |
| SUBJECT: | General Water Quality Criteria, Antidegradation Statement & Stream Use Classifications for Surface Waters |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Section 69-3-105; Section 303(c) of the Clean Water Act, 33 U.S.C. § 1313(c) |
| EFFECTIVE DATES: | July 2, 2013 through June 30, 2014 |
| FISCAL IMPACT: | Minimal |
| STAFF RULE ABSTRACT: | **Chapter 1200-04-03** |

Under existing regulations, this chapter identifies the standards for water quality in the state. It sets forth the numerical and narrative criteria necessary to protect designated uses of the state's water, which are established in Chapter 1200-04-04. Section 303 of the federal Clean Water Act requires states to review, revise, and adopt updated water quality standards every three years as part of a continuing triennial review process. Furthermore, Tenn. Code Ann., § 69-3-105 authorizes the Tennessee Water Quality Board to adopt and modify rules and regulations for this purpose.

Pursuant to federal requirements, this rule revises the water quality standards of the state to comply with changes in federal law. In particular, the rule adds certain compounds to the toxic substances list and sets forth criteria limits for such compounds in the waters of the state. Furthermore, the rule adds certain definitions to the General Water Quality Criteria including, but not limited to, the following terms: *de-minimus degradation*, *measurable degradation*, *parameter*, and *response variable*.

The rule clarifies the Antidegradation Statement and its implementation procedure, and certain terminology in the permitting context, including the terms described above. In particular, the rule

revises the steps an applicant must take in the permitting process and it revises the terminology used by an applicant and by the department for making social or economic necessity determinations.

The rule revises the process for reviewing applications to reduce processing time for applicants.

**Chapter 1200-04-04**

Under existing regulations, this chapter identifies the beneficial uses of the waters of the state and classifies individual waterways according to the specific uses of the waters. The rule updates the waters identified as trout streams based on information from the Tennessee Wildlife Resource Agency.

The rule adds the following trout streams: Elk River, Painter Creek, Dry Creek, Ramsey Creek, Briar Creek, Straight Creek, Bumpus Cove Creek, Laurel Fork Creek, Little Laurel Fork, Wagner Branch, Buck Creek, Shell Creek, Hampton Creek, and L. Prong Hampton Creek.

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

## 2010 Triennial Review of Water Quality Standards

## Summary of Public Comments and Tennessee Water Quality Control Board (WQCB) Responses

(Note: in some instances, public comments have been summarized in order to group similar observations by multiple reviewers.)

### A. GENERAL COMMENTS: Public Participation Process

**Comment A-1.** TDEC's notice procedures are inadequate. The public notice for the public meetings was not included in the division's regular notices for permit actions.

**Response:** The formal rulemaking hearing notice was published on the Secretary of State's website and the department's website. Additionally, emails were sent to previous participants in the process and persons who requested to be notified of rulemaking for water quality standards.

**Comment A-2.** TDEC's public hearings should be held in the evening or on Saturday.

**Response:** We have held meetings in the evening at many times in the past and will again in the future. However, in the past, many public meetings have been poorly attended, particularly in the evening. In 2010, we held evening public meetings in Memphis and Knoxville on the subject of the draft 303(d) List. No one attended at either location.

Staff resources are not unlimited and we must consider participation levels when allotting our time. Even if people cannot attend one of our hearings, comments can be submitted by regular mail, fax, or electronic submission.

**Comment A-3.** I would like a direct response from TDEC regarding my comments.

**Response:** The department compiles comments and responds to each in this document. This is part of the formal public participation process and is available to be reviewed by others.

### B. GENERAL COMMENTS: Legal Considerations and Federal Requirements

**Comment B-1.** One need only look at the division's water quality assessment reports and the underreporting of water quality impacts to see that water quality standards and the division's assessment processes are inadequate.

**Response:** The commenter provided as support for this comment the loss of aquatic species, including endangered mussels, due to the widespread impoundment of streams in Tennessee. We agree that the historical impacts of dams have been significant, but many of these projects were completed before the Clean Water Act was enacted. For example, Watts Bar and Douglas reservoirs were impounded in 1942.

We would be happy to consider specific suggestions to either water quality standards or the state's water quality assessment process.

**Comment B-2.** The goal of the water pollution program is to reduce pollutant levels. With this in mind, it is hard to understand why the criteria levels tend to stay the same rather than be reduced over time.

**Response:** We understand this comment, particularly in relation to language in the federal Clean Water Act, but would state the goals of the water quality standards process a bit differently: the purpose of clean water goals is to help insure that streams meet their designated uses. Where they do, our goal is to maintain their level of quality. Where they don't, our job is to implement controls over pollutant sources. The criteria provide a guide for both jobs.

It is not part of that strategy to ratchet down criteria levels arbitrarily or automatically.

**Comment B-3.** The proposed changes do not help the department accomplish its legal mandate to identify and restore impaired waters.

**Response:** The commenter has not specified a revision in voicing this concern. We consider the changes we have proposed to reflect not only the most current science, but also our years of experience running the regulatory program. Proper setting of standards is a critical tool in our efforts to identify and restore impaired waters as well as to fulfill our other statutory duties.

**Comment B-4.** NPDES permits should state that exceedence of any water quality standard is a violation.

**Response:** This prohibition is in the act and is included in standard permit language.

**Comment B-5.** The changes to the antidegradation statement place an unfair burden on the business community in Tennessee.

**Response:** The state may not authorize degradation without justifying that the change in water quality is in the public interest. If the commenter has a suggestion on how the administrative burden might be reduced, while maintaining the state's ability to make a proper judgment concerning degradation, we would be happy to consider it. However, most of the changes to the antidegradation statement are to provide clarity to the process and the procedure which should benefit all parties and in one instance the process has been streamlined by the deletion of one public meeting.

**Comment B-6.** The antidegradation statement should be used to protect Tennessee's aquatic diversity, plus species with special status.

**Response:** We agree. The characteristics for Exceptional Tennessee Waters include measures of biodiversity and the presence of threatened and endangered species.

## C. GENERAL COMMENTS: Miscellaneous

**Comment C-1.** 1200-04-03 does very little to make a connection between water quantity and quality issues.

**Response:** We do not agree that we have disregarded the linkage between water quantity and quality in Tennessee. We would point to our promulgation of flow criteria in the last triennial review, the adoption of habitat criteria two triennial reviews ago, and our antidegradation statement which incorporates implementation procedures for not only dischargers, but water withdrawals and habitat alteration projects, as evidence of this success.

**Comment C-2.** Water quality criteria do not go far enough to regulate water withdrawals.

**Response:** We do regulate water withdrawals under certain circumstances (see the previous response for more details about the role of water quality standards in water quantity issues). The department gets its regulatory authority from the Water Quality Control Act, which might have to be altered to provide the change envisioned by the commenter.

Other provisions of the rules directly address the requirement to obtain a permit for certain water withdrawals. See Chapter 1200-04-07. In response to this and other comments, we have made changes to the antidegradation statement (in Rule 1200-04-03-.06) to explicitly address how the rule applies to water withdrawals.

**Comment C-3.** Tennessee's criteria should recognize regional differences in water quality.

**Response:** We agree and identified a series of reference streams statewide which are monitored to establish the least impacted condition of wadeable streams. The following criteria specifically incorporate the concept of regional variability in water quality: nutrients, color, suspended solids, habitat, pH, dissolved oxygen, and biological integrity.

**Comment C-4.** The department should set criteria at more stringent levels than those suggested by EPA.

**Response:** We agree that we have the option to be more stringent than the national criteria suggestions. We would establish criteria more stringent than recommended by EPA if it is determined that specific national criteria are not adequately protective of Tennessee's water resources. The commenter has not suggested any specific changes or a science-based rational for doing so.

**Comment C-5.** Criteria should be based on whatever is best for Tennessee, not just what EPA suggests.

**Response:** We agree. Where we have had better ideas regarding criteria levels, we have had no problem proposing them. However; EPA has performed primary research into the effects of pollutants and for most substances, we have not.

**Comment C-6.** Due to flaws in the water quality assessment process, the department should revise the 2008 305(b) Report before the changes to the water quality standards are finalized.

**Response:** The most recent 305(b) report was completed in 2010. The new version replaces the 2008 version as our current assessment.

**Comment C-7.** Under Rule 1200-04-03-.03, the various sections only give the name of the use. The section is composed of the criteria for that use.

**Response:** We agree and have made this revision. For example, the heading of Rule 1200-04-03-.03(1) will now say: "the criteria for the use of Domestic Water Supply are the following."

## D. SPECIFIC COMMENTS: 1200-04-03-.02, General Considerations

**Comment D-1.** The description of wet weather conveyances should be revised to include the new language adopted by the legislature and incorporated in the Water Quality Control Act.

**Response:** We agree that since those rules have already gone through the process and become effective, these rules now incorporate that language so that all of the changes regarding wet weather conveyance determinations and associated definitions are not unintentionally deleted.

**Comment D-2.** The passage of the "wet weather conveyances bill" in 2009 will make it difficult for the department to protect headwater and ephemeral streams, plus biological integrity in Tennessee streams.

**Response:** We agree that it is imperative to protect headwater streams. But by definition in the law, headwaters that support aquatic life are not wet weather conveyances.

**Comment D-3.** The section about the public's reasonable uses of waters suggests that industrial use and power generation are just as important as aquatic life protection and recreation. They are not.

**Response:** The section in question is a listing of reasonable uses, not a ranking. The criteria for recreation and aquatic life protection are generally more stringent, reflecting the greater sensitivities of these uses to pollutants.

**Comment D-4.** The phrase "economically achievable" in Rule 1200-04-03-.02(4) creates an inappropriate exemption for dischargers in which they can avoid having to install pollution prevention equipment.

**Response:** A full reading of the passage suggests otherwise.

...existing pollution should be corrected as rapidly as practicable, and future pollution prevented through the best available technology economically achievable or that greater level of technology necessary to meet water quality standards; (emphasis added)

Economics is always a factor and the technology that might be needed to fully treat an effluent may not be available. However, the cited passage is clear that the goal at all times is to meet water quality standards.

## E. SPECIFIC COMMENTS: 1200-04-03-.03(2), Criteria for Water Uses, Domestic Water Supply

**Comment E-1.** Tennessee should adopt the 10 mg/L nitrate drinking water criterion based on the protection of infants (blue baby syndrome).

**Response:** We agree and have made this revision.

## F. SPECIFIC COMMENTS: 1200-04-03-.03(3), Criteria for Water Uses, Fish and Aquatic Life

**Comment F-1.** Different aquatic species have different sensitivities to pollutants, a fact not considered in the criteria.

**Response:** EPA develops national criteria for pollutants by conducting toxicity tests (or by incorporating the results of tests conducted by others) for a set number of different types of aquatic life. Criteria are intended to protect the most sensitive species. Additionally, an uncertainty factor is added to provide another level of conservatism to the criteria. Should a more sensitive species be discovered, the criteria can be reevaluated and adjusted.

**Comment F-2.** Tennessee's dissolved oxygen criterion should be raised to a minimum of 6.0 mg/L in areas not already set at that level or higher.

**Response:** The present dissolved oxygen criterion of 5.0 mg/L is appropriately protective according to the literature.

**Comment F-3.** Areas known to contain naturally reproducing mussel populations should have a higher dissolved oxygen criterion. EPA suggests a minimum of 6.5 mg/L in areas not already set at that level or higher.

**Response:** The national criteria table on EPA's website refers the reader to the 1986 Gold Book regarding dissolved oxygen. In that section, the national criterion is found in Table 1. The one day minimum dissolved oxygen standard for early life stages is 5 mg/L, Tennessee's current criterion.

The number cited by the commenter comes from Table 2 and is a level suggested to prevent any "production impairment" of fish. However, this number is not the national criterion.

**Comment F-4.** Tennessee's pH criterion should be revised to be more stringent.

**Response:** The commenter has not suggested a set of alternate values or the reason the alternative would be better for aquatic life. Our view is that our pH criteria are protective and EPA has approved them.

**Comment F-5.** Tennessee should adopt EPA's new turbidity criterion.

**Response:** The turbidity number the commenter is referring to is not an instream criterion, but is rather a performance standard for runoff from construction sites. In aquatic systems, many things can cause elevated turbidity levels, many of which are natural. By themselves, turbidity levels are not a good indication of pollution.

Additionally, EPA has withdrawn the proposed turbidity performance standard.

**Comment F-6.** Tennessee should have a turbidity criterion, since silt is one of the most frequently-cited pollutants.

**Response:** We agree with the commenter that silt is a frequently-cited pollutant in Tennessee waters. But as stated previously, turbidity measurements are an inaccurate method for assessing silt impairment.

**Comment F-7.** The state has not proposed criteria for silt, which is currently one of the most frequently-cited pollutants impacting Tennessee waters.

**Response:** The commenter is correct that we have not proposed a numeric criterion for silt under the fish and aquatic life protection provisions. We have found our narrative criterion for habitat to be the best tool for diagnosing stream impairment due to excessive silt. In fact, it is the basis for the statements we have made about waters that are impaired by silt.

**Comment F-8.** Tennessee should adopt Illinois' sulfate criterion.

**Response:** Currently, sulfate would be regulated in Tennessee under our "Toxic Substances" provision [Rule 1200-04-03-.03(3)(g)]. EPA has not recommended a sulfate criterion and we have performed no research to determine the levels needed to protect Tennessee streams, which are considerably different than those found in Illinois. It would be better to keep this criterion narrative at present, which gives us the flexibility to select a level best for our streams, rather than adopt a rigid numeric criterion which may be overly stringent or not protective enough.

**Comment F-9.** Tennessee should adopt EPA's aluminum national criteria.

**Response:** Aluminum is not a priority pollutant. Tennessee currently regulates it by way of the narrative "Toxic Substances" criterion. EPA has acknowledged problems with the current numeric national criteria for aluminum. For example, the chronic value is appropriate for situations where both the stream pH and hardness are below 6.6 and 10, respectively. However, relatively few streams have these specific conditions. As pH and hardness increase, aluminum is less toxic. Additionally, EPA also correctly states that many high quality streams have aluminum levels that exceed 87 ug/L.

For these reasons, we will not recommend adopting the national criterion at this time in hopes that it can be refined in the future.

**Comment F-10.** For numerous toxicants, including selenium, the chronic criteria is much lower than the acute value. Why even bother to have acute criteria?

**Response:** We need both chronic and acute criteria to protect aquatic life. Chronic criteria are best thought of as average concentrations that should be maintained over time. An acute criterion is a maximum level to not be exceeded at any point.

Without acute criteria, we could not regulate spikes in contaminant levels that might be toxic, but would not significantly raise average levels over time.

**Comment F-11.** The existing EPA national chronic selenium criterion (5 ug/L) is not protective. A chronic selenium criterion of 2 ug/L should be adopted by Tennessee

**Response:** The best information available to the department supports continuance of the present criteria for selenium. If better science becomes available we will certainly consider it.

**Comment F-12.** The 2004 EPA draft selenium national criterion represents more defensible science and should be promulgated instead of the existing national criterion proposed by the department. A criterion based on the 2004 draft guidance would be approved by EPA.

**Response:** Every indication we have received from EPA in the last year suggests that the 2004 draft no longer represents their current thinking on selenium. Thus, we are less certain than the commenter that EPA would approve an approach based on the 2004 draft, especially when we have little idea how we would implement it.

As noted by the commenter, in our Notice of Rulemaking Hearing draft set of revisions presented to the Water Quality Control Board in 2009, we suggested going to EPA's current national criterion for selenium, which would have been a chronic value of 5 ug/L and a formula for calculating the acute criterion based on the ratio of selenite and selenate in the water. However, we received comments objecting to that formula so we have decided that it would be better to stick with our previous EPA's approved criterion (5 ug/L chronic, 20 ug/L acute) and let the national discussion about selenium continue to a more final resolution. Staying at 5/20 would leave us at the same criteria level as many of our neighboring states. We note that none of the other Region 4 states have adopted the 2004 selenium draft criterion.

**Comment F-13:** The acute criteria formula originally proposed by the department for selenium is dated and flawed when compared to the acute formula in the 2004 EPA draft, which allows for consideration of the effects of sulfate in reducing the toxicity of selenate. By using these 2004 calculations, selenate is less toxic than selenite.

**Response:** We agree with the commenter that our original recommendation for the acute selenium formula should be dropped; however, we have changed the acute criterion back to the existing 20 ug/L rather than the approach of the 2004 EPA draft.

The commenter is correct that the 2004 draft EPA selenium formula incorporates sulfate into the calculations and at elevated sulfate levels, selenate can appear to be less toxic than selenite. However, several things should be noted:

1. Sulfate is toxic. As noted by a previous commenter, Illinois has adopted a numeric criterion for sulfate.

2. In their sample calculations, EPA used a 100 mg/L sulfate level (page 24 of the 2004 draft). We have reviewed the ambient water quality data in Tennessee and consider background sulfate levels to generally be much lower. However, streams historically impacted by coal mining activities tend to have much higher levels. Since mining discharges also may discharge selenium, using the sulfate altered formula would potentially allow the discharge of higher amounts of one pollutant, due to the discharge of another pollutant. When these pollutants enter the environment, the oxidation states of each may change which alters their toxicity.

3. As stated in previous comments, the 2004 draft reflects unsettled science. EPA may go in another direction in their next effort.

**Comment F-14.** Tennessee should not propose adopting the 2004 EPA draft selenium national criterion. EPA intends to publish a new draft by February, 2010.

**Response:** We will withdraw our recommendation to the board that we adopt the existing national water criterion for selenium. We note that at the time of this writing (November, 2011), there is no new selenium draft guidance, which suggests to us that the science associated with this criterion continues to be in flux.

**Comment F-15.** Tennessee needs a fish tissue-based criterion, such as suggested in the 2004 EPA draft selenium national criterion.

**Response:** As stated in the previous response, the latest indications from EPA suggest that they may be moving from a tissue-based criterion to one based on specific organs, such as reproductive parts, as a better indicator of toxicity problems induced by selenium. Particularly because EPA is evaluating recent studies and other data and their position may change based on those, we prefer to wait until EPA publishes its recommended criterion on selenium.

**Comment F-16.** If Tennessee adopts a fish tissue based criterion for selenium, it should be 4 mg/kg dry weight rather than the value suggested in the 2004 EPA draft selenium national criterion.

**Response:** We are not recommending a fish tissue-based criterion.

**Comment F-17.** The board need not promulgate an implementation procedure for a fish tissue-based selenium criterion. Such an implementation procedure, which could include a translator for converting the fish tissue-based criterion into a water concentration, could be developed later as part of the permitting strategy. Thus the board would be free to move forward with promulgation.

**Response:** The department agrees in principle that the board need not promulgate an implementation procedure if it were to go forward with a chronic selenium criterion based on fish tissue. But as a practical matter, we do not think a decoupling of the criterion/implementation procedure could be successfully accomplished, given that we expect that EPA would insist on knowing exactly how Tennessee intended to translate such a criterion prior to approving it for clean water act purposes. As EPA has yet to provide guidance on such an implementation procedure and we have done no primary research of our own, we would be at a loss to come up with a process EPA would approve.

**Comment F-18.** The department's recommendation for a new selenium criterion is not scientifically defensible. It was withdrawn by EPA as being too burdensome to industry in the Great Lakes.

**Response:** The department has withdrawn this recommendation, not because it is not scientifically defensible, but for all the reasons stated above.

**Comment F-19.** The department should have proposed promulgating the recently published new draft ammonia criterion.

**Response:** Much like the ongoing discussion regarding selenium, it is problematic to consider draft criteria, although we do not suggest that it is impossible to promulgate a draft national criterion or that EPA would automatically disapprove it. However, as a general statement based on our observations of this process over the years, it is better to let the public review of new national criteria proceed as these draft positions are often modified by this process.

**Comment F-20.** The department should propose a criterion for nonylphenol, but should select a more protective one than the EPA national criterion of 28 ug/L acute and 6.6 ug/L chronic. Environment Canada has adopted a more stringent criterion based on synergistic effects with other compounds.

**Response:** We have added the EPA national criterion for this substance (28 ug/L acute, 6.6 ug/L chronic). Regarding criteria developed in other countries: we have not researched this, but understand that Environment Canada made assumptions about the relative toxicities of the synergistic compounds. We think that it would be difficult to defend a criterion developed in Canada, since EPA would not help us explain a criterion they did not derive.

**Comment F-21.** The department should consider adopting EPA's national chronic criterion for demeton (0.1 ug/L), guthion (0.01 ug/L), malathion (0.1 ug/L), methoxychlor (0.03 ug/L), and Mirex (0.001 ug/L).

**Response:** We agree and have made this change.

**Comment F-22.** The department should consider adopting EPA's national criterion for diazinon (0.1 ug/L, chronic & acute) and parathion (0.013 ug/L chronic, 0.065 ug/L acute).

**Response:** We agree and have made this change.

**Comment F-23.** The department has said that although there is a criterion for "nutrients" [1200-4-3-.03(3)(k)], nutrients is not a parameter in the application of the antidegradation statement. The criterion should clarify this.

**Response:** We agree with the commenter and have added a number of provisions to the criteria, the definitions, and the antidegradation statement clarifying the relationship between criteria and parameters, especially in regard to nutrients, biological integrity, and habitat.

**Comment F-24.** Tennessee should continue to make progress in developing numeric lake criteria.

**Response:** We agree. Specifically regarding nutrients, the department has developed a written plan for development of nutrient criteria. This document can be accessed from our webpage at http://www.state.tn.us/environment/wpc/publications/pdf/NutrientCriteriaWorkplanRev.pdf.

**Comment F-25.** Tennessee must promulgate numeric criteria for nutrients rather than the current narrative one.

**Response:** Nutrients simply don't act in streams strictly in relation to concentration. Other factors influence the effects nutrients have in streams. Our criterion relies on numeric translators for wadeable streams. We believe this represents best use of available science and it has been approved in the past by EPA.

**Comment F-26.** Strict numeric nutrient criteria in Tennessee will help protect the Gulf of Mexico.

**Response:** We are standing by to do our part to help prevent hypoxia in the Gulf. However, as we have long maintained, EPA must take the lead in determining acceptable nutrient loadings and parsing out where allocations must be reduced. Additionally, EPA should provide guidance concerning what nutrient criterion is appropriate for the Mississippi River. This job is larger than any individual state and will require cooperation from all.

**Comment F-27.** Tennessee should have adopted EPA's national numeric nutrient criteria instead of criteria based on reference stream data. (The commenter provided a detailed critique of departmental documents published in 2001 and 2004.)

**Response:** The commenter is revisiting a decision made by Tennessee ten years ago and approved by EPA as scientifically defensible. Our approach- envisioned, developed, and undertaken well before the federal emphasis on nutrients began, is working well for the following reasons:

1. Tennessee's existing nutrient criteria are based on reference streams in Level 4 subecoregions, a more detailed approach. EPA's approach lumped Level 3 ecoregions together, some of which are not even found in Tennessee.

2. The database used in EPA's stream criteria calculations contained data from sites known to be large rivers and lake embayments. Tennessee limited its data to wadeable streams.

3. Tennessee's criteria were extensively field tested before and after publication, EPA's were not.

4. Tennessee's criteria approach incorporates biological response, EPA's does not.

5. Tennessee has continued to collect reference stream data at existing sites, has added new reference sites as discovered, and has continued to refine these criteria values.

6. EPA said at the time of publishing its nutrient criteria that it would be better for states to develop their own approaches, which is exactly what Tennessee had done. EPA has often referred to Tennessee's approach as a model for other states.

**Comment F-28.** The department has said that although there is a criterion for "biological integrity" [Rule 1200-04-03-.03(3)(m)], it is not a parameter in the application of the antidegradation statement. The regulation should clarify this.

**Response:** The commenter is correct that biological integrity is a condition index rather than a parameter. Beyond that, the parameters associated with biological integrity (e.g., number of EPT taxa) are response variables rather than cause variables. That means they are a measurement of the effects of a pollutant or the absence of pollutants, rather than a pollutant themselves. We have added some clarifying language.

**Comment F-29.** The existing biological integrity criterion contains the phase "except as authorized under Rule 1200-04-03-.06." Why is this criterion singled out for this phrase?

**Response:** The commenter is correct that antidegradation statement applies equally to all of the general water quality criteria. We have removed this phrase to avoid confusion.

**Comment F-30.** The biological integrity criterion should be numeric rather than narrative.

**Response:** Two triennial reviews ago, the department proposed, then withdrew a set of numerical criteria in favor of a position based on narrative criteria with regional numeric translators. We feel this approach has worked well.

**Comment F-31.** Tennessee's biological integrity criterion does not protect early life stages. Additionally, non-native species should not count towards diversity scores.

**Response:** Our Tennessee Macroinvertebrate Index, the foundation of our biocriteria, is based on the aquatic larval stages of insects. It is true that we count larvae rather than eggs, so we count early stages rather than the earliest stages.

We tried to think of non-native stream aquatic macroinvertebrates and other than *Corbicula*, we drew a blank. We do count *Corbicula* towards total taxa, but as an organism considered tolerant of pollution, they count against a stream's score in most other ways. We do not think of our assessments as being corrupted due of non-native species.

**Comment F-32.** Tennessee's habitat and biological integrity criteria do not provide for protection from cumulative impacts.

**Response:** We do not agree. Our habitat criteria and biocriteria are based on a wide-range of potential impacts that are sensitive to cumulative impacts to habitat and biology.

**Comment F-33.** Tennessee's biological integrity criteria should require that permittees perform biological monitoring in receiving waters.

**Response:** We agree that if permittees are potentially altering biological integrity, they should have some responsibility to monitor these changes and many permits now contain these requirements. This is a case-by-case determination that is more appropriately made in the permitting process than in the setting of clean water goals.

**Comment F-34.** Tennessee's criteria should speak to the problem of entrainment of aquatic life in power plant intakes.

**Response:** We have a set of biological integrity standards that apply to aquatic life, but think of entrainment as a permitting issue. EPA has proposed new regulations for entrainment and impingement and has identified intake technologies to reduce the magnitude of this problem.

**Comment F-35.** The department has said that although there is a criterion for "habitat" [1200-4-3-.03(3)(n)], habitat is not a parameter in the application of the antidegradation statement. The criterion should clarify this.

**Response:** We agree with the commenter. Like biological integrity, habitat is a condition index rather than a parameter. We have added a sentence identifying the parameters associated with this criterion.

**Comment F-36.** The habitat criterion [Rule 1200-04-03-.03(3)(n)], identifies "types" of habitat loss, but then goes on to list activities that cause these losses. It is the activities that are regulated.

**Response:** We agree with the commenter and have added a clarifying statement.

## G. SPECIFIC COMMENTS: 1200-04-03-.03(4), Criteria for Water Uses, Recreation

**Comment G-1.** Tennessee needs a numeric turbidity criterion.

**Response:** Our recreational turbidity criterion in Rule 1200-04-03-.03(4)(d) can be applied numerically in certain circumstances if the test stream can be compared to the reference stream database. These numeric interpretations of the turbidity criterion could be used as the basis for TMDLs, for example.

**Comment G-2.** The proposed recreational criterion for selenium is less stringent that the criterion for fish and aquatic life protection. People are no less sensitive to selenium than aquatic life.

**Response:** Different organisms are never equally sensitive to any toxicant. The results of toxicity tests and observations of humans under various selenium exposure scenarios indicate that people are less sensitive than fish and birds. EPA's national criteria incorporate the results of this research and observations. The Food and Drug Administration (FDA) has stated that most people do not need the selenium supplements commonly found in men's vitamins but that they are not harmful. (FDA did speak out on some of the "mega packs" of vitamins that contained too much selenium. These products have been pulled from shelves.)

**Comment G-3.** Tennessee should consider adopting EPA's national numeric criterion for zinc.

**Response:** We have made this revision, but note that zinc is not very toxic to people.

**Comment G-4.** EPA has published a new national criterion for mercury based on fish tissue concentrations. Tennessee should adopt this criterion.

**Response:** EPA has recommended this change and says that there are three ways a state can translate a tissue-based criterion for permit limit development:

Implement the fish tissue criterion without water column translation, or

Translate the fish tissue criterion to a water column value using bioaccumulation factors (BAFs). Three approaches include:

1. Site-specific BAFs
2. Modeled BAFs
3. BAFs derived using the results of field studies that are not site-specific (in limited circumstances); or

Combination (fish tissue criterion for some or all waters, combined with water column criteria for some or all waters).

We will follow the third approach, retaining the current water column number, while using the fish tissue criterion for decisions regarding the issuance of fish tissue advisories.

**Comment G-5.** Tennessee should consider adopting EPA's national numeric criterion for dinitrophenols.

**Response:** We already adopted EPA's criterion for 2,4-Dinitrophenol. Since the criterion is exactly the same, we have simply changed the name to Dinitrophenols.

**Comment G-6.** Tennessee should consider adopting EPA's national numeric criterion for Ether, Bis(Chloromethyl); Hexachlorocyclohexane-Technical; Nitrosodibutylamine; Nitrosodiethylamine; and Nitrosopyrrolidine.

**Response:** We have made these revisions, adjusting the criterion for Tennessee's different risk basis for carcinogens.

**Comment G-7.** Tennessee should consider adopting EPA's national numeric criterion for Nitrosamines; Pentachlorobenzene; 1,2,4,5-Tetrachlorobenzene; and 2,4,5-Trichlorophenol.

**Response:** We have made this revision.

**Comment G-8.** Tennessee should have additional numeric criteria for radionuclides, especially tritium.

**Response:** At this time EPA does not have a recommended criterion for tritium, and we do not have a basis to set a numeric criterion.

**Comment G-9.** The department should do more to regulate the discharge of radionuclides.

**Response:** This is a permitting rather than a clean water goal-setting issue, but the commenter should be aware that the regulation of radioactive materials is primarily done under standards set by the U.S. Nuclear Regulatory Commission, because the Atomic Energy Act preempts EPA and the states from regulating most radioactive materials.

## H. SPECIFIC COMMENTS: 1200-04-03-.03(5), Criteria for Water Uses, Irrigation

**Comment H-1.** Tennessee's toxic criteria for the irrigation designated use are vague and may not adequately protect the health of people eating fruits or vegetables irrigated with polluted waters.

**Response:** There have been several high profile events in recent years in which irrigation water has been thought or shown to be the source of bacterial contamination of certain vegetables, so we understand the commenter's concern.

The U.S. Food and Drug Administration has the authority and responsibility to regulate the quality of food products in the marketplace. Should EPA suggest national numeric water quality criteria to protect this use, we will adopt them.

## I. SPECIFIC COMMENTS: 1200-04-03-.03(5), Criteria for Water Uses, Livestock Watering and Wildlife

**Comment I-1.** Tennessee's toxic criteria for the livestock watering and wildlife designated use are vague and may not adequately protect the use.

**Response:** Our criteria for toxic substances for this use are narrative but we do not agree that status automatically equates to less protection. As EPA in conjunction with the U.S. Fish and Wildlife Service develop numeric wildlife criteria for selenium, for example, we will be standing by to adopt them. However, in the interim, we have not done primary research to determine more definitive protection levels and the commenter has not suggested any.

## J. SPECIFIC COMMENTS: 1200-04-03-.04, Definitions

**Comment J-1.** This section should also define available conditions and unavailable conditions.

**Response:** Please note that we are changing these terms to available and unavailable parameters rather than conditions. We have added a definition of "parameter."

Rule 1200-04-03-.06(2)(a) says that "unavailable parameters exist where water quality is at, or fails to meet, the water quality criteria in Rule 1200-04-03-.03."

Rule 1200-04-03-.06(3)(a) says that "available parameters exist where water quality is better than the water quality criteria in Rule 1200-04-03-.03."

**Comment J-2.** Tennessee currently puts the concept of "temporary" alterations within the definition of *de minimis*. But since temporary impacts are not degradation, couldn't it make more sense to revise the current definition of degradation to include this concept?

**Response:** We agree with the commenter, especially now that we have proposed revising the definition of *de minimis*. We have added the words "non-temporary" to the definition of degradation and removed the concept of short duration from the definition of *de minimis*.

**Comment J-3.** Since Tennessee now has flow criteria, shouldn't the definition of degradation include water withdrawals as a potential type of degradation?

**Response:** We agree with the commenter and have made this revision in the definition of degradation.

**Comment J-4.** A *de minimis* level of degradation should not be allowed in high quality waters. It allows water quality to be lowered incrementally, the "death from a thousand cuts."

**Response:** We understand this comment, but draw the commenter's attention to the 10 percent cumulative cap on applications of the *de minimis* provision. EPA has approved this concept as being consistent with federal regulations.

**Comment J-5.** The existing definition states that a *de minimis* level of alteration is not degradation, yet the new definition of "measurable degradation" says that that usually lesser amount of alteration is degradation. How can both be true?

**Response:** We agree with the commenter that a *de minimis* level of alteration, while small, is still degradation. We have deleted the statement in the regulation that *de minimis* does not represent degradation.

**Comment J-6.** The existing definition of *de minimis* could be clarified if it separated the discussions of how this level of alteration would be identified for the three different activities. Could subparagraphs be added?

**Response:** We have restructured this definition to add clarity. The definition now contains parts (a)1, (a)2, (a)3 for discharges, water withdrawals, and cumulative effects of discharges or withdrawals, respectively. Subparagraph (b) is specific to habitat alteration activities.

**Comment J-7.** The definition of *de minimis* does not explain how the concept of small magnitude or short duration will be applied.

**Response:** We believe the definition does explain how small magnitude will be determined by basing it on a percentage of the available assimilative capacity.

We have proposed changes to the definition of *de minimis*, specifically, acknowledging that *de minimis* is degradation. Since temporary impacts are not degradation, the concept of temporary impacts has been moved to the definition of degradation.

Short duration or temporary conditions are going to differ from site to site. One day's duration of an impact might not affect a larger stream, but devastate a smaller one. Additionally, since various pollutants have differing toxicities or potencies for human health impacts, the amount of exposure that might cause problems would differ for each. Five minutes of one pollutant might cause lasting harm, but five hours of another might have no effect.

Thus, in order to protect headwater streams and to account for the differing potential of each pollutant to cause harm, we have resisted any impulse to define what is "short duration."

**Comment J-8.** The definition of *de minimis* includes the word "insignificant" for the amount of additional degradation can occur beyond the 10 percent cap on cumulative effects. "Insignificant" should be defined. Could a bioaccumulative substance be considered insignificant?

**Response:** Like the concept of temporary, the significance of the effects of a substance on a waterbody is based on the nature of the stream and the toxicity or potency of the pollutant. For that reason, this concept would not lend itself to a rigid definition. There might be a specific instance (large receiving stream, very small discharge) in which the discharge of a bioaccumulative substance would be insignificant, but in general, we think of these substances as having a significant impact on a waterbody.

**Comment J-9.** The definition of *de minimis* allows for degradation above the 10 percent cap on cumulative effects. This is contrary to the recent Sixth Circuit Court ruling regarding Kentucky's antidegradation statement.

**Response:** The concept of allowing an insignificant amount of degradation above the ten percent cumulative cap is an existing provision of our *de minimis* definition, one that we are not proposing to revise. EPA already approved this approach during the previous triennial review.

**Comment J-10.** Activities that cause or contribute to a condition of pollution cannot be deemed *de minimis*.

**Response:** We understand this comment, but do not fully agree for several reasons. First, although we understand where this phrase comes from, we are getting away from "cause and contribute" in antidegradation

language. Obviously, something that "causes" the condition of pollution can never be *de minimis*. Causing the loss of use is always a prohibited amount of degradation.

Can an activity that "contributes" to the loss of use be *de minimis*? We think it could, if it was a very small contribution. Having the word "contributes" in the definition of *de minimis* might fuel arguments that even a molecule of a substance could contribute to loss of use.

**Comment J-11.** The testimony of permit writers in the Plateau Sand case demonstrated that the *de minimis* concept is poorly developed and is haphazardly applied to individual permits.

**Response:** We think the commenter has overstated the magnitude of this issue, but agree with the need for clear antidegradation guidance to staff. The initial proposal for amending these rules made changes to clarify the application of the concept of *de minimis* in the antidegradation analysis and we have now made additional changes to make it even clearer. We have clarified the applicant's burden to provide information on this point and explicitly stated that the determination of whether an impact is *de minimis* is the first step of the antidegradation analysis and can conclude it. However, to a certain degree this comment may be raising a permit issue rather than a water quality standards issue.

**Comment J-12.** A detailed explanation of the calculations used to determine that degradation is *de minimis* should be maintained in the permit files.

**Response:** We agree, but this is a permit processing issue rather than a water quality standards issue.

**Comment J-13.** *De minimis* levels of degradation should not be allowed for toxic or bioaccumulative substances.

**Response:** We agree that care needs to be exercised in the authorization of the discharge of bioaccumulative or toxic substances. However, it should be remembered that *de minimis* is based on the assimilative capacity of a substance, which in turn is based on that substances' criterion. The criteria already take into consideration the bioaccumulative or toxic effects of that substance.

**Comment J-14.** No activity should be considered *de minimis* simply based on the type of the activity.

**Response:** We understand this comment, but believe that selected general permits that were public noticed as representing *de minimis* levels of degradation are appropriately considered to represent an insignificant level of degradation. EPA has agreed with this approach.

Should the provisions of the permit not be followed and more than an insignificant amount of degradation occurs, that becomes an enforcement issue rather than a failure of goal-setting.

**Comment J-15.** The second paragraph of the existing *de minimis* definition should be discarded.

**Response:** The second paragraph in the existing regulation explains how the cumulative cap on *de minimis* will be implemented, which we consider critical. We will retain this paragraph, although as stated in a previous comment, we have restructured this definition to add clarity.

**Comment J-16.** The proposed approach to *de minimis* does not consider secondary impacts. For example, a power plant might withdraw a *de minimis* amount of water from a reservoir, but entrain a significant number of juvenile fish.

**Response:** In the commenter's hypothetical example, the withdrawal of the specific volume of water would be considered a *de minimis* effect if it complied with the definition found in Rule 1200-04-03-.04(4)(b). However, the related but different issue of fish entrainment would not be considered a *de minimis* effect.

**Comment J-17.** The proposed definition of measurable degradation is based on the results of chemical tests at very low detection levels. Substances may be unreliably quantified at those levels.

**Response:** The concept of measurable degradation is considered at the time of permitting. In practice, degradation will be considered measurable if the difference in instream concentration resulting from an addition of pollutants could be detected using laboratory methods specified by the division.

**Comment J-18.** The proposed definition of measurable degradation mentions dischargers but not water withdrawals. In a stream that is already at or violating a water quality standard, a water withdrawal might increase concentrations of the pollutant. That scenario should be addressed also.

**Response:** We agree and have added water withdrawals to the definition of measurable degradation.

**Comment J-19.** The definition of "mixing zone" is vague. More explanation of mixing zones should be given.

**Response:** In the next section "Interpretation of Criterion" [Rule 1200-04-03-.05(2)], more information about mixing zones is provided.

**Comment J-20.** The proposed definition of "normal weather conditions" has a typo. In the fourth line, "precipitation date" should be "precipitation data."

**Response:** We have made this correction.

**Comment J-21.** Under the antidegradation provisions for available and unavailable conditions, the word "parameter" is used. This should be defined lest the public be confused. Some criteria are for substances directly measured in analytical tests, such as iron or manganese. These are properly considered parameters. Other criteria are for overall conditions which are calculated composite scores, such as biological integrity and habitat, which are not directly measured. These are not parameters.

**Response:** We agree and have added the following definition: Parameter - A directly measurable biological, chemical, radiological, bacteriological, or physical property of water. Additionally, we added a second sentence to the definition to clarify the difference between a criterion and a parameter. We also have used the terms available and unavailable parameters to avoid the ambiguity of "conditions."

**Comment J-22.** Since the criteria for biological integrity references "response variables," a definition would be helpful.

**Response:** We agree and have made this addition.

**Comment J-23.** Why not just say that any stream that is a meter or less in depth is wadeable, instead of referring to the size of a biological sampling net?

**Response:** Streams typically deeper than one meter might also be sampled by wadeable methods, something our current definition makes allowances for.

**Comment J-24.** The definition of wet weather conveyance should explain what is meant by "direct response of precipitation."

**Response:** The department has developed a wet weather conveyance determination procedure (as a separate process) which has been added to water quality standards.

## K. SPECIFIC COMMENTS: 1200-04-03-.05, Interpretation of Criteria

**Comment K-1.** Temperature criteria violations should not allowed in mixing zones.

**Response:** Such discharges would be required to have Section 316(a) conditions in their NPDES permit. Section 316(a) provisions are a federal water quality standard that supersedes state temperature criteria. In place of the numeric criterion, permits subject to Section 316(a) have a requirement to maintain balanced indigenous biological conditions.

An NPDES permit with 316(a) requirements would still be subject to the conditions imposed on mixing zones in Rule 1200-04-03-.05(2). For example, the heat could not cause lethality, or prevent the free passage of fish upstream and downstream.

**Comment K-2.** The mixing zone provision should be amended to add that the drift of ichthyoplankton cannot be prevented.

**Response:** We agree, but feel that the prohibitions in Rule 1200-04-03-.05(2) already contain this concept in the part requiring the free passage of fish. We do not read that to limit these protections to only fish that swim as opposed to larval fish that drift.

**Comment K-3.** The flow basis paragraph (4) contains the following phrase:

...criteria that are wholly or partially based on direct measurements...

Some criteria are not directly measured, but are instead composed of individual parameters that are compiled to create a condition index.

**Response:** The commenter is correct and we have deleted the word "direct."

**Comment K-4.** Paragraph (5) mentions the magnitude and duration of water quality deviations, but not the frequency. Isn't this an important consideration that should be added?

**Response:** We agree and have made this revision.

**Comment K-5.** Pathogen data collected following rain events should not be treated as outliers.

**Response:** Part of the logic for the rain event pathogen provision is that people are unlikely to be recreating in streams during storms, thus risk is less. However, elevated rain event pathogen results are still violations of the water quality criterion.

This provision allows us not to automatically assess streams as impaired if the only elevated sample was collected during a high flow event. For example, we performed a great deal of pathogen monitoring in the Nashville area during the historic flood of May, 2010. However, since this was a 1000-year flood event, we would not consider those results to reflect normal water quality conditions.

**Comment K-6.** Paragraph (7) has the added phrase "or in water quality assessments." This needs clarification.

**Response:** We agree and have added the clarification that water quality criteria violations caused by natural conditions should not be assessed as the condition of pollution.

**Comment K-7.** Tennessee should have a laboratory certification process in wastewater like it does in drinking water.

**Response:** This idea has been explored in the past and while it has merit, it's not a subject for water quality standards

**Comment K-8.** Some of the general water quality criteria are set lower than the detection levels in Rule 1200-04-03-.05(8). Permittees should not be required to meet permit limits set below detection levels.

**Response:** Most permit limits are not set at the criteria level, since limits are based on additional factors such as ambient stream flow. However, where permit limits are below current detection levels, compliance with permit conditions is acknowledged with a result of "not-detected" at the appropriate detection level.

**Comment K-9.** Some of the RDLs (required detection levels) in permits are unreasonably low. (List provided by the commenter.)

**Response:** RDLs are an important tool in protecting water quality by assuring that permittees utilize appropriate analytical techniques.

It is important to note that according to Rule 1200-04-03-.05(8), not all substances limited in a permit are subject to RDLs. The regulation currently states: "In instances where permit limits established through implementation of these criteria are below analytical capabilities, compliance will be demonstrated..." (emphasis added). So the requirement for RDLs is triggered by the permit limit, not the criterion, since most dischargers get some dilution credit for the receiving stream. It would not make sense to require a very low detection level when the permit limit is much higher.

One of the RDLs brought to our attention by the commenter was anthracene. The commenter is correct that the RDL is challenging at 0.73 ug/L. However, the lowest numeric criterion for anthracene is 8300 ug/L, so a permittee would never be required to meet the RDL, according to the regulation.

A metal mentioned by the commenter was zinc, with an RDL of 1.0 ug/L. The fish and aquatic life criterion for zinc is hardness dependant, but at a hardness of 100 mg/L, the criterion would be 120 ug/L, so again, even in a zero flow stream, no permittee would be required to reach the RDL.

See the response to comment K-6 for additional information concerning the process for meeting alternate RDLs due to sample interferences.

**Comment K-10.** If RDLs are going to remain at current levels, then a process needs to be identified to allow the acceptance of scientifically valid data that has been generated with every effort to achieve the state's RDL limits.

**Response:** We believe that such a process currently exists. Rule 1200-04-03-.05(8) states: ...compliance with those limits will be demonstrated using the following detection limits, unless in specific cases other detection limits are demonstrated to be the best achievable because of the particular nature of the wastewater being analyzed (emphasis added).

In order to add clarification concerning how this provision will be implemented, we have added the following paragraph:

Such a demonstration shall be made at the time results are submitted and shall affirm that using methods, personnel, training, and equipment appropriate to reach applicable RDLs, the laboratory was unable to do so due to the nature of the sample. The methods, equipment, and general nature of the interference shall be provided. Inability to accurately quantify the level of a contaminant shall not be acceptable grounds for a higher detection level if the permit requirement was based on detection/non-detection.

**Comment K-11.** To streamline the regulation, the specific numeric RDLs should be deleted and the following bolded phrase should be added to the narrative:

"...compliance with those limits will be determined using the method detection levels associated with an applicable approved EPA analytical method as specified in 40 CFR Part 136."

**Response:** We don't disagree with this suggestion, but it presents a practical problem. Referencing a federal regulation in water quality standards usually requires that we add the phrase "or other defensible methods" in order to avoid certain legal problems. In this case, we feel that it would create fewer issues to simply specify the RDLs as we are doing currently. We understand we would be sacrificing flexibility for certainty.

## M. SPECIFIC COMMENTS:
## 1200-04-03-.06, Tennessee Antidegradation Statement

**Comment M-1.** No stream should be presumed to be outside of the protection of the antidegradation statement.

**Response:** All streams in Tennessee fall under one or more of the four antidegradation categories. (It is actually possible for streams to be in more than one category, as two of the categories are based on characteristics of the stream, while the other two are approached on a "parameter by parameter basis.") If the commenter meant that no stream should be presumed not to be "high quality," we agree. Our implementation procedure requires that the antidegradation status of a stream be determined prior to a regulatory action, except when the analysis concludes with the steps described in Rule 1200-04-03-.06(1).

**Comment M-2.** Basing Tennessee's water quality goals on conditions on November 28, 1975 sets the bar too low.

**Response:** The mention of November, 1975 refers to uses in place when the Clean Water Act was signed, not the existing water quality at that time. We do not believe that this provision places a limitation on clean water goal setting.

**Comment M-3.** The language in (1)(a) would more closely match the historical interpretation of this passage if it said that waters are high quality if the quality exceeds recreation <u>or</u> fish and aquatic life criteria, rather than using the conjunction <u>and,</u> as is presently done. Otherwise, someone might argue that water quality had to exceed both sets of criteria in order to be considered high quality.

**Response:** The commenter is correct and we have made this revision.

**Comment M-4.** Section 316(a) permits should not be referenced in the antidegradation statement as these permits have allowed historical impacts to aquatic life in Tennessee.

**Response:** Section 316(a) thermal discharge permits are allowed under federal law. The Section 316(a) requirement to maintain "balanced and indigenous populations" (BIP) of aquatic life is a federal water quality standard that supersedes any state temperature criterion.

**Comment M-5.** Rule 1200-04-03-.06(1)(b) needs additional detail regarding what constitutes a "complete application" for the various types of activities for which an applicant might request authorization.

**Response:** We agree and have rewritten the section to provide additional detail. We have added paragraphs and subparagraphs for the various activities.

**Comment M-6.** The proposed revisions add a requirement that any authorized degradation be necessary to accommodate important economic or social development.

**Response:** We do not agree that this represents a new requirement. This exact language appears in Rule 1200-04-03-.06(1) in the existing regulation and applies to all "waters where the quality is better than the level necessary to support" uses. This language is directly from 40 C.F.R. §131.12.

**Comment M-7.** The criteria need detailed procedures on how alternative analysis submissions will be evaluated by the department.

**Response:** We agree that evaluation procedures are important, but think they would be better placed in policy or SOP documents.

**Comment M-8.** The existing 2006 regulation has different application information requirements for authorizing degradation, depending on the antidegradation category of the water. The new proposal requires the same components of an application, no matter the category.

**Response:** New domestic wastewater discharges or alterations above a de minimis level must perform alternatives analysis. We agree with the commenter that the information submission requirements in the existing regulation are different between "available conditions" and exceptional Tennessee waters. As stated in the previous response, we do not concede that the nature of the state's determination is different.

Our reason for standardizing alternative analysis requirements is that due to the new requirements of the "permittee bill of rights" law recently enacted, the department must ensure that applications are complete prior to starting the clock on permitting time frames. Otherwise, the antidegradation analysis is likely to take longer than the new law allows. Applications are more likely to be complete if we standardize application requirements, given that the antidegradation category usually has not been determined prior to receipt of a completed application. In our view, applicants benefit from this clarity and simplification of requirements.

**Comment M-9.** The regulation refers to "important economic or social development" as the proper basis for allowing degradation in high quality streams (those better than existing uses). Important to the applicant, or the public? Who decides?

**Response:** The department makes this determination and can only authorize the degradation if it is in the public interest.

**Comment M-10.** Rule 1200-04-03-.06(1)(b) has been rewritten to suggest that the state must authorize any degradation of available conditions on the basis of the social/economic interest of the public. Only a discussion of these aspects was required in the previous version of the regulation, and the state has no regulatory authority for disapproval of the alternatives analysis. The proposed language is a new requirement that should be removed.

**Response:** We agree with the commenter that the existing rules require the submission of a "discussion" of the social, environmental, and economic consequences of each alternative. However, we disagree that the state's role was to merely confirm that the applicant had "discussed" alternatives and that we have no regulatory authority to reject the conclusions of the applicant.

The current Rule 1200-04-03-.06(1) says that degradation will not be allowed unless the state finds "...that the lowering of water quality is necessary to accommodate important economic or social development..." In order to make this finding, the department must have a factual basis. If the applicant does not provide adequate information needed by the state to make its determination or if the submittal does not make a case that the degradation is necessary, the department can withhold approval of the degradation. We do not think the approach described by the commenter would be approved by EPA.

The changes we have proposed will clarify responsibilities for both the applicant and the department. We have not changed the nature of the responsibilities.

**Comment M-11.** Rule 1200-04-03-.06(1)(b) has been rewritten to suggest that all permit applications for discharges causing more than *de minimis* degradation must perform an alternatives analysis. In the past, alternatives analysis has not been required for permit reissuances where limits are not being changed. This should be rewritten.

**Response:** The commenter is correct that where an applicant requests a status quo reissuance to available conditions (same limits, no increase in pollutant loading or concentration), an alternatives analysis has not been required.

At the time of permit renewal of previously authorized discharges that degrade Exceptional Tennessee Waters or Outstanding National Resource Waters both the existing and proposed rules require that the permittee must perform an alternatives analysis

**Comment M-12.** In the case of a reissuance of a permit that only adds a *de minimis* amount of degradation, the applicant should not be required to perform an alternatives analysis.

**Response:** We do not agree. Any increase in loadings or concentrations does not represent a status quo reissuance, if that facility was previously authorized to cause more than *de minimis* degradation.

**Comment M-13.** Under the current process, applicants and division can modify applications multiple times, often outside of the public's notice. This is done to try to "game" the system.

**Response:** All of the division's discussions with an applicant are public record. If the concern is that the public may be unaware that discussions are taking place, we would remind the commenter that our notification procedures are for specific regulatory actions, not discussions. It is the applicant's prerogative to modify an application for many reasons, including to render the effect of the alteration *de minimis*. When the draft permit is issued, the public has the right to review the basis of any determination. If any changes are made by the division after the comment period, a third party may appeal the permit on that point without having made a comment on the issue.

**Comment M-14.** Initial NPDES permit applications should be put on notice and a public hearing arranged, complete or not.

**Response:** Many initial and incomplete NPDES permit applications are withdrawn or significantly modified. We do not think it serves a public purpose to notice these submissions, since we cannot act on them until complete.

**Comment M-15.** The first step of the antidegradation process should be the determination of the antidegradation category of the stream.

**Response:** We agree that determination of the antidegradation category of the stream is important, but we do not agree that it has to happen first. Until an applicant submits a completed application, we have no idea if the proposed activity will represent degradation in available conditions or Exceptional Tennessee Waters, or "measurable" degradation in unavailable conditions or Outstanding National Resource Waters (ONRWs).

However, in some cases, the antidegradation category will already be known, especially in Exceptional Tennessee Waters. Of course, only the seven streams specifically currently designated by the board are ONRWs.

**Comment M-16.** Under the proposed revisions to Rule 1200-04-03-.06(2)(a) and the proposed definition of "measurable," additions of pollutants that can be detected in chemical tests at very low concentrations cannot be allowed. Just because something is measurable doesn't mean that it represents degradation. A *de minimis* amount of degradation should be allowed.

**Response:** The existing regulation says that any amount that would "cause or contribute to impairment" cannot be allowed. The definition of *de minimis* allows the loss of up to 5% of the assimilative capacity. That's not allowable in unavailable waters.

**Comment M-17.** General permits should not be allowed in unavailable conditions [Rule 1200-04-03-.06(2)] if the permit would result in the discharge of pollutants.

**Response:** No general permit authorizes discharges that would cause further impairment in unavailable conditions. Discharges that would further impairment are not eligible for general permit coverage.

**Comment M-18.** Under the proposed revisions to unavailable parameters, Rule 1200-04-03-.06(2)(a)(1), the phrase "cause or contribute" is used. Couldn't someone argue that even one molecule could contribute to measurable degradation?

**Response:** Although this language came from the federal regulation, we see the commenter's point. We have deleted "or contribute" in this phrase. Only those alterations that do not cause measurable degradation in unavailable parameters will be authorized.

**Comment M-19.** The department's permitting of dischargers into Tier I waters ignores significant water quality impacts by theorizing that dilution is "instantaneous."

**Response:** We no longer have an antidegradation category called Tier I, but we assume the commenter is referring to available conditions [Rule 1200-04-03-.06(3)(a)1]. Although this comment is really about permitting procedures rather than water quality standards, discharges are carefully modeled so as to not cause impacts to designated uses. In available conditions, degradation can be allowed if it is in the public interest.

**Comment M-20.** Rule 1200-04-03-.06(1)(c) should indicate the levels of degradation that for each of the three main categories of activities (discharges, water withdrawals, and habitat alterations) would off-ramp the permit from any further antidegradation review.

**Response:** We agree and have added sub-categories that establish that if a discharge or water withdrawal would not make a measurable difference in water quality parameters; or if the effect of a habitat alteration is rendered *de minimis* due to impact minimization and/or in-system mitigation; no further antidegradation review is necessary.

**Comment M-21.** Rule 1200-04-03-.06(1)(c) makes no mention of measureable degradation, even though only that amount of degradation can be allowed in unavailable conditions or Outstanding National Resource Waters.

**Response:** The commenter is correct and we have revised this subparagraph to correct this omission.

**Comment M-22.** A revision to Rule 1200-04-03-.06(1)(d) proposes to delete the requirement that the applicant be informed in writing that the stream they intend to alter is an Exception Tennessee Water. Why?

**Response:** A new subparagraph (e) reestablishes the department's responsibility for public notice once an application has been deemed to be complete. Thus, more than just the applicant will be notified. Additionally, Rule 1200-04-03-.06(4)(d)1 provides specific notice requirements for Exceptional Tennessee Waters.

**Comment M-23.** The antidegradation statement should do more to require water withdrawers to engage in regional planning.

**Response:** The department believes in and participates in regional water use planning and has done much to encourage it. When a new water withdrawal would cause measurable degradation, the applicant must provide an alternative analysis indicating that "reasonable alternatives are not feasible." The conclusions of an alternatives analysis backed by regional water use planning would carry much more weight than one without.

**Comment M-24.** The antidegradation statement protects high quality waters. It is not satisfied by simply setting permit limits.

**Response:** We understand this comment and generally agree. We must and do, withhold permission to degrade streams if better alternatives exist or if the degradation is not in the public interest. However, the commenter must remember that the antidegradation statement only works in terms of things the department authorizes. For example, we cannot regulate agricultural water withdrawals. Thus, the statement cannot prevent all impacts to high quality waters, but must be used in conjunction with other programs and policies.

**Comment M-25.** Mitigation should not be mentioned in the antidegradation statement. It results in widespread impacts to fully supporting streams.

**Response:** The purpose of mitigation is to fully replace water resource values that are lost due to the permitted activity. That is why in-system mitigation is considered *de minimis* in this rule.

**Comment M-26.** In Rule 1200-04-03-.06(1)(d), the first sentence refers to Outstanding Natural Resource Waters. Isn't this "National" waters instead?

**Response:** The commenter is correct and we have made this revision.

**Comment M-27.** In Rule 1200-04-03-.06(2) and (3), the regulation refers to unavailable and available "conditions," yet goes on to describe parameters. This is confusing and might be misinterpreted.

**Response:** The commenter is correct. We have substituted the word "parameters" for conditions.

**Comment M-28.** In Rule 1200-04-03-.06(2) and (3), could the requirements be more specific based on the type of activity is being proposed?

**Response:** We agree that this would help clarify these requirements. We will add these additional specifics as subparagraphs.

**Comment M-29.** In Rule 1200-04-03-.06(2), the regulation refers to unavailable parameters, which occur when criteria are not met. But some criteria are not specific to parameters. This is confusing and might be misinterpreted.

**Response:** The commenter is correct. We have added clarifying language to this paragraph indicating that where criteria are for condition indices, it is the individual parameters that make up the index that are unavailable. The revisions will also explain how response variables, such as the number of taxa in a stream, will be handled in regard to unavailable parameters.

**Comment M-30.** In Rule 1200-04-03-.06(3)(b), the regulation states that records of antidegradation determinations must be maintained. Isn't this requirement already in the permitting regulations and doesn't it apply to more than just determinations regarding available conditions?

**Response:** The commenter is correct and we have deleted this passage since it might be misunderstood to suggest that this overarching requirement only applies to this one provision.

**Comment M-31.** In Rule 1200-04-03-.06(4)(a)6, the regulation refers to the 2006 methodology for calculating the Tennessee Macroinvertebrate Index. Hasn't this SOP been updated since then?

**Response:** The commenter is correct and we have substituted 2011 for 2006.

**Comment M-32.** In Rule 1200-04-03-.06(4)(c), could the permitting requirements be more specific based on the type of activity is being proposed?

**Response:** We agree that this would help clarify these requirements. We have added these additional specifics as subparagraphs.

**Comment M-33.** The 2003 agreement between environmental groups and business interests established provisions requested by each: a contested case procedure and a requirement that cases be heard within 120 days, respectively. The proposed revisions to the antidegradation statement maintain the third party appeal process important to environmental groups, but eliminate the 120 day provision important to business interests.

**Response:** Both the contested case hearing process and the requirement for the Board to initiate within 120 days the hearing for declaratory contested cases in Exceptional Tennessee Waters have been restored to the regulation.

**Comment M-34.** The proposed changes to the regulation regarding Exceptional Tennessee Waters violates the spirit of the consensus changes developed during the 2003 triennial review by a coalition of agencies, the regulated community, and environmental groups. Especially important were how the provision would deal with social and economic necessity determinations and how contested cases would be handled.

**Response:** We have withdrawn the majority of these proposed revisions. The declaratory order contested case procedure has been restored to the regulation. We have deleted the extra meeting requirement regarding an application that would involve degrading ETWs. Our experience with those meetings was that they added time to the permitting process without a benefit. They did not provide us with useful information and they were frustrating for members of the public who did not understand the purpose of the additional meetings and wanted to discuss other issues besides antidegradation.

**Comment M-35.** The department has proposed deleting the requirement for the posting of signs at sites where authority to degrade Exceptional Tennessee Waters has been requested. This requirement should be restored. Additionally, the regulation should include required sign specifications (content, size, and location). To do otherwise would violate the agreed order in the Plateau Sand case.

**Response:** The requirement for signs already appears in the ARAP and NPDES regulations and removing it from the antidegradation statement will not change that. These specific requirements are more appropriately placed in the permitting regulation.

The existing requirement for sign postings has been criticized by both the regulated community and citizens as being an ineffective way of providing public notice. Many of these permit applications are for alterations in remote areas where signs are unlikely to be seen by anyone. We are committed to public notice and participation, but there may be better ways to do it.

**Comment M-36:** In the federal provision on antidegradation, the provision about protecting existing uses is separate from the one about finding that degradation is necessary for important economic and social development in the area. Tennessee's process for review of that decision should be limited to the social or economic justification. Any issues regarding the protection of existing uses may be raised in a permit appeal later, but should not be subject to being litigated in both.

**Response:** We agree and have revised the language regarding the declaratory order review accordingly.

**Comment M-37.** The revisions to public notice requirements seem to go more in the direction of emailing and internet postings rather than the traditional written letters or legal newspaper notices.

**Response:** We agree and consider these modifications to simply reflect the way people communicate now.

**Comment M-38.** The board should reconvene the coalition of groups involved in the 2003 agreement to discuss the new proposed antidegradation statement revisions.

**Response:** If the board asks us to reconvene the 2003 parties, we would be pleased to comply. However, the aspects of the proposed regulation that appeared to be most troublesome to both groups have been withdrawn.

**Comment M-39.** In the so called Third Party Appeal statute (TCA 69-3-105i); the General Assembly in effect codified the existing antidegradation provisions. Thus, they cannot be amended.

**Response:** We do not agree that the General Assembly, in effect, set the 2006 version of the antidegradation statement in concrete, never to be revised. Even if they did, it would ensure EPA disapproval, as they would consider such a policy inconsistent with federal law which requires an opportunity for reconsideration no less often than every three years.

We believe the Water Quality Control Board is free to modify the regulation as led by science and their good judgment. The specific reference in §69-3-105 is to the declaratory order provision and that is now maintained in the rule.

**Comment M-40.** The proposed changes to the public participation provisions fail to incorporate the results of an agreed order approved by the board in the Plateau Sand permit appeal case.

**Response:** The Plateau Sand agreement required the department to provide guidance for the sizing and lettering of signs. This has been done in accordance with the agreement. The agreement does not require the public participation provisions of the antidegradation statement to have any specific elements.

**Comment M-41.** The regulation should require the department to post notices on its website for requests to degrade Exceptional Tennessee Waters. (The commenter notes that this is typically already being done.)

**Response:** Detailed public notice procedures should be in the permitting regulations or in policy rather than in water quality standards.

**Comment M-42.** Any third-party appeal of a permit allowing degradation in an Exceptional Tennessee Water should be heard within 120 days.

**Response:** This would go beyond what was agreed in 2003 and, in certain cases, possibly would infringe on the authority of the administrative judges to assure that due process is provided in contested cases.

**Comment M-43.** Any third-party appeal of a permit allowing degradation in an Exceptional Tennessee Water should not result in a stay of the permit.

**Response:** We have deleted the stay provision and restored the provision regarding third party declaratory order contested case hearings.

**Comment M-44.** The public should exercise restraint in filing third-party appeals.

**Response:** The department has no mechanism for enforcing a provision requiring restraint. Members of the public properly filing a valid third party appeal are entitled to have the matter heard.

**Comment M-45.** The board should be able to review a permit at any step of the process, not just when it is final.

**Response:** We do not agree. The statute gives the commissioner the authority to issue permits. The board's role begins when an appeal of a final determination is filed. Otherwise, board time may be wasted on issues that may resolve themselves differently anyway. Furthermore, if the board was involved in making the permit decision, it could not review it on appeal.

**Comment M-46.** The department should nominate Rock Creek in Hamilton County as an Outstanding National Resource Water (ONRW). The required economic/social impact study could be patterned after those previously completed for the Tellico River and Citico Creek.

**Response:** Under the antidegradation statement, the designation of Outstanding National Resource Water is reserved for those streams that have been documented as important regional or national water resources due to their ecological, scenic, or recreational qualities. The department is familiar with Rock Creek and while we have identified it as an Exceptional Tennessee Water due to its prior designation as Lands Unsuitable for Mining, the presence of the state endangered laurel dace, and proximity to the Cumberland Trail State Park, we do not consider its water resource values to rise to the level envisioned for the ONRW designation.

The commenter is still free to present this proposal directly to the Water Quality Control Board when they traditionally hear public remarks at the rulemaking discussion to be scheduled later.

**Comment M-47.** In Rule 1200-04-03-.06(5)(b), could the permitting requirements in Outstanding National Resource Waters be more specific based on the type of activity is being proposed?

**Response:** We agree that this would help clarify these requirements. We have added these additional specifics as subparagraphs.

**Comment M-48.** In Rule 1200-04-03-.06(5)(b), water withdrawals are not mentioned.

**Response:** This is an oversight that we will correct.

## N. SPECIFIC COMMENTS: 1200-04-04, Use Classifications for Surface Waters

**Comment N-1.** The department should create a use classification called limited use waters that should be applied to headwater streams.

**Response:** Our interpretation is that the commenter envisions that this action would create a new type of waters, with less stringent criteria, that would fall between wet weather conveyances and streams. The commenter did not suggest any criteria for this new classification. A state cannot have one without the other.

We believe it's appropriate to leave stream-use classifications as they are currently structured and note that the abandonment of this concept was a key part of the changes made between the introduction of the bill and the passage of Public Chapter 464 concerning wet weather conveyances in 2009.

Additionally, we believe that EPA would disapprove such a blanket reclassification of streams to remove existing uses without individual Use Attainability Analyses on each. Many of these streams are likely "waters of the nation."

**Comment N-2.** Some headwater streams cannot meet criteria due to natural conditions. A use classification called limited use waters would acknowledge this important distinction.

**Response:** Natural conditions are not considered pollution so there is no conflict with existing criterion on that basis.

**Comment N-3:** The first page of Chapter 1200-04-04 provides "Abbreviations for Designated Uses." Are trout streams and naturally reproducing trout streams designated uses?

**Response:** The only designated uses are Domestic Water Supply, Industrial Water Supply, Fish and Aquatic Life, Recreation, Livestock Watering and Wildlife, Irrigation, and Navigation. The status of waters identified as

trout streams is included in this table as a convenience, not because they are classified uses. We will change the heading to "Abbreviations for Designated Uses and Trout Waters."

**Comment N-4:** The "Abbreviations for Designated Uses" in Chapter 1200-04-04 uses DWS as the abbreviation for Domestic Water Supply. However, the table uses DOM for this use.

**Response:** We will use DOM in both places.

**Comment N-5.** The trout stream status of the Elk River below Tims Ford dam should be modified due to the new dam operating agreement between TVA and U.S. Fish and Wildlife. The new agreement is designed to protect downstream endangered species. Only the section between mile 119 and mile 133.3 will be cold enough to maintain trout under the new agreement.

**Response:** We have made this revision. Since trout streams are not a use classification, this change can be made without a Use Attainability Analysis (UAA).

**Comment N-6.** The Tennessee Wildlife Resources Agency recommends that the entry for Goose Creek (pg 27) be revised to be a naturally reproducing trout stream from river mile 1.5 to origin. Additionally, one stream, Upper Hinkle Branch, a tributary of Stony Creek in the Watauga River watershed should not be a trout stream.

**Response:** We have made these revisions.

**Comment N-7.** The Tennessee Wildlife Resources Agency recommends adding the following trout streams and naturally reproducing trout streams to Chapter 1200-04-04:

| Proposed stream to add | Tributary to: ( listed trout stream) | Page of CH 1200-04-04 |
|---|---|---|
| E. Fork Wolf Creek | Wolf Creek | 12 |
| Rymer Camp Branch | Big Lost Creek | 12 |
| Big Bald Creek | Coffee Ridge Creek | 22 |
| Slip Creek | Coffee Ridge Creek | 22 |
| Little Bald Creek | Spivey Creek | 22 |
| Sarvis Cove Creek | Horse Creek | 22 |
| W. Fork Dry Creek | Dry Creek | 22 |
| Sill Branch, E. and W. Forks | Clarks Creek | 22 |
| Round Knob Branch | Jennings Creek | 22 |
| Big Branch | South Indian Creek | 22 |
| Blockstand Creek | Rocky Fork | 22 |
| Broad Branch | Rocky Fork | 22 |
| Fort Davie Creek | Rocky Fork | 22 |
| Rt. Prong Rock Creek | Rock Creek | 22 |
| Greenbrier Creek | Cosby Creek | 23 |
| Grassy Fork | Gulf Fork Big Creek | 23 |
| Sawmill Branch | Paint Creek | 23 |
| Little Paint Creek | Paint Creek | 23 |
| Tobes Creek | Pigeon River | 23 |
| Sinking Creek | Watauga River | 25 |
| Buffalo Creek | Watauga River | 25 |
| Dry Creek | Buffalo Creek | 25 |
| Furnace Branch | Stony Creek | 26 |
| Hodge Branch | Stony Creek | 26 |
| Lindy Camp Branch | Stony Creek | 26 |
| Pole Branch | N. Fork Stony Cr | 26 |
| Little Doe River | Doe River | 26 |
| McKinney Branch | Simerly Creek | 26 |
| Unnamed trib. at Tiger Cr | Tiger Creek | 26 |

| | | |
|---|---|---|
| Bill Creek | Tiger Creek | 26 |
| Fall Branch | Tiger Creek | 26 |
| Unnamed tribs. of Tiger Cr | Tiger Creek | 26 |
| Unnamed tribs. of Roaring Creek | Roaring Creek | 26 |
| Lacy Trap Branch | Laurel Fork | 26 |
| Leonard Branch | Laurel Fork | 26 |

| Proposed stream to add | Tributary to: ( listed trout stream) | Page of CH 1200-04-04 |
|---|---|---|
| Moreland Branch | Laurel Fork | 26 |
| Bunton Branch | Laurel Fork | 26 |
| Cook Branch | Laurel Fork | 26 |
| Camp Ten Branch | Laurel Fork | 26 |
| Hays Branch | Laurel Fork | 26 |
| All unnamed tribs. upstream of Moreland Br. | Laurel Fork | 26 |
| Heaton Creek | Doe River | 26 |
| Toms Branch | Doe River | 26 |
| Five Poplar Branch | Doe River | 26 |
| Middle Branch | Doe River | 26 |
| R. Prong Middle Br. | Middle Branch | 26 |
| Panther Branch | Doe River | 26 |
| Little Cove Creek | Cove Creek | 26 |
| Duck Branch | Doe River | 26 |
| Doll Branch | Shell Creek | 26 |
| Morgan Branch | Buck Creek | 26 |
| Bear Branch | Buck Creek | 26 |
| State Line Branch | Buck Creek | 26 |
| Morgan Branch | Little Laurel Branch | 26 |
| Trivett Branch | Elk River | 26 |
| Slabtown Branch | Doe Creek | 26 |
| Bulldog Creek | Roan Creek | 27 |
| Drake Branch | Roan Creek | 27 |
| Steve Phillippi Branch | Corn Creek | 27 |
| Cress Branch | Corn Creek | 27 |
| Roaring Creek | Forge Creek | 27 |
| Fall Branch | Roaring Creek | 27 |
| Unnamed trib. at Forge Cr. | Forge Creek | 27 |
| Valley Creek | Laurel Creek | 27 |
| Tank Hollow | Beaverdam Creek | 28 |
| Flat Springs Branch | Beaverdam Creek | 28 |
| Marshall Branch | Beaverdam Creek | 28 |
| Heaberlin Branch | Beaverdam Creek | 28 |
| Green Mountain Branch | Beaverdam Creek | 28 |
| Buck Ridge Branch | Beaverdam Creek | 28 |
| Owens Branch | Laurel Creek | 28 |
| Kate Branch | Gentry Creek | 28 |
| Gilbert Branch | Gentry Creek | 28 |
| Atchison Branch | Gentry Creek | 28 |
| Hoot Owl Hollow | Gentry Creek | 28 |
| Cut Laurel Branch | Gentry Creek | 28 |

**Response:** These streams are tributaries to streams that are already listed in Chapter 1200-04-04 as either trout streams or naturally reproducing trout streams. Rule 1200-04-03-.03(3)(a)2 states: "Tributaries to trout streams or naturally reproducing trout streams should be considered to be trout streams or naturally reproducing trout streams, unless demonstrated otherwise." In order to keep this regulation at a manageable length, we would prefer to not name all these streams by name, since they will automatically receive protection as a tributary.

**Comment N-8.** The Tennessee Wildlife Resources Agency recommends adding the following trout streams and naturally reproducing trout streams to Chapter 1200-04-04:

**Response:** These streams are tributaries to streams that are already listed in Chapter 1200-04-04 as either trout streams or naturally reproducing trout streams. Rule 1200-04-03-.03(3)(a)2 states: "Tributaries to trout streams or naturally reproducing trout streams should be considered to be trout streams or naturally reproducing trout streams, unless demonstrated otherwise." In order to keep this regulation at a manageable length, we would prefer to not name all these streams by name, since they will automatically receive protection as a tributary.

**Comment N-9.** The Tennessee Wildlife Resources Agency recommends adding the following trout streams and naturally reproducing trout streams to Chapter 1200-04-04:

| Proposed stream to add | Tributary to: | Placement in CH 1200-04-04 | Page of CH 1200-04-04 |
|---|---|---|---|
| Dry Creek | Nolichucky River | Before Broadshoal Ck | 22 |
| Ramsey Creek | Dry Creek | Under Dry Creek | 22 |
| Briar Creek | Dry Creek | After Ramsey Creek | 22 |
| Straight Creek | Dry Creek | After Briar Creek | 22 |
| Bumpus Cove Creek | Nolichucky River | After Dry Creek | 22 |
| Painter Creek | Nolichucky River | After Cassi Creek | 22 |

**Response:** These streams are not tributaries to streams that are already listed in Chapter 1200-04-04 as either trout streams or naturally reproducing trout streams. We have made these additions.

**Comment N-10.** The Tennessee Wildlife Resources Agency recommends reordering the following trout streams and naturally reproducing trout streams in 1200-4-4 so that they are in the proper hydrologic sequence:

| Proposed stream to change | Tributary to: | Placement in CH 1200-04-04 | Page of CH 1200-04-04 |
|---|---|---|---|
| Laurel Fork (and tribs.) | Doe River | Under Doe River (first) | 26 |
| Hampton Creek | Doe River | Before Sugar Hollow Creek | 26 |
| L. Prong Hampton Ck. | Hampton Creek | Under Hampton Creek | 26 |
| Buck Creek | Doe River | After Georges Creek | 26 |
| Shell Creek | Buck Creek | Under Buck Creek | 26 |

Response: We have made these revisions.

**2012 Triennial Review of Water Quality Standards**

**Summary of Supplemental Public Comments and Responses**

(Note: In November, 2011, at the request of the Water Quality Control Board, the previously revised water quality standards were again put on public notice and an additional review period was undertaken in the winter of 2011 and early spring of 2012. The following are responses to new public comments made during this review period. Some reviewers repeated comments previously made and should refer to the fall 2011 response document.

Additionally, our response to the comments made in regard to 1200-04-03-.05(9), the section specific to wet weather conveyance determinations, is that because that portion of the regulation was previously approved by the board in 2010 and no changes to it were proposed, any changes would be outside the scope of this rulemaking.

In some instances, public comments have been summarized in order to group similar observations by multiple reviewers.)

## A. TABLE OF CONTENTS

**Comment A-1.** *The Table of Contents does not match the section headings.*

**Response:** We will make the following revisions to the table of contents. We will add the word "Control" in 1200-04-03-.01. We will delete the word "Tennessee" in 1200-04-03-.06. In 1200-04-03-.08, we will add "Ground Water." We will delete the word "Petition" in 1200-04-03-.09 and replace it with the word "Application". We will change 1200-04-03-.10 to "Point of Classification Change." We will change 1200-04-03-.11 to "Appeals." We will delete 1200-04-03-.12 in its entirety.

**Comment A-2.** *The Tennessee Water Quality Control Board is now the Tennessee Board of Water Quality, Oil and Gas.*

**Response:** We will make this revision throughout the document.

## B. 1200-04-03-.02, General Considerations

**Comment B-1.** *Language in 1200-04-03-.02 states that "all Waters of the State are classified for more than one use" and provides a listing of those uses in Paragraph (2). Since wet weather conveyances have uses and criteria that apply to them, Paragraph (2) should be modified to reflect this.*

**Response:** The language regarding uses in the regulation in Rule 1200-04-03-.02 creates some confusion between the idea of classified uses and uses in general. Wet weather conveyances have few uses because by definition they are unsuitable for most of them. Wet weather conveyances do not support significant amounts of aquatic life and are unsuitable as drinking or industrial water supply, or irrigation. In fact, Chapter 1200-04-04, which establishes the designated uses of surface waters, doesn't mention wet weather conveyances, except to make it clear that they are not included in the "catch-all" category. We believe that it would be difficult to construct a legal argument that the water in a wet weather conveyance is formally classified in any way.

However, wet weather conveyances do have criteria that apply to them, but only those consistent with the goal that they be "protective of humans and wildlife that come in contact..."

Since we believe that wet weather conveyances are waterways to which some criteria apply, but no designated uses, we do not agree with the suggestion that some mention of wet weather conveyances should be added to Paragraph (2). Paragraph (6) already discusses wet weather conveyances in more detail.

**Comment B-2.** *The Biotic Ligand Model (BLM) should be cited as an alternative to the Water Effects Ratio (WER) for copper in Rule 1200-04-03-.02(9)(a).*

**Response:** Tennessee's regulation contains two sub-paragraphs [Rule 1200-04-03-.02(9)(a) and (b)] dealing with site specific criteria studies. Subparagraph (9)(a) provides information regarding water effect ratio (WER) studies. Successfully completed WER studies can result in the modification of the statewide numeric criteria based on the characteristics of ambient water and as a result, do not have to be promulgated as a criteria revision.

Subparagraph (9)(b) states that other types of site-specific studies may be used to alter criteria, but the results of these studies must be promulgated in order to be effective. It additionally states that other appropriate methods beyond the ones cited may be employed to develop site-specific criteria.

Colorado looked into the use of BLM studies and it is our understanding that they declined to allow this approach based on a concern that the BLM studies yield highly variable results that instantaneous ambient conditions can generate.

Until the technical issues with BLM are resolved, it is premature to consider it as an alternative to the WER. See also the Response to Comment D-7 regarding the use of the BLM in the copper criterion for fish and aquatic life.

### C. 1200-04-03-.03(1), Criteria for Water Uses, Domestic Water Supply

***Comment C-1.** *Since the other numeric criteria tables indicate which substances are bioaccumulative, the domestic water supply protection criteria table should also.*

**Response:** These criteria have a different basis than the ones in the other tables referenced. These criteria are not designed to protect human health, *per se*, but rather, to prevent substances from being at concentrations that would place a burden for additional treatment on a domestic water supplier. This is because we do not anticipate or encourage consumption of water directly from streams without treatment.

***Comment C-2.** *Criteria table (j) cites 2,4 Dichlorophenoxyacetic. This should be 2,4 Dichlorophenoxyacetic Acid.*

**Response:** We agree and will make this revision.

### D. 1200-04-03-.03(3), Criteria for Water Uses, Fish and Aquatic Life

**Comment D-1.** *The fish and aquatic life numeric criteria should include frequency and duration info specific to the application of CMC and CCC levels.*

**Response:** In this rulemaking we are proposing to add the word frequency to rule 1200-04-03-.05(5). This provision instructs us to consider the frequency, magnitude and duration of deviations from the criteria in determining whether or not they have been violated.

**Comment D-2.** *TDEC is to be commended for adopting new numeric criteria and should continue to work on numeric goals for parameters like suspended solids.*

**Response**: As stated consistently in the past, we are dependent on EPA for assistance in the development of most numeric criteria and there is no national recommendation for suspended solids. EPA proposed a numeric performance standard for suspended solids in stormwater, which they later withdrew. Even in the absence of a numeric criterion, our ecoregion reference data can be used to establish regional biological integrity and habitat goals which can be used to identify silt impaired streams.

**Comment D-3.** *Tennessee should adopt EPA's aluminum national criteria.*

**Response:** Aluminum is not a priority pollutant. Tennessee currently regulates it by way of the narrative "Toxic Substances" criterion. EPA has acknowledged problems with the current recommended numeric national criteria for aluminum. For example, the chronic value is appropriate for situations where both the stream pH and hardness are below 6.6 and 10, respectively. However, relatively few streams have these specific conditions. As pH and hardness increase, aluminum is less toxic. Additionally, EPA also correctly states that many high quality streams have aluminum levels that exceed 87 ug/L.

For these reasons, we will not recommend adopting the national criterion at this time. If EPA refines their criterion to address the foregoing concerns, we will likely adopt it in a future triennial review.

***Comment D-4.** *The columns in the numeric criteria tables should be called "Average" and "Maximum" instead of CCC and CMC as it currently does. This would be simpler and the public would understand what it means.*

**Response:** We agree that this approach would be simpler, but we're not sure it would be as accurate. The CCC column, also commonly called the chronic criteria, is based on the concentration of a pollutant causing toxicity in 4 day exposure tests. So technically, these criteria are not based on average levels over time. It is the nature of water quality standards that at times in order to be accurate, criteria must be expressed in ways that are less simple.

***Comment D-5.** *Certain FAL metals criteria are based on formulas which consider hardness and suspended solids levels. This is too complicated for most people. The criteria should be presented as numbers rather than by formula.*

**Response:** See the previous response. It is important to remember that the formula is the criterion for these substances, rather than numbers derived from the formula. Division staff will assist anyone having trouble with the formula.

***Comment D-6.** *Tennessee's current copper criterion only takes hardness into account.*

**Response:** This is incorrect. We use both hardness and total suspended solids to implement the criterion for assessment and permitting purposes. Rule 1200-04-03-.02(8) describes the translation process. We have revised the footnote in the fish and aquatic life table to include paragraph (8) as well as (9) in the citation of Rule 1200-04-03-.02.

***Comment D-7.** *Tennessee should adopt the Biotic Ligand Model (BLM) to replace the current copper criterion. This is the approach recommended by EPA.*

**Response:** The commenter is correct that EPA has recommended adoption of the BLM in place of the historic hardness-based criterion. The BLM greatly expands the number of parameters potentially altering the toxicity of copper that factor into the determination of the criterion.

According to EPA's 2007 copper criteria document:

> The BLM requires ten input parameters to calculate a freshwater copper criterion (a saltwater BLM is not yet available): temperature, pH, dissolved organic carbon (DOC), calcium, magnesium, sodium, potassium, sulfate, chloride, and alkalinity. The BLM is used to derive the criteria rather than as a post-derivation adjustment as was the case with the hardness-based criteria. This allows the BLM-based criteria to be customized to the particular water under consideration.

The department has the following concerns regarding the potential adoption of the BLM:

- Resources. In order to run the model, additional ambient data are needed. Many of these parameters, such as calcium and magnesium, are not commonly monitored. Additionally, samples would have to be filtered, probably in the field, in order to determine dissolved organic carbon levels. Filtering of samples, particularly where particulate material or algae levels are high, is a very time-consuming activity.

- Impact on water quality assessment. Obviously, criteria are not just used to set permit limits. They are also used to assess ambient water quality in Tennessee streams. Currently, we only need hardness and suspended solids levels to determine whether or not copper concentrations violate criteria. If we adopted the BLM, we would need a suite of additional parameters to apply the criterion to ambient data. This would have both a resource (lab costs) and efficiency (assessment staff time) impacts at a time when budgets and staff resources are already stressed.

- Impact on regulated community. Adoption of the BLM would likely necessitate requiring copper dischargers to collect additional effluent and ambient data. We have not gauged their reaction to this

change.

- Very few other states have adopted the BLM in any form. According to information provided by the International Copper Association, only one state (South Carolina) has adopted the BLM as a criterion, although they also retained the hardness-based criterion. Eight additional states – Maryland, Missouri, New Hampshire, New Jersey, New Mexico, North Carolina, Pennsylvania, and Texas – cite the BLM, not as a copper criterion, but as an alternative site-specific criterion method. All other states, like Tennessee, retain the hardness-based criterion.

- Timing. This comment was not formally made during the first round of comments in late 2009 – early 2010. (The initial contact regarding this issue was made in late 2010.) If we adopted the BLM, we would be doing so without allowing the public an opportunity to offer comments.

For all these reasons, we prefer to wait until the next triennial review to consider this change.

***Comment D-8.** *The Biotic Ligand Model (BLM) could be used to develop TMDLs for copper.*

**Response:** We will keep this in mind. However, with the exception of impacted streams within and downstream of the Copper Basin, we have no streams identified as impacted by copper that have not already had a TMDL developed. The TMDL approach is not considered appropriate streams in for the Copper Basin because of the legacy nature of the contaminants. Additionally, alternate control strategies have already been developed for this area.

***Comment D-9.** *The existing biological integrity criterion says that comparison to reference streams in the same ecoregion is appropriate. This passage should be modified to indicate that comparisons to upstream or pre-construction conditions are also appropriate.*

**Response:** Comparison to reference streams is our preferred approach. Pre-construction or upstream conditions are unlikely to reflect reference conditions and may even be impaired. However, the rules specifically state that other scientifically-defensible methods may be used in evaluating streams biologically.

***Comment D-10.** *Biological integrity in post-construction streams might be improved over previous conditions, but still not comparable to reference conditions. Similarly, upstream/downstream comparison should be allowed. Physical alterations may improve streams.*

**Response:** Rule 1200-04-03-.03(3)(m) and (n) establishes the clean water goals for biological integrity and habitat in streams. It is important that this goal be based on unimpaired conditions. Pre-construction or upstream conditions may be impaired. Physical alterations that truly improve streams would not run afoul of any of Tennessee's clean water regulations, since such projects would avoid causing degradation.

## E. 1200-04-03-.03(4), Criteria for Water Uses, Recreation

**Comment E-1.** *The numeric recreational criteria should include frequency and duration info specific to the application of Water and Organisms and Organisms Only levels.*

**Response:** See response D-1.

## F. 1200-04-03-.04, Definitions

**Comment F-1.** *This section should define habitat alteration.*

**Response:** The criterion for habitat provides examples of activities that alter habitat, which we consider more useful than a definition.

**Comment F-2.** *This section should define "best available instrumentation or laboratory analyses."*

**Response:** This phrase refers to the most precise instrument or laboratory method for the analysis of each parameter. Because this will differ from test to test and instrument to instrument, there's no single definition.

**Comment F-3.** *This section should define "normal water conditions."*

**Response:** The phrase "normal water conditions" is only used once in these rules [1200-04-03-.05(5)] and is used just to give a background statement, not the language of a criterion or a definition critical to a criterion. As such, we see no practical value in a definition.

**Comment F-4.** *This section should define "measurable degradation."*

**Response:** Our definition was proposed in this rulemaking in 1200-04-03-.04(11).

**Comment F-5.** *This section should define "discharge."*

**Response:** Discharge is defined in the permitting regulation (1200-04-05) which is the appropriate place for it.

**Comment F-6.** *"HUC" should be defined.*

**Response:** We searched the document to find a place this term was used in the regulation, but didn't find one. HUC is hydrologic unit code.

**Comment F-7.** *In Rule 1200-04-03-.04(3) you put the concept of "non-temporary" alterations within the definition of degradation. This is awkward wording.*

**Response:** We will delete "non-temporary" and add the phrase "except those alterations of a short duration."

**Comment F-8.** *An impact of short duration might significantly impact a stream. How would this concept be applied?*

**Response:** Even if short in duration, degradation that causes criteria to be violated and uses impacted cannot be authorized.

A real-life example of the application of this concept in an ONRW occurred a few years ago. Significant flooding along the eastern side in the Great Smoky Mountains National Park seriously damaged the Little River Road, which had to be closed. Emergency repairs were needed, which required a permit. Since the Little River is an ONRW, a strict, no-degradation policy might have made restoring the road impossible, since some habitat degradation was necessary to stabilize the site. However, since the alterations were of short duration and would not harm uses, the work could be authorized.

This discretion is needed and has been accepted in concept by EPA. Generally, we are speaking of an alteration lasting hours or days, not months or years. Also, chronic or acute toxicity will not be authorized.

**Comment F-9.** *How is assimilative capacity calculated in Rule 1200-04-03-.04(4)(a)1? What data are used and whose responsibility is it to perform the calculations? Detailed procedures would be helpful.*

**Response:** The assimilative capacity of a stream for a given pollutant can be expressed as the amount of that pollutant that could be added at low flow without causing the criterion for that substance to be violated. So the low flow calculations for the stream, the in-stream (background) concentration of the substance, plus the

proposed discharge volume are critical factors. In the proposed rule language, the applicant or their consultant must determine the amount of degradation their activity would cause. These calculations are later confirmed by the department. Detailed permitting procedures are not appropriate for inclusion in water quality standards. Additionally, EPA guidance is available.

**Comment F-10.** *Rule 1200-04-03-.04(4)(a)3 uses the term "segment." This should be defined.*

**Response:** There is no single definition of this term. It is dependent on the circumstances in which it is applied. For example, the relevant segment depends on the nature of the activity and the extent of its impact on the stream. The rationale section of individual permits will explain the stream segment(s) being considered.

**Comment F-11.** *Rule 1200-04-03-.04(4)(a)3 refers to "scientific basis," "insignificant," and "insignificant effect." These terms should be explained and defined.*

**Response:** In this paragraph, these terms have their generally accepted meanings rather than specific or technical ones. The rationale section of individual permits will explain the basis for the conclusions regarding significance.

**Comment F-12.** *Rule 1200-04-03-.04(4)(b) refers to gauging the effects of impacts "individually and cumulatively." These terms should be explained and defined.*

**Response:** In approving a *de minimis* level of degradation, the department must ensure that the effect is not only *de minimis* individually, but also that multiple authorizations of small amounts of degradation has not caused the cumulative cap to be exceeded.

**Comment F-13.** *The regulation has not defined the "in-system" mitigation mentioned in Rule 1200-04-03-.04(4)(b). TDEC has previously stated that it is the 12 digit HUC, but it should be defined as being within the 6 or 8 digit HUC.*

**Response:** As the commenter noted, we've stated previously that under normal conditions, mitigation that takes place within the same 12 digit HUC area will be considered "in-system." One exception is in Outstanding National Resource Waters (ONRWs) where mitigation would be required to take place in the ONRW. We will revise the definition to reflect the ONRW provision.

It is important to remember that in streams with available parameters or ETWs, degradation can still be authorized if mitigation is not in-system. However, out of system mitigation will not be considered *de minimis* in effect, and therefore, economic and social necessity will have to be established.

**Comment F-14.** *Any type of compensatory mitigation should be considered to make degradation de minimis.*

**Response:** In order to make the resource loss very small (*de minimis*) in a specific stream, the mitigation must happen nearby (in-system), not many miles away. Out of system mitigation is entirely appropriate in many settings, but it is not *de minimis* in effect.

**Comment F-15.** *The department's definition of in-system mitigation is different than other agencies like the Corps of Engineers and the Tennessee Stream Mitigation Program.*

**Response:** We do not think there is any inconsistency here. "In-system" is employed for the sole purpose of establishing what level of mitigated degradation can be considered *de minimis* under the antidegradation policy. The Tennessee Stream Mitigation Program manages money placed in mitigation banks to replace lost resource values. These lost resource values are more than *de minimis*.

**Comment F-16.** *Why is there a different interpretation of "in-system" in Outstanding National Resource Waters (ONRWs)?*

**Response:** Because ONRWs are intended to receive the highest level of protection under the antidegradation policy, in order to be considered *de minimis* any mitigation must occur in the ORNW. Of course, avoidance and minimization of degradation in an ONRW would be the preferred approach rather than mitigation.

**Comment F-17.** *Rule 1200-04-03-.04(11) refers to "sufficient magnitude." This term should be explained and defined.*

**Response:** In this paragraph, this term is used in its generally accepted meaning rather than a specific or technical one. The rationale section of individual permits will explain the basis for the conclusions.

**Comment F-18.** *Rule 1200-04-03-.04(12) about mixing zones refers to effluent becoming "dispersed and mixed." These terms should be explained and defined.*

**Response:** In this paragraph, these terms are used in their generally accepted meanings rather than specific or technical ones. The rationale section of individual permits will explain the basis for the conclusions.

**Comment F-19.** *The department is not consistent with the use of the term "measurable" because it has not been applied to habitat alterations.*

**Response:** In previous promulgated versions of the antidegradation policy, the concept of using a measurable amount of habitat alteration to determine whether or not degradation was *de minimis* was in the rule. In practice, this was a very difficult to implement. Habitat in a single spot can be measured, however, "total" habitat in a waterbody segment is difficult to quantify. For that reason, we went away from the idea of measuring habitat and moved toward the better idea that habitat alterations can only be *de minimis* if appropriate avoidance, minimization, and in-system mitigation is employed.

**Comment F-20.** *Please specify how you will determine whether degradation is measurable or not. Will Required Reporting Limits (RRLs) be used for this purpose?*

**Response:** We intend for this determination to be based on the method detection level, which may be different that the RRL. Additionally, for field instruments (DO, temperature, etc.) we will use the published accuracy information for that equipment.

**Comment F-21.** *In Rule 1200-04-03-.04(16), the term "parameter" has been defined so that some criteria will not be considered parameters for the purpose of applying the unavailable parameters provisions. Obvious examples are habitat and biological integrity.*

**Response:** The commenter is correct. Our long-standing position is that some criteria are for condition indices which are useful for assessing water quality, but are not parameters in the antidegradation sense. However, each of these indices is composed of parameters. For example, sediment deposition is one of the components of the condition index known as "habitat." Sediment deposition can be directly measured and is therefore a parameter.

**Comment F-22.** *In the definitions of "parameter" and "response variable," the word measurable is used. Might this cause confusion since that term is also defined?*

**Response:** We agree with this comment. We will revise these definitions so that they say "A parameter that can be measured…" and "not directly measured" instead of "A measurable parameter" and "not directly measurable."

**Comment F-23.** *Rule 1200-04-03-.04(16) about parameters refers to "criteria." These terms should be explained and defined.*

**Response:** The term "criteria" is introduced in Rule 1200-04-03-.02, General Considerations. The revised introductory wording in the paragraph for each of the uses of the waters in Rule 1200-04-03-.03, also now makes clear that each of the subparagraphs is a criterion.

**Comment F-24.** *Rule 1200-04-03-.04(16) about parameters refers to properties of "water." This should be "water and sediment."*

**Response:** The term "water" sets the context and is not intended to suggest that chemicals in sediment, fish flesh, or any other medium associated with waters aren't properly considered parameters also.

**Comment F-25.** *In Rule 1200-04-03-.04(21), the proposed definition for "response variable" says that it is a measurable parameter. If it's a parameter, why not call it "response parameter?"*

**Response:** Variable has a broader meaning than how we defined parameter. It simply means any characteristic in an experiment or analysis that can change. We defined parameter more narrowly, with the need to have a workable approach to applying the antidegradation policy in mind.

We don't think that response variables are always parameters. Within the context of the antidegradation policy - specifically, the provisions for protection of streams with unavailable parameters - it is important to make a distinction between pollutants and the effects they cause.

The classic example of the need to differentiate between pollutants and response variables is dissolved oxygen. Dissolved oxygen is a parameter, but it's not a pollutant. There's a criterion for DO, but it is the lack of oxygen that causes problems, not the presence of it. So if a stream was impaired due to low DO, we would not want to say that the stream was unavailable for oxygen.

What the regulation needs to say is that the stream is unavailable for the pollutant(s) causing the low oxygen levels, such as BOD or nutrients.

We agree with the commenter that the use of the word "parameter" in the definition for "response variable" confuses the issue. Since, as we've established, not all response variables are parameters, we will change the definition as follows. Additionally, we will reword to avoid confusion over the meaning of "measurable":

> 21. Response Variable – a **characteristic of water quality** that **can be measured and** changes as a result of an alteration of habitat, water withdrawal, or discharge of pollutants, as distinguished from **the agents** that cause changes in aquatic systems. (Emphasis added to illustrate wording changes.)

**Comment F-26.** *The department has proposed to differentiate between parameters that change as a result of the actions of a pollutant, and those parameters that are pollutants. How will this response variable provision be implemented in impaired waters where the causal variable is not known?*

**Response:** The scenario described is one that happens rarely, and when it does, the unknown causal variable is usually a toxicant. In these cases, discharge permits would be written to prohibit whole effluent toxicity at low flow conditions. The discharger might also be asked to isolate the most likely pollutant and once identified, it would be specifically limited in their permit.

**Comment F-27.** *A definition for "Required Reporting Level" should be provided.*

**Response:** The meaning and purpose of RRLs is already provided in Rule 1200-04-03-.05(8).

## G. SPECIFIC COMMENTS: 1200-4-3-.05, Interpretation of Criteria

**COMMENT G-1.** *Changing the name of the table in Rule 1200-04-03-.05(8) from Method Detection Levels to Required Reporting Levels may change how the table is interpreted.*

**RESPONSE:** We believe the changed name is more consistent with how the table should be used.

**COMMENT G-2.** *EPA says ML (method reporting levels) are 3.18 times the method detection levels.*

**RESPONSE:** Our Required Reporting Levels are not the same as EPA's method reporting levels and there is no mathematical relationship between our RRLs and method detection levels.

**COMMENT G-3.** *Some of the RRLs (required reporting levels) in permits are unreasonably low. (List provided by the commenter.)*

**RESPONSE:** RRLs are an important tool in protecting water quality by assuring that permittees utilize appropriate analytical techniques.

It is important to note that according to Rule 1200-04-03-.05(8), not all substances limited in a permit are subject to RRLs. The regulation currently states: "In instances where permit limits established through implementation of these criteria *are below analytical capabilities*, compliance will be demonstrated..."(emphasis added). So the requirement for RRLs is triggered by the permit limit, not the criterion, since almost all dischargers get some dilution credit for the receiving stream. It would not make sense to require a very low detection level when the permit limit is much higher.

One of the RRLs brought to our attention by the commenter was anthracene. The commenter is correct that the RRL is challenging at 0.73 ug/L. However, the lowest numeric criterion for anthracene is 8300 ug/L, so a permittee would <u>never</u> be required to meet the RRL, according to the regulation.

A metal mentioned by the commenter was zinc, with an RRL of 1.0 ug/L. The fish and aquatic life criterion for zinc is hardness dependent, but at a hardness of 100 mg/L, the criterion would be 120 ug/L, so again, even in a zero flow stream, no permittee would be required to reach the RRL.

Acrolein and acrylonitrile were identified as substances with challenging RRLs (1 ug/L). As pointed out by a commenter, at low detection levels, these compounds are unstable and results can be uncertain. We looked at our permitting database and found no instance in which permit limits have been given in Tennessee for these compounds.

Additionally, the commenter should remember that acrolein and acrylonitrile are recreational criteria, the flow basis for permit limits would be a 30Q5. Thus, it is unlikely that a permittee would have permit limits at or below the RRL.

**COMMENT G-4.** *The commenter is concerned that RRLs will go down.*

**RESPONSE:** We've proposed no changes to the actual Required Reporting Levels.

**COMMENT G-5.** *The sentence "The methods, equipment, and general nature of the interference shall be provided" could be misinterpreted to mean that Method Detection Levels are required.*

**RESPONSE:** If method detection techniques must be used to meet RRLs, then it is the permittee's obligation to do so. But again, angst over RRLs such as zinc - which a permittee would never be asked to report at those levels - is unnecessary.

**COMMENT G-6.** *Some substances are ubiquitous, such as PCBs, mercury, and zinc. Interferences due to these substances are common. It is an unreasonable burden for permittees to be required to document this each time.*

**RESPONSE:** The department reviews a great deal of data collected at monitoring stations across the state. While we concede that zinc is often detected in the water column, PCBs and mercury are not. Of course, this is good, since at current method detection levels, if PCBs and mercury are detected, criteria are typically violated.

We have an important responsibility to ensure that permittees use proper techniques to give ourselves the best possible chance to determine whether or not permit limits and criteria have been met. Documenting the nature of interference when it occurs does not seem to be an unreasonable burden, since the alternative might result in less than serious efforts to achieve detection levels and in extreme cases, might provide a handy smokescreen for permit violations.

Additionally, in cases where there has been established a repetitive interference, it would seem to us that it is not difficult to report the exact same explanation multiple times.

**COMMENT G-7.** *The permittee should be allowed to keep the documentation of interferences on file rather that submitting it to the department.*

**RESPONSE:** This is information we need and the commenter's suggestion places an unreasonable burden on the department. If the rationale is submitted automatically, we won't have to go looking for it each time.

## H. 1200-04-03-.06, Tennessee Antidegradation Statement

**Comment H-1.** *It's difficult to review the proposed WQS changes because the department didn't differentiate between language that was changed vs. language that was simply moved.*

**Response:** We don't disagree with the comment, but the public review period has ended. We will help any reviewer with their understanding of our proposal, but will give further consideration for implementation of this suggestion in the next triennial review.

**Comment H-2.** *The proposed changes in the terminology of the antidegradation policy, along with the definitions offered in support, are vague and confusing. They should be dropped in favor of going back to existing regulatory language.*

**Response:** The commenter has not offered any specific suggestions for rewording the definitions and terms to make them less confusing. At every step of the review process, the department has explained the rationale for the changes proposed. Going back to the old language will not resolve important implementation issues. However, we re-reviewed all of the provisions of the antidegradation rule and the definitions and made changes to make several provisions clearer or more precise.

**Comment H-3.** *The antidegradation policy is complicated and it is hard to understand what activities can be allowed and which cannot.*

**Response:** We agree the implementation of the antidegradation policy can be complex. We re-reviewed all of the provisions of the antidegradation rule and the definitions and made changes to make several provisions clearer or more precise. Division staff can always be contacted directly for additional information or clarification.

**Comment H-4.** *Since the antidegradation policy applies to permitting [Rule 1200-04-03-.06(1)(b)], the aspects of the policy about complete applications and the proposed revisions should be made part of the permit regulations (Rule 1200-04-05-.05).*

**Response:** We see the commenter's logic, but feel that the provisions of the antidegradation policy need to be kept together rather than parsed out to other regulations. The antidegradation policy and its implementation procedure are part of the water quality standards, according to the Clean Water Act. Additionally, Chapter 5 of the regulations is specific to NPDES permits. The antidegradation policy application requirements also apply to habitat and water withdrawal permits, which are not NPDES permits.

**Comment H-5.** *Can applicants assume that general permits do not require an antidegradation review [Rule 1200-04-03-.06(1)(b)]?*

**Response:** Only those general permits public noticed as representing *de minimis* for degradation can automatically be presumed to be free from antidegradation review.

**Comment H-6.** *The general permits for the aquatic resource alteration program will need to be revised to be consistent with the antidegradation policy?*

**Response:** When general permits are being renewed, they will need to be public noticed as representing a *de minimis* level of degradation, if that determination can be appropriately made.

**Comment H-7.** *The definition in Rule 1200-.04-.03-.04(4)(a)1 states that new domestic sources cannot be considered de minimis. Thus, new domestic sources would always be required to do alternatives analysis. However, the application process in the antidegradation rules does not seem to fully reflect this.*

**Response:** Rule 1200-04-03-.06(1)(b)2, 3 and 4 specifically mention the alternatives analysis requirements for new domestic discharges. However, we understand this comment and will additionally modify the following additional sections:

Rule 1200-04-03-.06(1)(b)1 - **For activities other than new domestic wastewater discharges,** a complete application will include...(emphasis added to illustrate new language)

Rule 1200-04-03-.06(1)(d)1(i) - "**unless the activity... is a new domestic discharge**"....(emphasis added to illustrate new language)

**Comment H-8.** *The process identified in Rule 1200-04-03-.06(1)(b) sets the applicant up for failure. The regulation does not provide enough information and guidance to ensure the applicant can provide the needed information.*

**Response:** We understand this concern but do not agree with the commenter that applicants will be unable to comply. The changes in the rule make it clearer what is expected without significant change to the requirements. In the past, the requirements were less clear and the department often had to request additional information after the application had already been submitted. The General Assembly has made it clear in legislation that increased speed in the permit process is a primary concern.

It will greatly speed the issuance of permit decisions, while not lessening the protection for the environment when applications are as complete as possible prior to submittal to the department. Guidance regarding the NPDES application is found in other available documents.

**Comment H-9.** *A flow chart of the application process identified in Rule 1200-04-03-.06(1)(b), (c), and (d) would be helpful.*

**Response:** We agree but think that the department's website or guidance documents would be a better place for this to appear than in the regulation.

**Comment H-10.** *An implementation schedule needs to be added to the process identified in Rule 1200-04-03-.06(1)(b), (c), and (d) so that applications already being processed would not unduly be held up.*

**Response:** When the board promulgates a new rule there is a required waiting period before it becomes effective, which would serve the purpose envisioned by the commenter. But to be clear, if an application was already submitted prior to the date the rule changes are effective, it will be reviewed under the old rule. After that, new applications would need to provide all the required information before they could be accepted as complete. (There is no penalty for submitting an incomplete application – the applicant simply has to provide the additional information.)

**Comment H-11.** *In Rule 1200-04-03-.06(1)(b)1, the applicant must state how much degradation will be caused by their activity. Other states have a single standard for degradation. Tennessee adds "de minimis" and "measurable." This imposes an unnecessary burden on applicants.*

**Response:** The commenter did not specify which other states Tennessee was being compared to, but perhaps these states do not allow degradation in any amounts. Other states do use the concepts of de minimis and measurable. Defining these smaller amounts of degradation makes them allowable under certain limited scenarios. A single definition of degradation could only result in the antidegradation policy being more restrictive and the denial of more applications. We do not consider this appropriate where the amount of degradation is extremely small.

**Comment H-12.** *To satisfy Rule 1200-04-03-.06(1)(b)1, the applicant must state how much degradation will be caused by its activity. The methods for determining "de minimis" and "measurable" are very different. This imposes an unnecessary burden on applicants. What if the degradation is both measurable and de minimis?*

**Response:** It might help to think in terms of incremental amounts of degradation. Any lowering of water quality (adding pollutants or removing habitat) without actually violating water quality standards is degradation.

*De minimis* is an amount of water quality lowering that is small, but can be measured. In some situations, a de minimis amount of degradation can be allowed, but not in all scenarios.

Degradation that is unmeasurable is so small that we can't, through modeling or direct chemical analysis, tell whether or not it is there. Without the ability to make this distinction, theoretically, even adding a molecule of a pollutant to the large river could be prohibited.

The analysis required by these steps is not new. Under the prior rules, the department would do it. These changes allow the applicant to state its position on these issues. The alternative to these concepts would likely be a blanket prohibition of new or expanded discharges into impaired or pristine streams, even if the actual impact from them would be minimal.

**Comment H-13.** *How does the department envision that applicants will communicate the level of degradation associated with their proposed activity as required in Rule 1200-04-03-.06(1)(b)1?*

**Response:** The applicant must project the level of degradation associated with their proposed activity and state whether the degradation will be either unmeasurable, *de minimis*, or more than *de minimis*. A rationale must be provided to explain how the applicant arrived at this conclusion.

In the specific case of habitat alterations, the applicant's determination will most likely be that the degradation would be either more than de minimis, or can be rendered de minimis by either avoidance, minimization, or in-system mitigation (within the same 12 digit HUC, or in the case of ONRWs, generally within the ONRW). This is because we are not aware of a method of measuring changes in assimilative capacity due to habitat alterations.

**Comment H-14.** *Rule 1200-04-03-.06(1)(b)1 refers to application forms. What are these forms and where does the applicant get them? Are they available for review?*

**Response:** These are the standard federal application forms for NPDES permits. A link to these forms is provided on the department's website under Summary of Permits (http://www.tn.gov/environment/water.shtml). Any comments regarding these federal forms should be directed to EPA.

**Comment H-15.** *Rule 1200-04-03-.06(1)(b)1 and 3 explains how the alternatives analysis required in part 2 will be done. For this reason, it should be subordinate to part 2 instead of separate.*

**Response:** We agree that the paragraphs could have been ordered that way, but believe that since part 3 has subparts, there are advantages to formatting the way it currently is. Nor would it be parallel with the other subparts of part 2, if part 3 were put under part 2.

**Comment H-16.** *Rule 1200-04-03-.06(1)(b)2 requires the evaluation of all alternatives in order to determine which ones are "feasible". This evaluation should be limited to reasonable alternatives.*

**Response:** We agree and added the word "reasonable."

**Comment H-17.** *Rule 1200-04-03-.06(1)(b)3 needs detailed procedures on how alternative analysis submissions will be evaluated by the department.*

**Response:** We agree that evaluation procedures are important, but think they would be better placed in policy or SOP documents.

**Comment H-18.** *Rule 1200-04-03-.06(1)(b)3(iii) suggests that avoidance of stream relocations is an alternative that avoids degradation. This should be deleted as stream relocations do not degrade habitat.*

**Response:** We cannot agree that all stream relocations do not degrade habitat. Remember. Degradation is any decrease in water quality, not the level of decrease that would violate water quality standards. The amount of degradation, if any, of a stream relocation depends on both the design and the implementation of the relocation. Avoiding or minimizing a stream relocation is an alternative that will lessen degradation, since even in the best relocations there are at least the temporary impacts until constructed areas stabilize and vegetation matures. The provision suggesting that the footprint of a project might be altered to avoid degradation is valid and the application should demonstrate that this alternative has been considered, even if ultimately ruled-out as infeasible.

**Comment H-19.** *Why must the department in Rule 1200-04-03-.06(1)(d) redo calculations regarding the level of degradation submitted by the applicant? Isn't this a duplication of efforts? Knowing the department will check the calculations will remove the applicant's incentive to do a good job.*

**Response:** Our goal is to provide for a thorough, but streamlined, application review process. In most cases, we will simply check the calculations and the rationale. Only where we find errors will the calculations be redone. We would not be doing our due diligence to simply assume that the permittee's calculations are correct.

We disagree that the fact of having applications reviewed lessens the incentive to submit quality work. We believe that applicants, their consultants, and the public all expect permit applications to be reviewed and understand that checking calculations is part of that process.

**Comment H-20.** *What basis in Rule 1200-04-03-.06(1)(d) would the department use to overrule the applicant's conclusions regarding the level of degradation to be caused by an activity?*

**Response:** The ultimate basis would be that the conclusions are incorrect. The reasons for that could be many, including, calculation errors, use of assumptions that do not fit the situation, lack of scientific or factual support for assertions, or incorrect input for a model.

**Comment H-21.** *In Rule 1200-04-03-.06(1)(d)1 the revisions state that the antidegradation review can be concluded if the degradation is found to be unmeasurable. However, a previous passage states that municipal*

*discharges can never be de minimis. Is this consistent? Also, what about substances with criteria below method detection levels or that are bioaccumulative? What about Outstanding National Resource Waters?*

**Response:** The commenter is correct. We will modify and clarify the first sentence to create sub-categories:

> In the case of discharges, if the department determines that no measurable degradation will occur as a result of the activity, no further review under this rule (1200-04-03-.06) is required regardless of the antidegradation classification of the receiving stream, **unless the activity:**
>
> **(1) is a new domestic wastewater discharge, or**
>
> **(2) introduces a parameter identified as bioaccumulative, or**
>
> **(3) introduces a parameter with a criterion below the current method detection level for that substance, or**
>
> **(4) is proposed to occur in an ONRW.**
>
> (emphasis added to illustrate new language)

Further, we will modify (d)(2) as follows:

> In the case of withdrawals **from waters other than ONRWs that require permits** ...(emphasis added to illustrate new language)

**Comment H-22.** *Rule 1200-04-03-.06(1)(e) requires the department to determine the antidegradation status of the receiving stream. The department should have a comprehensive monitoring program so that applicants are not required to wait while a determination of water quality is made. Other states have done this.*

**Response:** The department maintains a network of 5000 monitoring stations and in many streams, current water quality condition is known. However, with over 60,000 miles of indexed streams, it is not reasonable or realistic to think that we could maintain current assessments of that much water. We do not know of any other states that have done so.

The commenter is reminded that under the statute commonly referred to as the "Permittee's Bill of Rights," very challenging time-schedules have been placed on the department for permit issuance. Of course, applicants can assist in, and dramatically hasten, the permit review process by submitting complete and accurate application information, something the new antidegradation policy revisions attempt to ensure.

**Comment H-23.** *If the department does not know the antidegradation status of a stream where an activity is proposed, it should be presumed to have available conditions [Rule 1200-04-03-.06(1)(e)]. If the stream has not been previously identified as an ETW, it should be presumed to not be one.*

**Response:** Our implementation procedure requires a determination of the antidegradation status of the stream where an activity is proposed. To make this determination by presumption invites legal challenges. It is unlikely that EPA would approve such an approach.

**Comment H-24.** *The department maintains that it must make a determination regarding the conditions of a stream in order to apply the antidegradation policy and that these water quality conditions must not be presumed [Rule 1200-04-03-.06(1)(e)], yet the department frequently assumes impacts in unassessed streams.*

**Response:** We think the commenter is referring to situations in which an assessment of impairment is made on a stream, then tributaries that have not been monitored are included within the assessment unit as impaired. This works the other way as well – sometimes tributaries that have not been monitored are assessed as fully supporting if the mainstem stream is fine.

When a stream is assessed, we not only look at the data that have been collected, but also at notes and photographs that have been made by staff about the watershed as a whole. Additionally, we have immediate access to high quality aerial photographs. Where we find evidence that small tributary streams have similar characteristics to the mainstem that has been monitored, we are confident in including them in the assessment, either good or bad.

**Comment H-25.** *If a stream has not been listed on the most current 303(d) List, the department should presume that it has available parameters [Rule 1200-04-03-.06(1)(e)].*

**Response:** See the previous response. The 303(d) is simply an every two year compilation of assessment results that is helpful in prioritizing TMDL efforts. The 303(d) list carries no additional regulatory authority and more current water quality assessment information is often available. We must regulate streams based in the condition of the stream at the time of the application, rather than on its 303(d) listing status.

**Comment H-26.** *If a stream has not been assessed prior to the receipt of an application, it should be presumed to have available parameters in Rule 1200-04-03-.06(1)(e).*

**Response:** See the previous responses.

**Comment H-27.** *An applicant should be able to go to the department's website and determine if a stream has been identified as ETW, impaired, or habitat altered [Rule 1200-04-03-.06(1)(e)].*

**Response:** To a certain extent, they already can. http://www.tn.gov/environment/

- Compilation of known ETWs: http://environment-online.state.tn.us:8080/pls/enf_reports/f?p=9034:34304:1041537674797901
- Online GIS-based mapping of assessment information: http://tnmap.tn.gov/wpc/default.aspx?resetSession=true

While the above are good resources, it's important to remember that the absence of a stream from the web compilations may not mean that it isn't an ETW or impaired, just that it hasn't been assessed yet.

**Comment H-28.** *The basis for the identification of a stream or wetland as an ETW or the assessment of a stream or wetland as impaired or habitat altered [Rule 1200-04-03-.06(1)(e)] should be made available to applicants upon request. Where this basis cannot be provided, in-system mitigation should not be expected.*

**Response:** We agree.

**Comment H-29.** *If a stream has been found not to support a use such as fish and aquatic life protection, and has unavailable parameters [Rule 1200-04-03-.06(2)], increased degradation should not be allowed for <u>any</u> parameter that might have any detrimental effect on that use (in this case, aquatic life).*

**Response:** Except in a narrow range of circumstances, the antidegradation policy does not prohibit degradation. The policy says that where degradation is in the public interest, it can be allowed provided that the concentrations of that substance are not currently violating water quality standards. Significant degradation cannot be authorized in Outstanding National Resource Waters.

The commenter's suggestion that additions of any substance – even if that substance is not currently violating water quality standards – should be prohibited in impaired waters is unworkable and contrary to the spirit of water quality regulation. Under this approach, if a stream was impacted by copper, we could not authorize an increased loading of zinc.

EPA addressed this by identifying the parameter-by-parameter approach as an appropriate antidegradation implementation method. According to EPA's *Water Quality Standards Handbook*, the two steps of this approach are:

- Assess each waterbody parameter to identify any pollutant criteria for which water quality is better than required by the criterion's threshold level. (Not all parameters need to be better.)

- For each positive finding, calculate the increment between existing quality and what is established by the criterion as necessary to protect "fishable/swimmable" uses. This increment — termed the "assimilative capacity" of the waterbody — is considered the resource to be protected.

This is the approach we follow. Using the previous example: if the concentrations of zinc in a waterbody were "better than required by the criterion" then zinc has an assimilative capacity that could be assigned if all other requirements are met. Copper would not have an assimilative capacity since its criterion is not being met. The department would appropriately treat the two parameters differently.

The concern behind this comment, which was also made previously in this rulemaking process, is the reason why we have clarified what are criteria and added definitions for "parameter" and "response variable."

**Comment H-30.** *Why do the provisions for unavailable conditions [Rule 1200-04-03-.06(2)(a)] contain a prohibition against bioaccumulative substances or substances whose criteria are below current method detection levels? If the concentrations will be unmeasurable, can't they be allowed in all cases?*

**Response:** If a substance has been identified as already impacting a stream, usually the requirement that as long as a new loading is not "measurable" it is allowable, will be appropriately protective. However, in the case of bioaccumulative substances or substances with very low criteria, an additional level of protection is warranted.

We will modify the language in Rule 1200-04-03-.06(1)(d)1 to clarify that bioaccumulative or low criteria substances need additional scrutiny.

**Comment H-31.** *Rule 1200-04-03-.06(2)(a) references current "method detection levels." Is this the same as required reporting levels?*

**Response:** No, the method detection level is generally lower and is specific to the instrument and EPA methodology being used.

**Comment H-32.** *The application of antidegradation to water withdrawals in Rule 1200-04-03-.06(2)(b) should be limited to their potential impacts of habitat or biological integrity. Water withdrawals do not affect chemical concentrations in streams.*

**Response:** We think that they can in certain circumstances. For example, if we were asked to authorize a water withdrawal upstream of an industrial or municipal discharger, the diversion of water could, at low flow, increase in-stream concentrations of parameters discharged. However, if the concentrations remained the same, there is no degradation and no need to implement the antidegradation policy.

**Comment H-33.** *The proposed changes in the antidegradation policy in Rule 1200-04-03-.06(2) are matters that have been ruled upon by the Chancery Court of Davidson County in Pickard v. TN Water Quality Control Board.*

**Response:** The chancellor's ruling in this case was the Court's interpretation of the meaning of the existing regulation promulgated in 2007. This ruling does not bind us to previous regulation language. Also, some aspects of the chancellor's rulings have now been reversed by the Court of Appeals. The triennial review process is intended to allow water quality standards to be revised as we receive new guidance and learn from implementation efforts.

**Comment H-34.** *If the regulation is revised to clarify that impaired streams are only considered unavailable for the specific pollutant(s) causing the impairment [Rule 1200-04-03-.06(2)], that will appear to be intended to allow the maximum amount of pollution in waterbodies.*

**Response:** The Act prohibits the department from issuing permits that would allow the condition of pollution. We consider our interpretation of the policy to be based on common sense. Streams are only unavailable for the pollutants specifically causing water quality standards to be violated. We can issue a permit for an activity that would cause degradation, after alternative analysis and determination of public need, of only those parameters that are available.

**Comment H-35.** *If a stream has available conditions for habitat, the requirement regarding alterations should simply be that the degradation not cause water quality standards to be violated. There should be no requirement that social and economic necessity be determined, especially for transportation projects [Rule 1200-04-03-.06(3)(c)].*

**Response:** Such a policy would be in direct violation of the Clean Water Act and rules and would ensure federal disapproval of that provision because the federal regulations require analysis of alternatives and consideration of the economic or social justification prior to authorizing degradation, not just prior to criteria violation. Transportation projects already go through intensive financial and environmental review to ensure that they are in the public interest. It seems to us that in many situations, this information would not require much modification to satisfy the economic and social justification of the antidegradation policy.

**Comment H-36.** *Who is responsible for making the determination that degradation is "necessary" in Rule 1200-04-03-.06(3). What criteria will be used?*

**Response:** When the water board asked multiple agencies and groups to meet to work out an agreement on antidegradation provisions about ten years ago, it was decided by the group that the department would have this responsibility as part of the permit issuance process. This was then approved by the Board in the current language of the rule. The basis for the determination would be review of the alternatives analysis and economic information provided by the applicant. Decisions made by the department would be subject to requests from the applicant or third-parties for review by the board and, thereafter, by the courts.

**Comment H-37.** *If an applicant has proposed mitigation, they should not be required to demonstrate social and economic necessity as required in Rule 1200-04-03-.06(3)(c). The forms used for this are not appropriate for linear projects.*

**Response:** The state must make a determination that the degradation is in the public interest, even if mitigation has been proposed, unless in-system mitigation has been used to render the degradation *de minimis*. As the regulation already states, alternate information formats may be used by applicants if the EPA forms are inappropriate.

**Comment H-38.** *In Rule 1200-04-03-.06(4)(a)1, the regulation refers to "Waters within state or national parks, wildlife refuges, forests, wilderness areas, or natural areas." A colon should be added after the word "national" so that it is clear that both state and federal areas are included for the entire list.*

**Response:** We think this is already clear.

**Comment H-39.** *A revisions to Rule 1200-04-03-.06(4)(c) proposes to delete the requirement that the applicant be informed in writing that the stream they intend to alter is an Exception Tennessee Water. Why?*

**Response:** Rule 1200-04-03-.06(1)(e) establishes the department's responsibility for public notice once an application has been deemed to be complete. Thus, more than just the applicant will be notified. Additionally, Rule 1200-04-03-.06(4)(d)1 provides specific notice requirements for Exceptional Tennessee Waters.

**Comment H-40.** *The language in Rule 1200-04-03-.06(4)(c)3 that states that "new or increased habitat alterations that would cause degradation…" is awkward.*

**Response:** The commenter is correct and we will revise the phrase to read "an activity that would cause degradation of habitat…"

**Comment H-41:** *The requirements for approving degradation in Exceptional Tennessee Waters [Rule 1200-04-03-.06(4)(c)] appear to have been diluted to the point that there is no difference between these requirements and those for waters with available parameters*

**Response:** We do not agree this is the case. The justification for degrading higher resource value stream must be stronger than with streams with available conditions, but no exceptional values. Additionally, the declaratory order contested case procedures in Rule 1200-04-03-.06(4)(d) are specific to ETWs.

The process for issuing or declining to issue permits must not be prolonged unnecessarily and must comply with existing state laws regarding the rights of permittees.

**Comment H-42:** *Clarify what the department means by "no discernible effect" under the ONRW protections.*

**Response:** We will replace this phrase and return to the idea of no "significant" effect.

**Comment H-43:** *Habitat alterations that represent a de minimis amount of degradation can be allowed in ONRWs, as long as any mitigation occurs within the ONRW. Is it possible that a de minimis amount of physical alteration might cause chemical degradation, which would be prohibited?*

**Response:** It is possible. We will revise the second part of 1200-04-03-.06(5)(b)2 so that it now reads "no new or increased habitat alteration that would cause degradation of habitat above the level of de minimis or degrade water chemistry for more than a short duration will be authorized."

**Regulatory Flexibility Addendum**
Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

These rules are federally mandated. Section 303(c) of the federal Clean Water Act, 33 U.S.C. §1313(c) requires states to review and modify their water quality standards at least once every three years.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

Most local governments will not be impacted by these rule amendments. However, it is possible that there will be a minor impact on some local governments because of specific situations.

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Sequence Number: 04-04-13
Rule ID(s): 5469-5470
File Date: 4/3/13
Effective Date: 7/2/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Environment and Conservation |
| **Division:** | Water Resources |
| **Contact Person:** | Gregory Denton |
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**Revision Type (check all that apply):**

X Amendment
___ New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 1200-04-03 | General Water Quality Criteria |
| **Rule Number** | **Rule Title** |
| 1200-04-03-.01 | Tennessee Water Quality Control Board |
| 1200-04-03-.02 | General Considerations |
| 1200-04-03-.03 | Criteria For Water Uses |
| 1200-04-03-.04 | Definitions |
| 1200-04-03-.05 | Interpretation of Criteria |
| 1200-04-03-.06 | Antidegradation Statement |
| 1200-04-03-.07 | Ground Water Classification |
| 1200-04-03-.08 | Criteria |
| 1200-04-03-.09 | Site Specific Impaired Classification Petition Process |
| 1200-04-03-.10 | Remediation of Ground Water or Perched Water |
| 1200-04-03-.11 | Classified Site Specific Impaired Ground Water and Respective Criteria |
| 1200-04-03-.12 | Reporting Requirement |

| **Chapter Number** | **Chapter Title** |
|---|---|
| 1200-04-04 | Use Classifications For Surface Waters |
| **Rule Number** | **Rule Title** |
| 1200-04-04-.01 | Memphis Area Basin |
| 1200-04-04-.02 | Hatchie River Basin |
| 1200-04-04-.03 | Obion-Forked Deer Basin |
| 1200-04-04-.04 | Tennessee River Basin – Western Valley |
| 1200-04-04-.05 | Duck River Basin |
| 1200-04-04-.06 | Elk River Basin (including Shoal Creek) |

| | |
|---|---|
| 1200-04-04-.07 | Lower Tennessee River Basin (including Conasauga Basin) |
| 1200-04-04-.08 | Upper Tennessee River Basin |
| 1200-04-04-.09 | Clinch River Basin |
| 1200-04-04-.10 | French Broad River Basin |
| 1200-04-04-.11 | Holston River Basin |
| 1200-04-04-.12 | Lower Cumberland River Basin |
| 1200-04-04-.13 | Upper Cumberland River Basin |
| 1200-04-04-.14 | Barren River Watershed |

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

Chapter 1200-04-03
General Water Quality Criteria

Amendments

Chapter 1200-04-03 General Water Quality Criteria is deleted in its entirety and replaced with the following so that, as amended, Chapter 1200-04-03 shall read as follows:

Chapter 1200-04-03
General Water Quality Criteria

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1200-04-03-.01 Tennessee Board of Water Quality, ~~Control Board~~ Oil and Gas

The Water Quality Control Act, T.C.A., § 69-3-101, et seq., makes it the duty of the Board of Water Quality, ~~Control Board~~ Oil and Gas to study and investigate all problems concerned with the pollution of the Waters of the State and with its prevention, abatement, and control; and to establish such standards of quality for any Waters of the State in relation to their reasonable and necessary use as the Board shall deem to be in the public interest; and establish general policies relating to pollution as the Board shall deem necessary to accomplish the purposes of the Act. The following general considerations and criteria shall be used to determine the permissible conditions of waters with respect to pollution and preventative or corrective measures required to control pollution in various waters or in different sections of the same waters.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.02 General Considerations

(1) Tennessee water quality standards shall consist of the General Water Quality Criteria and the Antidegradation Statement found in Rule 1200-04-03, and the Use Classifications for Surface Waters found in Rule 1200-04-04.

(2) Waters have many uses which in the public interest are reasonable and necessary. Such uses include: sources of water supply for domestic and industrial purposes; propagation and maintenance of fish and other aquatic life; recreation in and on the waters including the safe consumption of fish and shellfish; livestock watering and irrigation; navigation; generation of power; propagation and maintenance of

wildlife; and the enjoyment of scenic and aesthetic qualities of waters.

(3) The rigid application of uniform water quality is not desirable or reasonable because of the varying uses of such waters. The assimilative capacity of a stream for sewage and waste varies depending upon various factors and including the following: volume of flow, depth of channel, the presence of falls or rapids, rate of flow, temperature, natural characteristics, and the nature of the stream.

(4) In order to permit the reasonable and necessary uses of the Waters of the State, existing pollution should be corrected as rapidly as practicable, and future pollution prevented through the best available technology economically achievable or that greater level of technology necessary to meet water quality standards; i.e., modeling and stream survey assessments, treatment plants or other control measures.

(5) Since all Waters of the State are classified for more than one use, the most stringent criteria will be applicable. In cases where criteria for protection of more than one use apply at different stream flows (e.g., aquatic life versus recreation), the most protective will also be applicable.

(6) Waters identified as wet weather conveyances according to the definition found in Rule 1200-04-03-.04 ~~(4)~~, shall be protective of humans and wildlife that may come in contact with them and shall not adversely affect the quality of downstream waters. Applicable water quality standards will be maintained downstream of wet weather conveyances.

(7) Where general water quality criteria are applied on a regional, ecoregional, or subecoregional basis, these criteria will be considered to apply to a stream if eighty percent of its watershed or catchment is contained within the unit upon which the criterion is based.

(8) All fish and aquatic life metals criteria are expressed as total recoverable, except cadmium, copper, lead, nickel, silver, and zinc which are expressed as dissolved. Translators will be used to convert the dissolved fraction into a total recoverable permit limit. One of three approaches to metals translation will be used: (1) translator is the same as the conversion factor, (2) translator is based on relationships derived from STORET data, (3) a site-specific translator is developed. Where available, a site-specific translator is preferred. For assessing whether criteria for cadmium, copper, lead, nickel, silver, and zinc are exceeded by ambient water quality conditions, the dissolved criteria will also be translated in order to allow direct comparison to the ambient data, if total recoverable.

(9) Site-specific criteria studies may be conducted on any appropriate fish and aquatic life criteria.

(a) Site-specific criteria studies based on a Water Effects Ratio (WER) calculated from the documented toxicity of a parameter in the stream in which it will be introduced may supersede the adopted criteria at a site. The Division shall approve a site-specific criteria developed by others provided that the WER methodology [Interim Guidance on Determination and Use of Water-effect Ratios for Metals (EPA-823-B-94-001)] is used, both the study plan and results are approved by the department, and the U.S. Environmental Protection Agency has concurred with the final site specific criterion value(s).

(b) Any site specific criterion based on methodologies other than the WER methodology which recalculate specific criterion, such as the Resident Species Method or the Recalculation Method, must be adopted as a revision to Tennessee water quality standards into Chapter 1200-04-03, and following EPA approval, can be used for Clean Water Act purposes.

References on this subject include, but are not limited to: Technical Support Document for Water Quality-based Toxics Control (EPA - 505/2-90-001); Technical Guidance Manual for Performing Waste Load Allocations: Book VIII (EPA/600/6-85/002a/002b/002c); MinteqA2, An Equilibrium Metal Speciation Model (EPA/600/3-87/012); Water Quality Standards Handbook, Second Edition (EPA-823-B-93-002); The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit From a Dissolved Criteria (EPA-823-B-96-007); Interim Guidance on Determination and Use of Water-effect Ratios for Metals (EPA-823-B-94-001).

(10) Interpretation and application of narrative criteria shall be based on available scientific literature and EPA guidance and regulations.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.03 Criteria For Water Uses

(1) The criteria for the use of Domestic Water Supply are the following.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not appreciably impair the usefulness of the water as a source of domestic water supply.

(d) Total Dissolved Solids - The total dissolved solids shall at no time exceed 500 mg/l.

(e) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water as a source of domestic water supply.

(f) Turbidity or Color - There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes (See definition).

(g) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet or mid-depth, whichever is less, and the temperature in flowing streams shall be measured at mid-depth.

(h) Coliform - The concentration of the E. coli group shall not exceed 630 per 100 ml as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purpose of determining the geometric mean, individual samples having an E. coli group concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml.

(i) Taste or Odor - The waters shall not contain substances which will result in taste or odor that prevent the production of potable water by conventional water treatment processes.

(j) Toxic Substances - The waters shall not contain toxic substances, whether alone or in combination with other substances, which will produce toxic conditions that materially affect the health and safety of man or animals, or impair the safety of conventionally treated water supplies. Available references include, but are not limited to: Quality Criteria for Water (Section 304(a) of Public Law 92-500 as amended); Federal Regulations under Section 307 of Public Law 92-500 as amended; and Federal Regulations under Section 1412 of the Public Health Service Act as amended by the Safe Drinking Water Act, (Public Law 93-523). Limits set for some of the most commonly occurring toxic substances are as follows:

| Compound | Criteria (~~u~~µg/L) | Compound | Criteria (~~u~~µg/L) |
|---|---|---|---|
| Antimony | 6 | Diquat | 20 |
| Arsenic | 10 | Endothall | 100 |
| Beryllium | 4 | Glyphosate | 700 |
| Barium | 2000 | Hexachlorobenzene | 1 |
| Cadmium | 5 | Hexachlorocyclopentadiene | 50 |
| Chromium, total | 100 | Oxamyl (Vydate) | 200 |
| Lead | 5 | Picloram | 500 |

| | | | |
|---|---|---|---|
| Cyanide (as free cyanide) | 200 | Simazine | 4 |
| Mercury | 2 | 2,3,7,8 TCDD (Dioxin) | 0.00003 |
| Nickel | 100 | Benzene | 5 |
| Selenium | 50 | Carbon tetrachloride | 5 |
| Thallium | 2 | 1,2-Dichloroethane | 5 |
| Alachlor | 2 | 1,1-Dichloroethylene | 7 |
| Atrazine | 3 | 1,1,1-Trichloroethane | 200 |
| Carbofuran | 40 | Trichloroethylene | 5 |
| Chlordane | 2 | Vinyl chloride | 2 |
| Dibromo chloropropane | 0.2 | para-Dichlorobenzene | 75 |
| ~~2,4 Dichlorophennoxyacetic~~ | | cis 1,2-Dichloroethylene | 70 |
| 2,4 Dichlorophenoxyacetic Acid | 70 | | |
| Ethylene dibromide | 0.05 | 1,2-Dichloropropane | 5 |
| Heptachlor | 0.4 | Ethyl benzene | 700 |
| Heptachlor epoxide | 0.2 | Monochlorobenzene | 100 |
| Lindane | 0.2 | ortho-Dichlorobenzene | 600 |
| Methoxychlor | 40 | Styrene | 100 |
| Polychlorinated biphenyls | 0.5 | Tetrachloroethylene | 5 |
| 2,4,5 Trichloropheno-xyprioponic acid | 50 | Toluene | 1000 |
| | | trans 1,2-Dichloroethylene | 100 |
| Pentachlorophenol | 1 | Xylenes, total | 10000 |
| Benzo(a)pyrene | 0.2 | Dichloromethane | 5 |
| Dalapon | 200 | 1,2,4-Trichlorobenzene | 70 |
| Di(2-ethylhexyl) adipate | 400 | 1,1,2-Trichloroethane | 5 |
| Di(2-ethylhexyl) phthalate | 6 | Endrin | 2.0 |
| Dinoseb | 7 | Toxaphene | 3 |
| | | Nitrate | 10000 |

(k) Other Pollutants - The waters shall not contain other pollutants in quantities that may be detrimental to public health or impair the usefulness of the water as a source of domestic water supply.

(2) The criteria for the use of Industrial Water Supply are the following.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not appreciably impair the usefulness of the water as a source of industrial water supply.

(d) Total Dissolved Solids - The total dissolved solids shall at no time exceed 500 mg/l.

(e) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water as a source of industrial water supply.

(f) Turbidity or Color - There shall be no turbidity or color in amounts or characteristics that cannot be reduced to acceptable concentrations by conventional water treatment processes.

(g) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet or mid- depth, whichever is less, and the temperature in flowing streams shall be measured at mid-depth.

(h) Taste or Odor - The waters shall not contain substances which will result in taste or odor that would prevent the use of the water for industrial processing.

(i) Toxic Substances - The waters shall not contain toxic substances whether alone or in combination with other substances, which will adversely affect industrial processing.

(j) Other Pollutants - The waters shall not contain other pollutants in quantities that may adversely affect the water for industrial processing.

(3) The criteria for the use of Fish and Aquatic Life are the following.

(a) Dissolved Oxygen - The dissolved oxygen shall not be less than 5.0 mg/l with the following exceptions.

1. In streams identified as trout streams, including tailwaters, dissolved oxygen shall not be less than 6.0 mg/L.

2. The dissolved oxygen concentration of trout waters designated as supporting a naturally reproducing population shall not be less than 8.0 mg/L. (Tributaries to trout streams or naturally reproducing trout streams should be considered to be trout streams or naturally reproducing trout streams, unless demonstrated otherwise. Additionally, all streams within the Great Smoky Mountains National Park should be considered naturally reproducing trout streams.)

3. In wadeable streams in subecoregion 73a, dissolved oxygen levels shall not be less than a daily average of 5.0 mg/L with a minimum dissolved oxygen level of 4.0 mg/L.

4. The dissolved oxygen level of streams in ecoregion 66 (Blue Ridge Mountains) not designated as naturally reproducing trout streams shall not be less than 7.0 mg/L.

Substantial and/or frequent variations in dissolved oxygen levels, including diurnal fluctuations, are undesirable if caused by man-induced conditions. Diurnal fluctuations shall not be substantially different than the fluctuations noted in reference streams in that region.

In lakes and reservoirs, the dissolved oxygen concentrations shall be measured at mid-depth in waters having a total depth of ten feet or less, and at a depth of five feet in waters having a total depth of greater than ten feet and shall not be less than 5.0 mg/L.

(b) pH - The pH value shall not fluctuate more than 1.0 unit over a period of 24 hours and shall not be outside the following ranges: 6.0 – 9.0 in wadeable streams and 6.5 – 9.0 in larger rivers, lakes, reservoirs, and wetlands.

(c) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life.

(d) Turbidity, Total Suspended Solids, or Color - There shall be no turbidity, total suspended solids, or color in such amounts or of such character that will materially affect fish and aquatic life. In wadeable streams, suspended solid levels over time should not be substantially different than conditions found in reference streams.

(e) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of recognized trout waters shall not exceed 20°C. There shall be no abnormal temperature changes that may affect aquatic life unless caused by natural conditions. The temperature in flowing streams shall be measured at mid-depth.

The temperature of impoundments where stratification occurs will be measured at mid-depth in the epilimnion (see definition in 1200-04-03-.04) for warm water fisheries and mid-depth in the hypolimnion (see definition in 1200-04-03-.04) for cold water fisheries. In the case of large

impoundments (100 acres or larger) subject to stratification and recognized as trout waters, the temperature of the hypolimnion shall not exceed 20°C.

A successful demonstration as determined by the state conducted for thermal discharge limitations under Section 316(a) of the Clean Water Act, (33 U.S.C. §1326), shall constitute compliance with this section.

(f) Taste or Odor - The waters shall not contain substances that will impart unpalatable flavor to fish or result in noticeable offensive odors in the vicinity of the water or otherwise interfere with fish or aquatic life. References include, but are not limited to: Quality Criteria for Water (section 304(a) of Public Law 92-500 as amended).

(g) Toxic Substances - The waters shall not contain substances or a combination of substances including disease - causing agents which, by way of either direct exposure or indirect exposure through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), physical deformations, or restrict or impair growth in fish or aquatic life or their offspring. References on this subject include, but are not limited to: Quality Criteria for Water (Section 304(a) of Public Law 92-500 as amended); Federal Regulations under Section 307 of Public Law 92-500 as amended. The following criteria are for the protection of fish and aquatic life:

| Compound | Criterion Maximum Concentration ~~u~~µg/l (CMC) | Criterion Continuous Concentration ~~u~~µg/l (CCC) |
|---|---|---|
| Arsenic (III)* | 340 | 150 |
| Cadmium** | 2.0 | 0.25 |
| Chromium, III** | 570 | 74 |
| Chromium, VI* | 16 | 11 |
| Copper** | 13 | 9.0 |
| Lead** | 65 | 2.5 |
| Mercury* (b) | 1.4 | 0.77 |
| Nickel** | 470 | 52 |
| Selenium | 20 | 5 |
| Silver** | 3.2 | --- |
| Zinc** | 120 | 120 |
| Cyanide*** | 22 | 5.2 |
| Chlorine (TRC) | 19 | 11 |
| Pentachlorophenol **** | 19 | 15 |
| Aldrin | 3.0 | --- |
| g-BHC – Lindane (b) | 0.95 | --- |
| Chlordane (b) | 2.4 | 0.0043 |
| 4-4'-DDT (b) | 1.1 | 0.001 |
| Demeton | --- | 0.1 |
| Diazinon | 0.1 | 0.1 |
| Dieldrin (b) | 0.24 | 0.056 |
| a-Endosulfan | 0.22 | 0.056 |
| b-Endosulfan | 0.22 | 0.056 |
| Endrin | 0.086 | 0.036 |
| Guthion | --- | 0.01 |
| Heptachlor | 0.52 | 0.0038 |
| Heptachlor epoxide | 0.52 | 0.0038 |
| Malathion | --- | 0.1 |
| Methoxyclor | --- | 0.03 |
| Mirex (b) | --- | 0.001 |
| Nonylphenol | 28.0 | 6.6 |
| Parathion | 0.065 | 0.013 |
| PCBs, total (b) | --- | 0.014 |
| Toxaphene (b) | 0.73 | 0.0002 |
| Tributyltin (TBT) | 0.46 | 0.072 |

(b) Bioaccumulative parameter.

* Criteria for these metals are expressed as dissolved.

** Criteria for these metals are expressed as dissolved and are a function of total hardness (mg/L). Hardness-dependent metals criteria may be calculated from the following (values displayed above correspond to a total hardness of 100 mg/l and may have been rounded):

CMC (dissolved) = exp{mA[ln(hardness)]+bA } (CF)

CCC (dissolved) = exp{mC [ln(hardness)]+bC} (CF)

| Chemical | MA | bA | MC | BC | Freshwater Conversion Factors (CF) | |
|---|---|---|---|---|---|---|
| | | | | | CMC | CCC |
| Cadmium | 1.0166 | -3.924 | 0.7409 | -4.719 | 1.136672-[(ln hardness)(0.041838)] | 1.101672-[(ln hardness)(0.041838)] |
| Chromium III | 0.8190 | 3.7256 | 0.8190 | 0.6848 | 0.316 | 0.860 |
| Copper | 0.9422 | -1.700 | 0.8545 | -1.702 | 0.960 | 0.960 |
| Lead | 1.273 | -1.460 | 1.273 | -4.705 | 1.46203-[(ln hardness)(0.145712)] | 1.46203-[(ln hardness)(0.145712)] |
| Nickel | 0.8460 | 2.255 | 0.8460 | 0.0584 | 0.998 | 0.997 |
| Silver | 1.72 | -6.59 | | | 0.85 | |
| Zinc | 0.8473 | 0.884 | 0.8473 | 0.884 | 0.978 | 0.986 |

If criteria are hardness-dependent, the Criterion Maximum Concentration (CMC) and Criterion Continuous Concentration (CCC) shall be based on the actual stream hardness. When an ambient hardness of less than 25 mg/l is used to establish criteria for cadmium or lead, the hardness dependent conversion factor (CF) shall not exceed one. When ambient hardness is greater than 400 mg/l, criteria shall be calculated according to one of the following two options: (1) calculate the criterion using a default Water Effects Ratio (WER) of 1.0 and a hardness of 400 mg/l in the hardness based equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the hardness based equation. For information concerning metals translation and site-specific criteria, see 1200-04-03-.02(9).

*** If Standard Methods 4500-CN I (Weak Acid Dissociable), 4500-CN G (Cyanides Amenable to Chlorination after Distillation), or OIA-1677 are used, this criterion may be applied as free cyanide.

**** Criteria for pentachlorophenol are expressed as a function of pH. Values displayed above correspond to a pH of 7.8 and are calculated as follows:

CMC = exp(1.005(pH) - 4.869) CCC = exp(1.005(pH) - 5.134)

(h) Other Pollutants - The waters shall not contain other pollutants that will be detrimental to fish or aquatic life.

(i) Iron – The waters shall not contain iron at concentrations that cause toxicity or in such amounts that interfere with habitat due to precipitation or bacteria growth.

(j) Ammonia – The one-hour average concentration of total ammonia nitrogen (in mg N/L) shall not exceed the CMC (acute criterion) calculated using the following equations:

Where salmonid fish are present:

$$CMC = \frac{0.275}{1 + 10^{7.204-pH}} + \frac{39.0}{1 + 10^{pH-7.204}}$$

Or where salmonid fish are not present:

$$CMC = \frac{0.411}{1 + 10^{7.204-pH}} + \frac{58.4}{1 + 10^{pH-7.204}}$$

The thirty-day average concentration of total ammonia nitrogen (in mg N/L) shall not exceed the CCC (chronic criterion) calculated using the following equations:

When fish early life stages are present:

$$CCC = \left[\frac{0.0577}{1 + 10^{7.688-pH}} + \frac{2.487}{1 + 10^{pH-7.688}}\right] \cdot MIN\ (2.85,\ 1.45 \cdot 10^{0.028 \cdot (25-T)})$$

When fish early life stages are absent:

$$CCC = \left[\frac{0.0577}{1 + 10^{7.688-pH}} + \frac{2.487}{1 + 10^{pH-7.688}}\right] \cdot 1.45 \cdot 10^{0.028 \cdot (25-MAX\ (T,7))}$$

In addition, the highest four-day average within the 30-day period shall not exceed 2.5 times the CCC.

(k) Nutrients - The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that aquatic habitat is substantially reduced and/or the biological integrity fails to meet regional goals. Additionally, the quality of downstream waters shall not be detrimentally affected. Examples of parameters associated with the criterion include but are not limited to: nitrogen, phosphorus, potassium, calcium, magnesium, and various forms of each.

Interpretation of this provision may be made using the document Development of Regionally-based Interpretations of Tennessee's Narrative Nutrient Criterion and/or other scientifically defensible methods.

(l) Coliform - The concentration of the E. coli group shall not exceed 630 per 100 ml as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purposes of determining the geometric mean, individual samples having an E. coli group concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml. In addition, the concentration of the E. coli group in any individual sample shall not exceed 2,880 per 100 ml.

(m) Biological Integrity - The waters shall not be modified through the addition of pollutants or through physical alteration to the extent that the diversity and/or productivity of aquatic biota within the receiving waters are substantially decreased or, in the case of wadeable streams, substantially different from conditions in reference streams in the same ecoregion ~~adversely affected, except as allowed under 1200-04-03-.06~~. The parameters associated with this criterion are the aquatic biota measured. These are response variables.

Interpretation of this provision for any stream which (a) has at least 80% of the upstream

catchment area contained within a single bioregion and (b) is of the appropriate stream order specified for the bioregion and (c) contains the habitat (riffle or rooted bank) specified for the bioregion, may be made using the most current revision of the Department's Quality System Standard Operating Procedure for Macroinvertebrate Stream Surveys and/or other scientifically defensible methods.

Interpretation of this provision for all other wadeable streams, lakes, and reservoirs may be made using Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers (EPA/841-B-99-002) or Lake and Reservoir Bioassessment and Biocriteria (EPA 841-B-98-007), and/or other scientifically defensible methods. Interpretation of this provision for wetlands or large rivers may be made using scientifically defensible methods. Effects to biological populations will be measured by comparisons to upstream conditions or to appropriately selected reference sites in the same bioregion if upstream conditions are determined to be degraded.

(n) Habitat - The quality of stream habitat shall provide for the development of a diverse aquatic community that meets regionally-based biological integrity goals. Examples of parameters associated with this criterion include but are not limited to: sediment deposition, embeddedness of riffles, velocity/depth regime, bank stability, and vegetative protection. Types of activities or conditions which can cause habitat loss include, but are not limited to: channel and substrate alterations, rock and gravel removal, stream flow changes, accumulation of silt, precipitation of metals, and removal of riparian vegetation. For wadeable streams, the instream habitat within each subecoregion shall be generally similar to that found at reference streams. However, streams shall not be assessed as impacted by habitat loss if it has been demonstrated that the biological integrity goal has been met.

(o) Flow – Stream or other waterbody flows shall support the fish and aquatic life criteria.

(4) The criteria for the use of Recreation are the following.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to recreation.

(d) Total Suspended Solids, Turbidity or Color - There shall be no total suspended solids, turbidity or color in such amounts or character that will result in any objectionable appearance to the water, considering the nature and location of the water.

(e) Temperature - The maximum water temperature change shall not exceed 3C° relative to an upstream control point. The temperature of the water shall not exceed 30.5°C and the maximum rate of change shall not exceed 2C° per hour. The temperature of impoundments where stratification occurs will be measured at a depth of 5 feet, or mid- depth whichever is less, and the temperature in flowing streams shall be measured at mid-depth.

(f) Coliform - The concentration of the E. coli group shall not exceed 126 colony forming units per 100 ml, as a geometric mean based on a minimum of 5 samples collected from a given sampling site over a period of not more than 30 consecutive days with individual samples being collected at intervals of not less than 12 hours. For the purposes of determining the geometric mean, individual samples having an E. coli concentration of less than 1 per 100 ml shall be considered as having a concentration of 1 per 100 ml.

Additionally, the concentration of the E. coli group in any individual sample taken from a lake, reservoir, State Scenic River, Exceptional Tennessee Water or ONRW (1200-04-03-.06) shall not exceed 487 colony forming units per 100 ml. The concentration of the E. coli group in any individual sample taken from any other waterbody shall not exceed 941 colony forming units per 100 ml.

(g) Taste or Odor - The waters shall not contain substances that will result in objectionable taste or odor.

(h) Nutrients - The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that the public's recreational uses of the waterbody or other downstream waters are detrimentally affected. Unless demonstrated otherwise, the nutrient criteria found in 1200-04-03-.03(3)(k) will be considered adequately protective of this use.

(i) Nutrient Response Criteria for Pickwick Reservoir: those waters impounded by Pickwick Dam on the Tennessee River. The reservoir has a surface area of 43,100 acres at full pool, 9,400 acres of which are within Tennessee. Chlorophyll a (corrected, as described in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998): the mean of the photic-zone (See definition) composite chlorophyll a samples collected monthly April through September shall not exceed 18 µg/l, as measured over the deepest point, main river channel, dam forebay.

(j) Toxic Substances - The waters shall not contain toxic substances, whether alone or in combination with other substances, that will render the waters unsafe or unsuitable for water contact activities including the capture and subsequent consumption of fish and shellfish, or will propose toxic conditions that will adversely affect man, animal, aquatic life, or wildlife. Human health criteria have been derived to protect the consumer from consumption of contaminated fish and water. The water and organisms criteria should only be applied to those waters classified for both recreation and domestic water supply. The criteria for recreation are as follows:

| Compound | Water & Organisms Criteria * (~~u~~µg/L) | Organisms Only Criteria (~~u~~µg/L) |
|---|---|---|
| INORGANICS | | |
| Antimony | 5.6 | 640 |
| Arsenic (c) | 10.0 | 10.0 |
| Mercury (b) | 0.05 | 0.051 |
| Nickel | 610 | 4600 |
| Thallium | 0.24 | 0.47 |
| Cyanide | 140 | 140 |
| Selenium | 170 | 4200 |
| Zinc | 7400 | 26000 |
| Dioxin ** (b) | 0.000001 | 0.000001 |
| VOLATILES | | |
| Acrolein | ~~190~~ 6 | ~~200~~ 9 |
| Acrylonitrile (c) | 0.51 | 2.5 |
| Benzene (c) | 22 | 510 |
| Bromoform (c) | 43 | 1400 |
| Carbon tetrachloride (c) | 2.3 | 16 |
| Chlorobenzene | 130 | 1600 |
| Chlorodibromomethane (c) | 4.0 | 130 |
| Chloroform (c) | 57 | 4700 |
| Dichlorobromomethane (c) | 5.5 | 170 |
| 1,2-Dichloroethane (c) | 3.8 | 370 |
| 1,1-Dichloroethylene | 330 | 7100 |
| 1,2-Dichloropropane (c) | 5.0 | 150 |
| 1,3-Dichloropropene (c) | 3.4 | 210 |
| Ethylbenzene | 530 | 2100 |
| Methyl bromide | 47 | 1500 |
| Methylene chloride (c) | 46 | 5900 |
| 1,1,2,2-Tetrachloroethane (c) | 1.7 | 40 |
| Tetrachloroethylene (c) | 6.9 | 33 |

| | | |
|---|---|---|
| Toluene | 1300 | 15000 |
| 1,2-Trans-Dichloroethylene | 140 | 10000 |
| 1,1,2-Trichloroethane (c) | 5.9 | 160 |
| Trichloroethylene (c) | 25 | 300 |
| Vinyl chloride (c) | 0.25 | 24 |

| Compound | Water & Organisms Criteria * (~~u~~µg/L) | Organisms Only Criteria (~~u~~µg/L) |
|---|---|---|
| ACID EXTRACTABLES | | |
| 2-Chlorophenol | 81 | 150 |
| 2,4-Dichlorophenol | 77 | 290 |
| 2,4-Dimethylphenol | 380 | 850 |
| 2-Methyl-4,6-dinitrophenol | 13 | 280 |
| ~~2,4-~~Dinitrophenols | 69 | 5300 |
| Pentachlorophenol (c) (pH) | 2.7 | 30 |
| Phenol | ~~21000~~ 10000 | ~~1700000~~ 860000 |
| 2,4,6-Trichlorophenol (c) | 14 | 24 |
| BASE NEUTRALS | | |
| Acenaphthene | 670 | 990 |
| Anthracene | 8300 | 40000 |
| Benzidine (c) | 0.00086 | 0.0020 |
| Benzo(a)anthracene (c) | 0.038 | 0.18 |
| Benzo(a)pyrene (c) | 0.038 | 0.18 |
| Benzo(b)fluoranthene (c) | 0.038 | 0.18 |
| Benzo(k)fluoranthene (c) | 0.038 | 0.18 |
| Bis(2-Chlorethyl)ether (c) | 0.30 | 5.3 |
| Bis(2-Chloro-isopropyl)ether | 1400 | 65000 |
| Bis(2-Ethylhexyl)phthalate (c) | 12 | 22 |
| Bis(Chloromethyl)ether (c) | 0.0010 | 0.0029 |
| Butylbenzyl Phthalate | 1500 | 1900 |
| 2-Chloronaphthalene | 1000 | 1600 |
| Chrysene (c) | 0.038 | 0.18 |
| Dibenz(a,h)Anthracene (c) | 0.038 | 0.18 |
| 1,2-Dichlorobenzene | 420 | 1300 |
| 1,3-Dichlorobenzene | 320 | 960 |
| 1,4-Dichlorobenzene | 63 | 190 |
| 3,3-Dichlorobenzidine (c) | 0.21 | 0.28 |
| Diethyl phthalate | 17000 | 44000 |
| Dimethyl phthalate | 270000 | 1100000 |
| Di-n-butyl phthalate | 2000 | 4500 |
| 2,4-Dinitrotoluene (c) | 1.1 | 34 |
| 1,2-Diphenylhydrazine (c) | 0.36 | 2.0 |
| Fluoranthene | 130 | 140 |
| Fluorene | 1100 | 5300 |
| Hexachlorobenzene (b)(c) | 0.0028 | 0.0029 |
| Hexachlorobutadiene (b)(c) | 4.4 | 180 |
| Hexachlorocyclohexane-Technical (b)(c) | 0.123 | 0.414 |
| Hexachlorocyclopentadiene | 40 | 1100 |
| Hexachloroethane (c) | 14 | 33 |
| Ideno(1,2,3-cd)Pyrene (c) | 0.038 | 0.18 |
| Isophorone (c) | 350 | 9600 |
| Nitrobenzene | 17 | 690 |
| Nitrosamines | 0.0008 | 1.24 |
| Nitrosodibutylamine (c) | 0.063 | 2.2 |
| Nitrosodiethylamine (c) | 0.008 | 12.4 |
| Nitrosopyrrolidine (c) | 0.16 | 340 |
| N-Nitrosodimethylamine (c) | 0.0069 | 30 |
| N-Nitrosodi-n-Propylamine (c) | 0.05 | 5.1 |
| N-Nitrosodiphenylamine (c) | 33 | 60 |

| Compound | Water & Organisms Criteria * (~~u~~µg/L) | Organisms Only Criteria (~~u~~µg/L) |
|---|---|---|
| Pyrene | 830 | 4000 |
| Pentachlorobenzene (b) | 1.4 | 1.5 |
| 1,2,4,5-Tetrachlorobenzene (b) | 0.97 | 1.1 |
| 1,2,4-Trichlorobenzene | 35 | 70 |
| 2,4,5-Trichlorophenol | 1800 | 3600 |
| PESTICIDES | | |
| Aldrin (c) | 0.00049 | 0.00050 |
| a-BHC (c) | 0.026 | 0.049 |
| b-BHC (c) | 0.091 | 0.17 |
| g-BHC - Lindane (b) | 0.98 | 1.8 |
| Chlordane (b)(c) | 0.0080 | 0.0081 |
| 4-4'-DDT (b)(c) | 0.0022 | 0.0022 |
| 4,4'-DDE (b)(c) | 0.0022 | 0.0022 |
| 4,4'-DDD (b)(c) | 0.0031 | 0.0031 |
| Dieldrin (b)(c) | 0.00052 | 0.00054 |
| a-Endosulfan | 62 | 89 |
| b-Endosulfan | 62 | 89 |
| Endosulfan Sulfate | 62 | 89 |
| Endrin | 0.059 | 0.06 |
| Endrin Aldehyde | 0.29 | 0.30 |
| Heptachlor (c) | 0.00079 | 0.00079 |
| Heptachlor epoxide (c) | 0.00039 | 0.00039 |
| PCB, total (b)(c) | 0.00064 | 0.00064 |
| Toxaphene (b)(c) | 0.0028 | 0.0028 |

(b) Bioaccumulative parameter.

(c) 10-5 risk level is used for all carcinogenic pollutants.

* These criteria are for protection of public health due to consumption of water and organisms and should only be applied to these waters designated for both recreation and domestic water supply.

** Total dioxin is the sum of the concentrations of all dioxin and dibenzofuran isomers after multiplication by Toxic Equivalent Factors (TEFs). Following are the TEFs currently recommended by EPA (subject to revision):

| DIOXIN ISOMERS | TEF | FURAN ISOMERS | TEF |
|---|---|---|---|
| Mono-, Di-, & TriCDDs | 0.0 | Mono-, Di-, & TriCDFs | 0.0 |
| 2,3,7,8 TCDD | 1.0 | 2,3,7,8 TCDF | 0.1 |
| Other TCDDs | 0.0 | Other TCDFs | 0.0 |
| 2,3,7,8 PeCDD | 0.5 | 1,2,3,7,8 PeCDF | 0.05 |
| Other PeCDDs | 0.0 | 2,3,4,7,8 PeCDF | 0.5 |
| | | Other PeCDFs | 0.0 |
| 2,3,7,8 HxCDD | 0.1 | Other PeCDFs | 0.0 |
| Other HxCDDs | 0.0 | 2,3,7,8 HxCDF | 0.1 |
| | | Other HxCDFs | 0.0 |
| 2,3,7,8 HpCDD | 0.01 | 2,3,7,8 HpCDF | 0.01 |
| Other HpCDDs | 0.0 | Other HpCDFs | 0.0 |
| OCDD | 0.001 | OCDF | 0.001 |

(k) Other Pollutants - The waters shall not contain other pollutants in quantities which may have a detrimental effect on recreation.

(l) Fish Consumption Advisories - A public fishing advisory will be considered when the calculated risk of additional cancers exceeds 10 -4 for typical consumers or 10 -5 for atypical consumers (See definition). A "do not consume" advisory will be issued for the protection of typical consumers and a "precautionary advisory" will be issued for the protection of atypical consumers. The following formula will be used to calculate the risk of additional cancers:

$$R = qE$$

where:

R= Plausible-upper-limit risk of cancer associated with a chemical in a fisheries species for a human subpopulation.

q = Carcinogenic Potency Factor for the chemical (mg kg-1 day-1)-1 estimated as the upper 95 percent confidence limit of the slope of a linear dose-response curve. Scientifically defensible Potency Factors will be used.

E = Exposure dose of the chemical (mg kg-1 day-1) from the fish species for the human subpopulation in the area. E is calculated by the following formula:

$$E = \frac{C\,I\,X}{W} \quad \text{where:}$$

C = Concentration of the chemical (mg/kg) in the edible portion of the species in the area. The average levels from multiple fillet samples of the same species will be used. Catfish will be analyzed skin-off with the belly flap included in the sample. Gamefish and carp will be analyzed skin-on with the belly flap included in the sample. Sizes of fish collected for analysis will represent the ranges of sizes likely to be collected and consumed by the public. References on this subject include, but are not limited to: EPA's Guidance for Assessing Chemical Contaminant Data for use in Fish Advisories.

I = Mean daily consumption rate (g/day averaged over 70 year lifetime) of the fish species by the human subpopulation in the area. 6.5 g/day will be used unless better site-specific information is available.

X = Relative absorption coefficient, or the ratio of human absorption efficiency to test animal absorption efficiency of the chemical. Assumed to be 1.0 unless better information is available.

W = Average human mass (kg). 75 kg will be used.

For substances for which the public health concern is based on toxicity, a "do not consume" advisory will be considered warranted when average levels of the substance in the edible portion of fish exceed U.S. Food and Drug Administration (FDA) Action Levels or EPA national criteria. Based on the rationale used by FDA or EPA for their levels, the Commissioner may issue precautionary advisories at levels appropriate to protect sensitive populations.

(m) Flow – Stream flows shall support recreational uses.

(5) The criteria for the use of Irrigation are the following.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not impair its use for irrigation.

(d) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water for irrigation purposes.

(e) Temperature - The temperature of the water shall not interfere with its use for irrigation purposes.

(f) Toxic Substances - The waters shall not contain toxic substances whether alone or in combination with other substances which will produce toxic conditions that adversely affect the quality of the waters for irrigation.

(g) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the waters used for irrigation.

(6) The criteria for the use of Livestock Watering and Wildlife are the following.

(a) Dissolved Oxygen - There shall always be sufficient dissolved oxygen present to prevent odors of decomposition and other offensive conditions.

(b) pH - The pH value shall lie within the range of 6.0 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of 24 hours.

(c) Hardness or Mineral Compounds - The hardness of or the mineral compounds contained in the water shall not impair its use for livestock watering and wildlife.

(d) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as to interfere with livestock watering and wildlife.

(e) Temperature - The temperature of the water shall not interfere with its use for livestock watering and wildlife.

(f) Toxic Substances - The waters shall not contain substances whether alone or in combination with other substances, which will produce toxic conditions that adversely affect the quality of the waters for livestock watering and wildlife.

(g) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the water for livestock watering and wildlife.

(7) The criteria for the use of Navigation are the following.

(a) Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character as to interfere with navigation.

(b) Other Pollutants - The waters shall not contain other pollutants in quantities which may be detrimental to the waters used for navigation.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.04 Definitions

In addition to the meanings provided in the Water Quality Control Act (T.C.A. § 69-3-103), terms used in these rules shall mean the following:

(1) Atypical consumers - Those persons in the vicinity of a stream or lake who due to physiological factors or previous exposure are more sensitive to specific pollutants than is the population in general. Examples of atypical consumers may include, but are not limited to: children; pregnant or nursing women; subsistence

fishermen; frequent purchasers of commercially harvested fish; and agricultural, industrial, or military personnel who may have had previous occupational exposure to the contaminant of concern.

(2) Conventional Water Treatment - Conventional water treatment as referred to in the criteria denotes coagulation, sedimentation, filtration, and chlorination or disinfection.

(3) Degradation - The alteration of the properties of waters by the addition of pollutants, withdrawal of water, or removal of habitat, except those alterations of a short duration.

(4) De Minimis degradation – ~~Alterations, other than those resulting in the condition of pollution or new domestic wastewater discharges, that represent either~~ Degradation of a small magnitude, as provided in this paragraph, ~~or a short duration shall be considered a de minimis impact and will not be considered degradation for purposes of implementing the antidegradation policy~~.

(a) Discharges and withdrawals

1. Subject to the limitation in part 3 of this subparagraph, a single discharge~~s~~ other than those from new domestic wastewater sources will be considered ~~small magnitude and therefore~~ de minimis if ~~they are temporary or~~ it uses less than five percent of the available assimilative capacity for the substance being discharged.

2. Subject to the limitation in part 3 of this subparagraph, a single water withdrawal~~s~~ will be considered de minimis if it removes less than five percent of the 7Q10 flow of the stream ~~is removed (the calculations of the low flow shall take into account existing withdrawals)~~.

3. If more than one activity described in part 1 or 2 of this subparagraph has been authorized in a segment and the total of the authorized and proposed impacts uses no more than ten percent of the assimilative capacity, ~~available habitat,~~ or 7Q10 low flow, they are presumed to be de minimis. Where the total of the authorized and proposed impacts uses ~~more than~~ ten percent of the assimilative capacity, ~~available habitat,~~ or 7Q10 low flow, additional degradation ~~they~~ may only be treated as de minimis ~~provided that~~ if the division finds on a scientific basis that the additional degradation has an insignificant effect on the resource ~~and that no single activity is allowed to consume more than five percent of the assimilative capacity, available habitat or 7Q10 low flow~~.

(b) Habitat alterations authorized by an Aquatic Resource Alteration Permit (ARAP) are de minimis if the division finds that the impacts, individually and cumulatively are offset by ~~a combination of~~ impact minimization and/or in-system mitigation, provided however, in ONRWs the mitigation must occur within the ONRW.

(5) Ecoregion - A relatively homogeneous area defined by similarity of climate, landform, soil, potential natural vegetation, hydrology, or other ecologically relevant variables.

(6) Epilimnion – The upper layer of water in a thermally stratified lake or reservoir. This layer consists of the warmest water and has a fairly uniform (constant) temperature.

(7) Ground water – Water beneath the surface of the ground within the zone of saturation, whether or not flowing through known and definite channels.

(8) Ground water table – The upper surface of the zone of saturation by ground water.

(9) Hypolimnion - The lowest layer in a thermally stratified lake or reservoir. This layer consists of colder, more dense water, has a constant temperature and no mixing occurs. The hypolimnion of a eutrophic lake is usually low or lacking in oxygen.

(10) Interflow – The runoff infiltrating into the surface soil and moving toward streams as shallow, perched water above the main ground-water level.

(11) Measurable degradation, as used in the context of discharges or withdrawals – Changes in parameters of waters that are of sufficient magnitude to be detectable by the best available instrumentation or laboratory analyses.

~~(11)~~(12) Mixing Zone - That section of a flowing stream or impounded waters in the immediate vicinity of an outfall where an effluent becomes dispersed and mixed.

~~(12)~~(13) Multiple populations – Two or more individuals from each of two or more distinct taxa, in the context of obligate lotic aquatic organisms.

~~(13)~~(14) Normal weather conditions – Those within one standard deviation of the cumulative monthly precipitation means for at least the three months prior to the hydrologic determination investigation, based on a 30-year average computed at the end of each decade. Precipitation ~~date~~ data shall come from National Oceanographic and Atmospheric Agency's National Climatic Data Center, National Resources Conservation Service's National Climatic Data Center, Natural Resources Conservation Service's National Water and Climate Center, or other well-established weather station.

~~(14)~~(15) Obligate lotic aquatic organisms - Organisms that require flowing water for all or almost all of the aquatic phase of their life cycles.

(16) Parameter – A biological, chemical, radiological, bacteriological, or physical property of water that can be directly measured. Some criteria are expressed in terms of a single parameter; others, such as habitat, nutrients, and biological integrity are not directly measured, but are derived from measurements of parameters.

~~(15)~~(17) Perched water – Water that accumulates above an aquitard that limits downward migration where there is an unsaturated interval below it, between the aquitard and the zone of saturation.

~~(16)~~(18) Photic Zone - the region of water through which light penetrates and where photosynthetic organisms live.

~~(17)~~(19) Reference condition - A parameter-specific set of data from regional reference sites that establish the statistical range of values for that particular substance at least-impacted streams.

~~(18)~~(20) Reference Site - Least impacted waters within an ecoregion that have been monitored to establish a baseline to which alterations of other waters can be compared.

(21) Response Variable – a characteristic of water quality that can be measured and changes as a result of an alteration of habitat, water withdrawal, or discharge of pollutants, as distinguished from agents that cause changes in aquatic systems.

~~(19)~~(22) Stratification – The tendency in lakes and reservoirs for distinct layers of water to form as a result of vertical change in temperature and, therefore, in the density of water. During stratification, dissolved oxygen, nutrients, and other parameters of water chemistry do not mix well between layers, establishing chemical as well as thermal gradients.

~~(20)~~(23) Stream - A surface water that is not a wet weather conveyance.

~~(21)~~(24) Subecoregion - A smaller, more homogenous area that has been delineated within an ecoregion.

~~(22)~~(25) Thermocline – The middle layer in a thermally stratified lake or reservoir. In this layer there is a rapid decrease in temperature with depth. Also called the metalimnion.

~~(23)~~(26) Wadeable streams - Streams that can be sampled using a hand held, one meter square or smaller kick net without water and materials escaping over the top of the net.

~~(24)~~(27) Watercourse - A man-made or natural hydrologic feature with a defined linear channel which discretely conveys flowing water, as opposed to sheet-flow.

~~(25)~~(28) Wet weather conveyance - Man-made or natural watercourses, including natural watercourses that have been modified by channelization:

(a) That flow only in direct response to precipitation runoff in their immediate locality;

(b) Whose channels are at all times above the ground water table;

(c) That are not suitable for drinking water supplies; and

(d) In which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months.

~~(26)~~(29) Wet weather conveyance determination - The decision based on site specific information of whether a particular watercourse is a stream or a wet weather conveyance. It is synonymous with "stream determination" and "hydrologic determination."

~~(27)~~(30) Zone of saturation – A subsurface zone below the ground water table in which all of the interconnected voids and pore spaces are filled with water.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.05 Interpretation of Criteria

(1) Interpretation of the above criteria shall conform to any rules and regulations or policies adopted by the Board of Water Quality, ~~Control Board~~ Oil and Gas.

(2) The effect of treated sewage or waste discharge on the receiving waters shall be considered beyond the mixing zone except as provided in this paragraph. The extent to which this is practicable depends upon local conditions and the proximity and nature of other uses of the waters. Such mixing zones (See definition) shall be restricted in area and length and shall not (i) prevent the free passage of fish or cause aquatic life mortality in the receiving waters; (ii) contain materials in concentrations that exceed acute criteria beyond the zone immediately surrounding the outfall; (iii) result in offensive conditions; (iv) produce undesirable aquatic life or result in dominance of a nuisance species; (v) endanger the public health or welfare; or (vi) adversely affect the reasonable and necessary uses of the area; (vii) create a condition of chronic toxicity beyond the edge of the mixing zone; (viii) adversely affect nursery and spawning areas; or (ix) adversely affect species with special state or federal status.

(3) The technical and economical feasibility of waste treatment, recovery, or adjustment of the method of discharge to provide correction shall be considered in determining the time to be allowed for the development of practicable methods and for the specified correction, to the extent allowable under Rule 1200-04-03-.06(5).

(4) Water quality criteria for fish and aquatic life and livestock watering and wildlife set forth shall generally be applied on the basis of the following stream flows: unregulated streams - stream flows equal to or exceeding the 7-day minimum, 10-year recurrence interval; regulated streams - all flows in excess of the minimum critical flow occurring once in ten years as determined by the division. However, criteria that are wholly or partially based on ~~direct~~ measurements of ambient aquatic community health, such as the nutrient, biological integrity, and habitat criteria for the fish and aquatic life use, shall support the designated use. These criteria should be considered independent of a specified minimum flow duration and recurrence. All other criteria shall be applied on the basis of stream flows equal to or exceeding the 30 day minimum 5 year recurrence interval.

(5) In general, deviations from normal water conditions are undesirable, but the frequency, magnitude and duration of the deviations shall be considered in interpreting the above criteria. When interpreting pathogen data, samples collected during or immediately after significant rain events may be treated as outliers unless caused by point source dischargers. Such outlier data may be given less weight in assessment decisions than non-rain event sampling results.

(6) The criteria and standards provide that all discharges of sewage, industrial waste, and other waste shall receive the degree of treatment or effluent reduction necessary to comply with water quality standards, or state or federal laws and regulations pursuant thereto, and where appropriate will comply with the "Standards of Performance" as required by the Tennessee Water Quality Control Act, (T.C.A., §§69-3-101, et seq.).

(7) Where naturally formed conditions (e.g., geologic formations) or background water quality conditions are

substantial impediments to attainment of the water quality standards, these natural or background conditions shall be taken into consideration in establishing any effluent limitations or restrictions on discharges to such waters. For purposes of water quality assessment, exceedances of water quality standards caused by natural conditions will not be considered the condition of pollution.

(8) There are cases in which the in-stream criteria as established by this rule are less than current chemical technological capabilities for analytical detection. In instances where permit limits established through implementation of these criteria are below analytical capabilities, compliance with those limits will be determined using the following ~~detection~~ reporting limits, unless in specific cases other ~~detection~~ reporting limits are demonstrated to be the best achievable because of the particular nature of the wastewater being analyzed. Such a demonstration shall be made at the time results are submitted and shall affirm that using methods, personnel, training, and equipment appropriate to reach applicable required reporting levels (RRLs), the laboratory was unable to do so due to the nature of the sample. The methods, equipment, and general nature of the interference shall be provided. Inability to accurately quantify the level of a contaminant shall not be acceptable grounds for a higher reporting level if the permit requirement is based on detection/non-detection.

REQUIRED ~~METHOD DETECTION~~ REPORTING LEVELS [~~RDL~~ RRL] (~~u~~µg/l)
Approved EPA Methods Must Be Used)

| INORGANICS | ~~RDL~~RRL |
|---|---|
| Antimony | 3.0 |
| Arsenic, total (c) | 1.0 |
| Arsenic (III) (c) | 1.0 |
| Beryllium (c) | 1.0 |
| Cadmium | 1.0 |
| Chromium, total | 1.0 |
| Chromium (III) | 1.0 |
| Chromium (VI) | 10.0 |
| Copper | 1.0 |
| Lead | 1.0 |
| Mercury | 0.2 |
| Nickel | 10.0 |
| Selenium | 2.0 |
| Silver | 1.0 |
| Zinc | 1.0 |
| Cyanide | 5.0 |
| Dioxin | 0.00001 |

| BASE NEUTRALS | ~~RDL~~RRL |
|---|---|
| Acenaphthylene (c) | 2.3 |
| Anthracene | 0.7 |
| Benzo(a)anthracene (c) | 0.3 |
| Benzo(a)pyrene (c) | 0.3 |
| 3,4-Benzofluoranthene (c) | 0.3 |
| Benzo(k)fluoranthene (c) | 0.3 |
| Bis(2-Chloroethyl)ether (c) | 1.0 |
| Bis(2-Ethylhexyl)phthalate(c) | 2.5 |
| Chrysene | 2.5 |
| 1,2-Dichlorobenzene | 2.0 |
| 1,3-Dichlorobenzene | 2.0 |
| 1,4-Dichlorobenzene - para-Dichlorobenzene | 4.4 |
| Diethyl phthalate | 1.9 |
| Dimethyl phthalate | 1.6 |
| Di-n-Butyl phthalate | 2.5 |
| 2,4-Dinitrotoluene (c) | 1.0 |
| Fluoranthene | 2.2 |

| INORGANICS | ~~RDL~~RRL |
|---|---|
| **VOLATILES** | |
| Acrolein | 1.0 |
| Acrylonitrile (c) | 1.0 |
| Benzene (c) | 1.0 |
| Bromoform - Tribromomethane (c) | 1.0 |
| Carbon tetrachloride (c) | 1.0 |
| Chloroform - Trichloromethane (c) | 0.5 |
| Dichlorobromomethane (c) | 1.0 |
| 1,2-Dichloroethane (c) | 1.0 |
| 1,1-Dichloroethylene (c) | 1.0 |
| 1,3-Dichloropropylene | 1.0 |
| Ethylbenzene | 1.0 |
| Methyl chloride - Chloromethane (c) | 1.0 |
| Methylene chloride - Dichloromethane (c) | 1.0 |
| 1,1,2,2-Tetrachloroethane (c) | 0.5 |
| Tetrachloroethylene (c) | 0.5 |
| Toluene | 1.0 |
| 1,1,1-Trichloroethane | 1.0 |
| 1,1,2-Trichloroethane (c) | 0.2 |
| Trichloroethylene (c) | 1.0 |
| Vinyl chloride (c) | 2.0 |
| **ACID EXTRACTABLES** | |
| 2-Methyl-4,6-dinitrophenol-4,6-Dinitro-o-cresol | 24.0 |
| 2,4-Dinitrophenol | 42.0 |
| Pentachlorophenol | 5.0 |
| 2,4,6-Trichlorophenol (c) | 2.7 |

| BASE NEUTRALS | ~~RDL~~RRL |
|---|---|
| Fluorene | 0.3 |
| Hexachlorobenzene (c) | 1.9 |
| Hexachlorobutadiene (c) | 5.0 |
| Hexachloroethane (c) | 0.5 |
| Nitrobenzene | 10.0 |
| Phenanthrene | 0.7 |
| Pyrene | 0.3 |
| **PESTICIDES** | |
| Aldrin (c) | 0.5 |
| g-BHC - Lindane (c) | 0.5 |
| Chlordane (c) | 0.1 |
| 4-4'-DDT (c) | 0.1 |
| 4,4'-DDE (c) | 0.1 |
| 4,4'-DDD (c) | 0.1 |
| Dieldrin (c) | 0.05 |
| a-Endosulfan | 0.1 |
| b-Endosulfan | 0.05 |
| Endrin | 0.1 |
| Heptachlor (c) | 0.05 |
| Heptachlor epoxide (c) | 0.08 |
| PCB-1242 (c) | 0.5 |
| PCB-1254 (c) | 0.5 |
| PCB-1221 (c) | 0.5 |
| PCB-1232 (c) | 0.5 |
| PCB-1248 (c) | 0.5 |
| PCB-1260 (c) | 0.5 |
| PCB-1016 (c) | 0.5 |
| PCB, total (c) | 0.5 |
| Toxaphene (c) | 0.5 |

(c) carcinogen

(9) Standard operating procedures for making stream and wet weather conveyance determinations (hydrologic determinations)

(a) General

1. Because a primary purpose of the Water Quality Control Act is to protect the waters of the state for the public, and since streams receive a higher level of protection than wet weather conveyances, anyone desiring to alter a watercourse who wishes to avoid unnecessary expense and delay, may request the department to process a permit application or issue an authorization under a general permit with the presumption that the watercourse is a stream. In that instance, a full hydrologic determination would not be performed under these rules. However, nothing shall preclude an applicant from subsequently seeking a wet weather conveyance determination.

2. The procedures detailed in this rule are intended to be used in situations where there is some question whether a watercourse is a stream or wet weather conveyance. In situations where it is obvious that a watercourse is a stream, such as named rivers or streams with watersheds larger than a square mile, or spring-fed streams with consistent flow greater than one cubic foot per second, it is not necessary to conduct a detailed hydrologic determination.

3. It is the purpose of this rule to set out the framework for making stream and wet weather conveyance determinations taking into consideration all relevant and necessary information on the biology, geology, geomorphology, precipitation, hydrology, and other scientifically based principles. Staff of the department and certified hydrologic professionals not employed by the department who are making a submission pursuant to §69-3-108(r) shall follow these rules and the Guidance for Making Hydrologic Determinations (Guidance) which contains the instructions and examples for proper application of these rules to situations in the field that has been developed pursuant to §69-3-107(25) in making these determinations.

4. The format for documenting these determinations is provided in the Hydrologic Determination Field Data Sheet (Data Sheet) in the Guidance. All available field characteristics necessary to make an accurate determination shall be evaluated, and all evidence utilized in making a determination shall be documented using the Data Sheet or as an addendum. Applicants may choose to submit additional hydrological or geotechnical data not included in the standard procedure in support of a hydrologic determination. Any additional relevant information submitted to the department shall be considered by the division in its determination.

5. Any significant revision to the Data Sheet or Guidance shall be subject to a thirty-day public comment period prior to adoption. The department shall advertise its intent to modify the Data Sheet or Guidance by posting notice of proposed changes on the department's internet web site and by sending to the permit mailing list. Significant modifications include the addition or deletion or substantive modification of either the primary or secondary indicators or a change in the scoring system. The department shall consider the need for modifications to the Data Sheet and Guidance periodically and whenever a significant comment is submitted in regard to them.

6. To be classified as a wet weather conveyance, a watercourse must meet all four elements of the definition in §69-3-103. Therefore, if it is determined that any one of the four elements does not apply to a watercourse, the watercourse is a stream.

7. Because natural variation and human activities can alter hydrologic conditions over time, hydrologic determination will only be considered valid for a maximum of five years or the term of a permit based on it.

8. Because there can be considerable variability within a given reach of a watercourse, wet weather conveyance determinations should not be made on a single point but must also investigate up and down channel and consider the watercourse's landscape context.

9. All of the indicators referred to in these rules and the Guidance are evidence relevant to the presence or absence of one or more of the four elements of the wet weather conveyance definition. The difference between the primary and secondary indicators is that each of the primary indicators is considered presumptive evidence alone regarding one or more of the four elements, and will allow for an immediate hydrologic determination to be made in most cases. Some of the primary indicators involve direct observations of the presence or absence of one or more of the elements. The primary indicators of wet weather conveyances are:

(i) hydrologic feature exists solely due to a process discharge,

(ii) defined bed and bank absent, watercourse dominated by upland vegetation/ grass,

(iii) watercourse dry anytime during February through April 15th under normal precipitation/ ground water conditions, and

(iv) daily flow and precipitation records showing feature only flows in direct response to rainfall.

10. Primary indicators of streams are:

(i) presence of multiple populations of obligate lotic organisms with two months or longer aquatic phase,

(ii) presence of fish (except Gambusia),

(iii) presence of naturally occurring ground water table connection,

(iv) flowing water in channel seven days or more since the last precipitation in the local watershed, and

(v) evidence watercourse has been used as a supply of drinking water.

11. When primary indicators cannot be observed or documented, then the investigator must evaluate the watercourse using secondary indicators. The secondary indicators are an aggregate set of observations that in total are used to evaluate the presence or absence of one or more of the elements of a wet weather conveyance. Secondary indicators are:

(i) continuous bed and bank,

(ii) sinuous channel,

(iii) in-channel structure, riffle-pool sequences,

(iv) sorting of soil textures or other substrate,

(v) active/relic floodplain,

(vi) depositional bars or benches,

(vii) braided channel,

(viii) recent alluvial deposits,

(ix) natural levees,

(x) headcuts,

(xi) grade controls,

(xii) natural valley draingeway,

(xiii) at least second order channel on United States Geological Survey or Natural Resources Conservation Service map,

(xiv) subsurface flow/discharge into channel,

(xv) water in channel more than forty-eight hours since rain,

(xvi) leaf litter in channel,

(xvii) sediment on plants or on debris,

(xviii) organic debris lines or piles (wrack lines),

(xix) hydric soils in channel bed or sides,

(xx) fibrous roots in channel,

(xxi) rooted plants in channel,

(xxii) crayfish in channel (exclude in floodplain),

(xxiii) bivalves/mussels,

(xxiv) amphibians,

(xxv) macrobenthos,

(xxvi) filamentous algae, periphyton,

(xxvii) iron-oxidizing bacteria/fungus, and

(xxviii) wetland plants in channel.

12. The secondary indicators shall be scored in accordance with the instructions in the Guidance. Hydrologic determinations will often be made on the basis of secondary indicators because none of the primary indicators is present at the time of investigation. Any of the primary indicators contained in these rules and the Guidance may be considered conclusive after consideration of appropriate background information including recent weather and precipitation, in the absence of any directly contradictory evidence. However, since hydrologic determinations are required to be made at all times of year, secondary indicators of hydrologic status will be used, in accordance with the Guidance and these rules, as determinant evidence in the absence of primary indicators. The secondary indicators used in the Guidance shall be based on sound scientific principles.

13. Watercourses in which flow is solely a result of process or wastewater discharge or other non-natural sources shall not be regulated as streams even though they may exhibit characteristics of a stream rather than a wet weather conveyance.

(b) The specific procedures outlined herein are intended to consider each of the four elements necessary for a watercourse to be classified as a wet weather conveyance.

1. Because the duration of the flow in a watercourse is the central inquiry of hydrologic determinations, all of the primary and secondary indicators are relevant to evaluating it. Although other factors may also be relevant, at a minimum the following procedures shall be used to determine if a watercourse flows only in direct response to precipitation runoff in its immediate vicinity.

(i) Prior to conducting a field evaluation, the investigator should review recent precipitation patterns for the local area, the longer-term seasonal precipitation trends, and any other available information such as historic land use, regional geology and soil types, or previous hydrologic determinations near the site to be investigated.

(ii) The investigator must decide if the determination is being conducted under "normal weather conditions." The procedure for determining if weather conditions are normal, or either wetter or drier than normal, is contained in the Guidance. If conditions are either wetter or drier than normal the investigator must take this into consideration in making a hydrologic determination.

(iii) The vast majority of wet weather conveyances will generally cease to flow within 48 hours of almost all except some of the largest rain events. This is especially true in urbanized, impervious areas, or other areas with low infiltration rates, such as mowed lawns. The investigator shall document the presence or absence of flow within the watercourse. If in-stream surface flow is observed within the evaluated reach, and it has been at least seven days since the last rainfall event in the upstream watershed, the flow will not be considered a direct storm response, and the investigator shall conclude that the feature is a stream. The investigator shall document the source of the precipitation data. The source used shall be as close as feasible to the watercourse.

(iv) When subsurface water discharges such as seeps, interstitial flow, perched water, or interflow are observed and used as indicators of hydrology, investigators shall consider the influence of recent precipitation events and localized soil and geologic conditions on these features to determine if these features provide adequate hydrology such that the watercourse flows more than in direct response to precipitation. For example, since some such features have more flow when there has been significant recent precipitation, if they are flowing when there has not been much recent precipitation, it is more likely that they flow for sustained periods. In some instances, there may be observable outcroppings of a confining layer such as shale or clay that causes interstitial flow to discharge to a watercourse. In this situation, the capacity of up-gradient conditions such as the permeability and volume of the soils above the confining layer to sustain extended periods of surface flow should be considered. These types of sustained discharges should not be considered a direct response to rainfall. In other instances, such as in areas with a highly karst geology, observed seeps into a watercourse may be not be able to sustain extended periods of flow, and may be considered a more direct response to rainfall.

(v) Field investigations for hydrologic determinations should not be conducted if a one-inch precipitation event in 24 hours has occurred in the area of investigation within the previous 48 hours.

2. The following procedures are to determine if the channel is above the ground water table at all times. Under the definition of wet weather conveyance in T.C.A. §69-3-103, if there are any times that the channel is not above the ground water table, it is a stream.

(i) Since larger streams and rivers are frequently in contact with the ground water table, the investigator shall review topographic maps to determine if the watercourse is within the floodplain of, or within twenty feet in elevation of a larger stream or river known to carry perennial flow. Flow in such a watercourse should not be considered conclusive evidence of a ground water table connection, but is contributing evidence to be considered in the determination. Therefore further investigation into additional factors including those listed below is necessary to determine that the watercourse in question is in contact with the ground water table.

(ii) Since the presence of wetlands often indicates a shallow depth to the ground water table, the investigator shall search for the presence of wetlands in the

immediate vicinity of the watercourse both on topographic maps and in the field. The presence of wetlands in the vicinity of the watercourse being examined should not be considered conclusive evidence of a ground water table connection, but is contributing evidence to be considered in the determination. Therefore further investigation into other factors including those listed below is necessary to determine that the watercourse in question is in contact with the ground water table.

(iii) The investigator shall review United States Department of Agriculture soil surveys. Their soil descriptions often contain information on depth to water table. For watercourses whose channels are at a depth that indicates contact with the ground water table for the soil type in which they are formed, the investigator can conclude that the watercourse is in contact with the water table, absent contradicting field information.

(iv) The investigator shall review site geological characteristics affecting the elevation of the ground water table with respect to the elevation of the channel, including the presence of karst bedrock features, erodibility of watershed soils, thickness of regolith and channel alluvium, depth to bedrock or laterally persistent silt or clay horizons, land-use disturbances, and other watershed conditions controlling or contributing to the presence or absence of channel base flow.

(v) If data are available from water wells within one mile of and in similar landscape position to a watercourse under investigation, and if the surface elevation of standing water in the well is at or above the elevation of the bottom of the channel of the watercourse, then the investigator can conclude that the watercourse is in contact with the ground water table.

(vi) The observed emergence of water from the ground is not necessarily water from the ground water table and should not be considered as conclusive for the purpose of this element. Therefore further investigation into factors including those listed above is necessary to determine the source of the emergent water.

3. The following procedures are to determine if a watercourse is suitable for drinking water supplies. The investigator should note spring boxes, water pipes to carry water from the watercourse to a residence, or other observable evidence the watercourse is being used as a household water supply upstream of or within the segment being evaluated. When these features are noted, the investigator can conclude that the watercourse is a stream absent contradicting information.

4. The following procedures are to determine if a watercourse, under normal weather conditions, due to naturally occurring ephemeral or low flow does not have sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months.

(i) The presence of the requisite aquatic life is a primary indicator that the watercourse supports that aquatic life. In order to find that the requisite aquatic life is present, the investigator must document more than one individual of at least two qualifying taxa in the evaluated reach under normal weather conditions. Unhatched eggs or any other stage of a taxon's life cycle that could be found in a wet weather conveyance or lentic habitat (such as a deceased winged adult) should not be considered as a primary indicator that a watercourse is a stream. The specific taxa found should be noted on the Data Sheet. Representative individuals of the taxa used to make this determination should be collected for confirmation of identification. All aquatic life observed should be noted, even if some do not qualify as primary indicators. These organisms may also be relevant as secondary field indicators.

(ii) Indigenous members of taxa within the benthic macroinvertebrate groups listed below are obligate lotic aquatic organisms and thus are primary indicators that a

watercourse is a stream when two or more specimens of two or more taxa are documented under normal weather conditions.

(I) Gastropoda: Pleuroceridae, Viviparidae, Valvatidae

(II) Bivalvia: Unionidae

(III) Coleoptera: Dryopidae, Elmidae, Psephenidae, Ptilodactylidae, Staphylinidae

(IV) Diptera: Athericidae, Blephariceridae, Chironomidae (except: Chironomini or red midges), Empididae, Ptychopteridae, Tanyderidae, and some Tipulidae (Antocha, Rhabdomastix, Dicranota, Hexatoma, Limnophila, Tipula)

(V) Ephemeroptera: all members, except: Siphlonuridae, and some Ephemeridae (Hexagenia)

(VI) Megaloptera: all members, except: Chauliodes

(VII) Odonata: Aeshnidae, Calopterygidae, Cordulegastridae, Gomphidae, some Coenagrionidae (Argia, Chromagrion, Amphiagrion), some Libellulidae (Perithemis) and some Corduliidae (Epitheca, Helocordulia, Neurocordulia)

(VIII) Plecoptera: all members

(IX) Trichoptera: all members, except: Molannidae, some Leptoceridae (Nectopsyche, Triaenodes), and some Limnephilidae (Ironoquia, Limnephilus, Hesperophylax)

(X) Oligochaetes: Branchiobdellidae, Lumbriculidae, Sparganophilidae, some Tubificidae (subfamily Naidinae, Ilyodrilus, Rhyacodrilus, Varichaetadrilus), and some Lumbricidae (Eiseniella tetraedra only).

(iii) The presence of any indigenous fish species, other than the Mosquitofish (*Gambusia*), documented under normal weather conditions, is also a primary indicator that the watercourse is a stream, and constitutes support of the requisite aquatic life.

(iv) There are conditions in which a stream may be dry for a period of weeks or even months, but supports multiple populations of lotic aquatic organisms or fish at other times during a year. In such conditions, an investigator could appropriately determine that there is sufficient water on an annual basis to support such populations even though there were not any present on a particular date. In addition, manmade pollution or other water quality issues may preclude support of these organisms. Therefore, the absence of lotic aquatic organisms at the time of the investigation cannot be the sole basis for a determination that a watercourse meets the fourth element of the definition. When multiple populations of lotic aquatic organisms or fish cannot be documented to occur in a watercourse, then the investigator must consider the hydrologic and biologic factors referred to as secondary indicators in these rules and the Guidance to make a hydrologic determination.

(v) Under normal weather conditions, if the investigator documents the absence of water due to naturally occurring conditions in a watercourse between February 1 and April 15, then the investigator can conclude the watercourse is unable to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months and is therefore a wet weather conveyance.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.06 Antidegradation Statement

(1) General

(a) It is the purpose of Tennessee's standards to fully protect existing uses of all surface waters as established under the Act. Existing uses are those actually attained in the waterbody on or after November 28, 1975. Additionally, the Tennessee Water Quality Standards shall not be construed as permitting the degradation (see definition) of high quality surface waters. Where the quality of Tennessee waters is better than the level necessary to support propagation of fish, shellfish, and wildlife, ~~and~~ or recreation in and on the water, that quality will be maintained and protected unless the state finds, after intergovernmental coordination and public participation, that lowering water quality is necessary to accommodate important economic or social development in the area in which the waters are located. Sources exempted from permit requirements under the Water Quality Control Act should utilize all cost-effective and reasonable best management practices. ~~Activities that cause or contribute to non-compliance with a water quality standard will not be allowed. Activities proposed for waters that are not identified as either being Exceptional Tennessee Waters (1200-4-3-.06(4)) or Outstanding National Resource Waters (1200-4-3-.06(5)), will be evaluated on the basis of 1200-4-3-.06(2) and (3).~~ Where new or increased temperature alterations are proposed, a successful demonstration as determined by the state under Section 316(a) of the Clean Water Act, 33 U.S.C. §1326, shall be considered to be in compliance with this ~~section~~ rule.

(b) To apply this antidegradation statement in the permitting context, the Department shall first determine if the application is complete. Absent extraordinary circumstances, the Department shall notify the applicant that an application is complete or of any deficiencies within 30 days of receipt of the application.

1. A complete application will include all of the information requested on the forms provided by the Department. For activities other than new domesic wastewater discharges, a complete application will include the applicant's basis for concluding that the proposed activity:

(i) will not cause measurable degradation, or

(ii) will only cause de minimis degradation, or

(iii) will cause more than de minimis degradation.

2. If the proposed activity will cause degradation above a de minimis level or if it is a new discharge of domestic wastewater, a complete application will:

(i) analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives;

(ii) discuss the social and economic consequences of each alternative; and

(iii) demonstrate that the degradation will not violate the water quality criteria for uses existing in the receiving waters and is necessary to accommodate important economic and social development in the area.

3. Such alternatives analyses shall include, at a minimum, completed and accurate Worksheets A and B for public sector applicants or Worksheets A and G for private system applicants, or shall provide alternative information subject to approval by the Department. Additionally, to provide information to the Department regarding the applicant's claim of economic or social necessity, public sector applicants shall provide the relevant information from Forms O, P, Q, S, T, U, and AA, found in the EPA guidance document (Economic Guidance); private sector applicants shall provide the relevant information from Forms O, R, V, W, X, Y, Z, and AB, found in the EPA guidance document (Economic Guidance). Either type of applicant shall submit alternative or

additional information regarding economic or social necessity as directed by the Department. These forms are found in the EPA guidance document entitled Interim Economic Guidance for Water Quality Standards: Workbook (EPA 823/B-95-002) (Economic Guidance). Reasonable alternatives for the various activities include, but are not limited to the following actions.

(i) Alternatives for discharges include connection to an existing collection system, land application, water reuse, water recycling, or other treatment alternatives. For small domestic discharges, connection to an existing system or land application will be considered preferable.

(ii) For water withdrawals, alternatives include water conservation, water reuse or recycling, off-stream impoundments, water harvesting during high flow conditions, regionalization, withdrawing water from a larger waterbody, use of ground water, connection to another water supply with available capacity, and pricing structures that encourage a reduction in consumption.

(iii) For activities that cause habitat alterations, alternatives that avoid or minimize degradation should be explored and explained by the applicant. These avoidance or minimization activities could include maintaining or enhancing buffer zones, bridging a stream rather than culverting it, altering the footprint of a project instead of relocating a stream, or using a culvert without a bottom, instead of one that is fully concreted.

(c) When the Department determines that a permit application is complete, it shall notify the applicant by letter or email and shall notify the public and the state and federal agencies with jurisdiction over fish, wildlife, shellfish, plant and wildlife resources, parks, and historic preservation by posting a notice on the department's web site and sending email to persons who have asked to be notified of permit actions. In the case of habitat alterations or water withdrawals this notice shall be a part of the public notice of a permit application under paragraph (4) of Rule 1200-04-07-.04 and shall contain the information required by that paragraph of the rules. For a discharge, the notice shall summarize the information given by the applicant pursuant to subparagraph (b) of this paragraph.

(d) Next, the Department shall determine the level of degradation that would occur as a result of the proposed activity. Not all activities cause an addition of pollutants, diminish flows, or impact habitat.

1. In the case of discharges, if the department determines that no measurable degradation will occur as a result of the activity, no further review under this rule (1200-04-03-.06) is required regardless of the antidegradation classification of the receiving stream, unless the activity:

(i) is a new domestic wastewater discharge, or

(ii) introduces a parameter identified as bioaccumulative, or

(iii) introduces a parameter with a criterion below the current method detection level for that substance, or

(iv) is proposed to occur in an ONRW.

2. In the case of water withdrawals requiring permits from waters other than ONRWs, if the department determines that no measurable degradation will occur, no further review under this rule (1200-04-03-.06) is required regardless of the antidegradation classification of the receiving stream.

3. In the case of habitat alterations, if the department determines that no degradation or only de minimis degradation will occur, no further review under the rule (1200-04-03-.06) is required regardless of the antidegradation classification of the receiving stream.

(e) If the steps described in subparagraphs (b), (c) and (d) of this paragraph do not conclude the review under this rule (1200-04-03-.06), the Department shall determine whether the waters impacted by the activity are ones with available parameters, unavailable parameters, Exceptional Tennessee Waters, or Outstanding National Resource Waters, or if they are in more than one category. For example, a stream segment may be unavailable for one parameter and be available for others and Exceptional Tennessee Waters may also be unavailable for certain parameters. If an activity is proposed in a waterbody that is in more than one category, it must meet all of the applicable requirements.

(2) Waters with unavailable parameters

Unavailable ~~conditions~~ parameters exist where water quality is at, or fails to meet, the ~~criterion for one or more parameters~~ levels specified in water quality criteria in Rule 1200-04-03-.03. In the case of ~~such~~ a criterion that is a single response variable or is derived from ~~measurements~~ measurement of ~~more than one parameter, unavailable parameters applies only to the parameter or parameters that are unavailable; however, in the case of such a criterion that is derived from measurement of response variables such as the parameters associated with the biological integrity criterion (e.g., the number of certain aquatic organisms),~~ multiple response variables, the unavailable parameters shall be the agents causing water quality to be at or failing to meet the levels specified in criteria. For example, if the biological integrity criterion (derived from multiple response variables) is violated, the unavailable parameters shall be the pollutants causing the violation, not the response variables.

(a) In waters with unavailable ~~conditions~~ parameters, new or increased discharges ~~of a substance~~ that would cause ~~or contribute to a condition~~ measurable degradation of ~~impairment~~ the parameter that is unavailable ~~will~~ shall not be ~~allowed~~ authorized. ~~Where impairment by habitat alteration exists, additional significant loss of habitat within the same area of influence shall not be authorized unless avoidance, minimization, or in-system mitigation can render the impact de minimis.~~ Nor will discharges be authorized in such waters if they cause additional loadings of unavailable parameters that are bioaccumulative or that have criteria below current method detection levels.

(b) In waters with unavailable parameters, no new or expanded water withdrawals that will cause additional measurable degradation of the unavailable parameter shall be authorized.

(c) Where one or more of the parameters comprising the habitat criterion are unavailable, activities that cause additional degradation of the unavailable parameter or parameters above the level of de minimis shall not be authorized.

(3) Waters with available parameters

Available ~~conditions~~ parameters exist where water quality is better than the ~~applicable criterion for a specific parameter~~ levels specified in water quality criteria in Rule 1200-04-03-.03.

(a) In waters with available ~~conditions~~ parameters, new or ~~additional~~ increased discharges that would cause degradation above the level of de minimis for ~~that~~ any available parameter for any criterion will only be ~~allowed~~ authorized if the applicant has demonstrated to the ~~department~~ Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and the degradation will not violate the water quality criteria for uses existing in the receiving waters.

(b) In waters with available parameters, new or expanded water withdrawals that would cause degradation above the level of de minimis will only be authorized if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and will not violate the water quality criteria for uses existing in the receiving waters.

(c) In waters with available parameters, an activity that would cause degradation of habitat above the level of de minimis will only be authorized if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and will not violate the water quality criteria for uses existing in the receiving waters.

~~(a) Analysis of reasonable alternatives shall be part of the application process and shall include a discussion of the feasibility of all potential alternatives, plus the social and economic considerations and environmental consequences of each. Alternatives analyses shall include, at a minimum, completed and accurate Worksheets A and B for public sector applicants or Worksheets A and G for private system applicants, except where these worksheets are inappropriate for the activity, in which case applicants may substitute materials that provide equivalent information. These forms are found in the EPA guidance document entitled Interim Economic Guidance for Water Quality Standards: Workbook (EPA 823/B-95-002) (Economic Guidance). Reasonable alternatives for the various activities include, but are not limited to the following actions.~~

~~1. Alternatives for discharges include connection to an existing collection system, land application, water reuse, water recycling, or other treatment alternatives. For small domestic discharges, connection to an existing system or land application will be considered preferable.~~

~~2. For water withdrawals, alternatives include water conservation, water reuse or recycling, off-stream impoundments, water harvesting during high flow conditions, regionalization, withdrawing water from a larger waterbody, use of ground water, connection to another water supply with available capacity, and pricing structures that encourage a reduction in consumption.~~

~~3. For activities that cause habitat alterations, alternatives that minimize or avoid degradation should be explored and explained by the applicant. These avoidance or minimization activities could include maintaining or enhancing buffer zones, bridging a stream rather than culverting it, altering the footprint of a project instead of relocating a stream, or using a culvert without a bottom, instead of one that is fully concreted.~~

~~(b) For authorized new or expanded discharges, a record of the antidegradation determination(s) will be maintained and will be available for public review. Public participation and intergovernmental coordination will be provided in conjunction with permitting activities.~~

(4) Exceptional Tennessee Waters

(a) Exceptional Tennessee Waters are waters that are in any one of the following categories:

1. Waters within state or national parks, wildlife refuges, forests, wilderness areas, or natural areas;

2. State Scenic Rivers or Federal Wild and Scenic Rivers;

3. Federally-designated critical habitat or other waters with documented non-experimental populations of state or federally-listed threatened or endangered aquatic or semi-aquatic plants, or aquatic animals;

4. Waters within areas designated as Lands Unsuitable for Mining pursuant to the federal Surface Mining Control and Reclamation Act where such designation is based in whole or in part on impacts to water resource values;

5. Waters with naturally reproducing trout;

6. Waters with exceptional biological diversity as evidenced by a score of 40 or 42 on the Tennessee Macroinvertebrate Index (or a score of 28 or 30 in subecoregion 73a) using protocols found in TDEC's ~~2006~~ 2011 Quality System Standard Operating Procedure for Macroinvertebrate Stream Surveys, provided that the sample is considered representative of overall stream conditions; or

7. Other waters with outstanding ecological, or recreational value as determined by the ~~department~~ Department. When application of this provision is a result of a request for a permit, such preliminary determination is to be made within 30 days of receipt of a

complete permit application.

(b) The ~~department~~ Department will maintain a list of waterbodies that have been reviewed and are known to have one or more of the above characteristics on its website and will make paper copies of that list available upon request.

(c) Authorization of Activities in Exceptional Tennessee Waters

1. In waters identified as Exceptional Tennessee Waters ~~no~~ new or increased discharges that would cause degradation of any available parameter above the level of de minimis and discharges of domestic wastewater will only be ~~allowed~~ authorized if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and ~~unless and until it is affirmatively demonstrated to the Department, after full satisfaction of the following intergovernmental and public participation provisions, that a change is justified as a result of necessary economic or social development and will not interfere with or become injurious to any classified uses existing in such waters~~ will not violate the water quality criteria for uses existing in the receiving waters. At the time of permit renewal, previously authorized discharges, including upstream discharges, which presently degrade Exceptional Tennessee Waters above a de minimis level, will be subject to a review of updated alternatives analysis information provided by the applicant, but not to a determination of economic/social necessity. Public participation for these existing discharges will be provided in conjunction with permitting activities. Sources exempted from permit requirements under the Water Quality Control Act should utilize all cost-effective and reasonable best management practices.

2. In waters identified as Exceptional Tennessee Waters, new or increased water withdrawals that would cause degradation of any available parameter above the level of de minimis will only be authorized if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and will not violate the water quality criteria for uses existing in the receiving waters.

3. In waters identified as Exceptional Tennessee Waters, an activity that would cause degradation of habitat above the level of de minimis will only be authorized if the applicant has demonstrated to the Department that reasonable alternatives to degradation are not feasible and the degradation is necessary to accommodate important economic or social development in the area and will not violate the water quality criteria for uses existing in the receiving waters.

(d) Determination of Economic/Social Necessity - ~~Where reasonable alternatives to degradation to an Exceptional Tennessee Water is not feasible, applicants may ask the Department to determine that the proposed degradation is justified on the basis of economic or social necessity. The applicant shall have the burden of establishing to the Department that a change is justifiable as a result of necessary economic or social development and will not interfere with or become injurious to any classified uses existing in such waters.~~ The Department's determination that degradation of Exceptional Tennessee Waters resulting from a proposed discharge, habitat alteration or water withdrawal is, ~~justified or unjustified~~ or is not, necessary to accommodate important economic and social development in the area shall be subject to review by the Board of Water Quality, ~~Control Board~~ Oil and Gas under the following procedures.

1. ~~If the Department determines that degradation is justified, it will notify the applicant, the federal and state intergovernmental coordination agencies, and third persons who requested notification of the determination. Within 30 days after the date of the notification, any affected intergovernmental coordination agency or affected third person may petition the Board for a declaratory order under Tennessee Code Annotated § 4-5-223, and the Board shall convene a contested case. After the Board has convened a contested case in response to a declaratory order petition under this part, the Department shall within 5 business days thereafter transmit the petition to the Administrative Procedures Division of the Secretary of State so the contested case may be docketed~~

~~and an administrative law judge may be assigned to the case. If a declaratory order petition is timely filed, the Department shall not proceed further in processing the permit application until the petition has been resolved before the Board. In the contested case, the petitioner shall have the burden of proof, and the Department's determination shall carry no presumption of correctness before the Board. The applicant is a necessary party to the declaratory order contested case, and if the applicant does not participate in the contested case, the Board shall render a decision that degradation is not justified. If no intergovernmental coordination agency or third person petitions for a declaratory order within 30 days of the notification date, then the Department shall proceed with processing the permit application.~~ If the Department determines that an activity that would cause degradation above a de minimis level of Exceptional Tennessee Waters is necessary to accommodate important economic or social development in the area, it shall give notice to the applicant, the public, and federal and state agencies with jurisdiction over fish, wildlife, shellfish, plant and wildlife resources, parks, and advisory councils for historic preservation. In the case of an application for a discharge, this notice may be combined with the notice of a draft permit under Rule 1200-04-05-.06. In the case of an application for a habitat alteration or water withdrawal, this notice shall be given by being posted on the department's web site and by sending email to persons who have asked to be notified of permit actions. Within 30 days after the date of the notification, any affected intergovernmental coordination agency or affected third person may petition the Board for a declaratory order under Tennessee Code Annotated § 4-5-223, and the Board shall convene a contested case. After the Board has convened a contested case in response to a declaratory order petition under this part, the Department shall within 5 business days thereafter transmit the petition to the Administrative Procedures Division of the Secretary of State so the contested case may be docketed and an administrative law judge may be assigned to the case. If a declaratory order petition is timely filed, the Department shall not proceed further in processing the permit application until the petition has been resolved before the Board. In the contested case, the petitioner shall have the burden of proof, and the Department's determination shall carry no presumption of correctness before the Board. The applicant is a necessary party to the declaratory order contested case, and if the applicant does not participate in the contested case, the Board shall render a decision that degradation is not necessary to accommodate important economic or social development in the area. If no intergovernmental coordination agency or third person petitions for a declaratory order within 30 days of the notification date, or if one is filed after the 30 days expires, then the Department shall proceed with processing the permit application.

2. A declaratory order contested case conducted under this ~~provision~~ subparagraph shall be subject to the following procedures. Mediation may occur if all the parties agree. Any proposed agreed order resulting from mediation shall be subject to approval by the Board. In order to provide for an expedited proceeding, the contested case is subject to the following time limitations. The time periods specified in this part shall commence on the day after the contested case has been docketed by the Administrative Procedures Division of the Secretary of State and an administrative law judge has been assigned to the case. Any alteration of the time periods set out in this part shall be granted only upon agreement of all the parties, or when there have been unforeseen developments that would cause substantial prejudice to a party, or when the parties have agreed to mediation. Within 20 days, the parties shall confer to try and develop a proposed agreed scheduling order. If the parties are unable to agree, then each party shall submit a proposed scheduling order, and the administrative law judge, after a hearing, shall enter a scheduling order. All discovery shall be completed no later than 20 days prior to the date the hearing before the Board is to begin. Within 120 days, the hearing before the Board shall begin, but the Board on its own initiative may exceed 120 days to complete the hearing and render its final decision. In order for degradation of Exceptional Tennessee Waters to proceed pursuant to these rules, the Board must make a finding approving degradation by a majority vote of the members of the Board present and voting.

3. ~~If the Department determines that degradation is not justified, it will notify the applicant, the federal and state intergovernmental coordination agencies, and third persons who requested notification of the determination. The Department also will issue a tentative~~

~~decision to deny the permit because degradation is not justified. In accordance with 1200-4-5-.06(4), the Department will provide the public with notice of and an opportunity to comment on its tentative denial decision. If no public hearing is requested within the 30 day public comment period, and if the Department does not alter its tentative decision to deny, the Department shall notify the applicant of its final decision to deny the permit because degradation is not justified. Within 30 days after receiving notice of the final decision to deny the permit, the applicant may seek review of the decision in a contested case before the Board in accordance with Tennessee Code Annotated § 69-3-105(i). Within 5 business days after the Department receives an applicant's written request for a contested case hearing before the Board, the Department shall transmit the written request to the Administrative Procedures Division of the Secretary of State so the contested case may be docketed and an administrative law judge may be assigned to the case. In the contested case, the applicant shall have the burden of proof, and the Department's determination shall carry no presumption of correctness before the Board. The federal and state intergovernmental coordination agencies, and third persons who requested notification of the Department's degradation determination will be notified by the Department of the applicant's permit appeal. The intergovernmental coordination agencies and third persons may seek to intervene in the contested case in accordance with Tennessee Code Annotated § 4-5-310.~~ If the Department determines that degradation is not necessary to accommodate important economic or social development in the area, it will notify the applicant, the federal and state agencies with jurisdiction over fish, wildlife, shellfish, plant and wildlife resources, parks, and advisory councils for historic preservation, and third persons who have asked to be notified of permit actions. The Department also will issue a tentative decision to deny the permit because degradation is not necessary. In accordance with paragraph (4) of Rule 1200-04-05-.06, the Department will provide the public with notice of and an opportunity to comment on its tentative denial decision. If no public hearing is requested within the 30 day public comment period, and if the Department does not alter its tentative decision to deny, the Department shall notify the applicant of its final decision to deny the permit because degradation is not necessary. Within 30 days after receiving notice of the final decision to deny the permit, the applicant may seek review of the decision that the degradation is not necessary to accommodate important economic or social development in the area in a contested case before the Board in accordance with Tennessee Code Annotated § 69-3-105(i). Within 5 business days after the Department receives an applicant's written request for a contested case hearing before the Board, the Department shall transmit the written request to the Administrative Procedures Division of the Secretary of State so the contested case may be docketed and an administrative law judge may be assigned to the case. In the contested case, the applicant shall have the burden of proof, and the Department's determination shall carry no presumption of correctness before the Board. The federal and state intergovernmental coordination agencies, and third persons who requested notification of the Department's degradation determination will be notified by the Department of the applicant's permit appeal. The intergovernmental coordination agencies and third persons may seek to intervene in the contested case in accordance with Tennessee Code Annotated § 4-5-310.

~~(e) Information Requirements:~~

~~1. Applicants requesting an economic/social necessity determination to allow degradation under this provision must provide all information required in order for the Department to make a determination that reasonable alternatives to degradation are not feasible. Reasonable alternatives for discharges may include, but are not limited to, connection to an existing collection system, land application, water reuse, water recycling, or other treatment alternatives. Applicants for permit renewals of previously authorized discharges, including upstream discharges, which presently degrade Exceptional Tennessee Waters, shall submit as an alternatives analysis completed and accurate Worksheets A and B for public sector applicants or Worksheets A and G for private system applicants, except where these worksheets are inappropriate for the activity, in which case applicants may substitute materials that provide equivalent information. If needed, the Department may request the applicant to provide additional information. Alternatives analysis for new or additional degradation shall include, at a minimum, completed and accurate Worksheets A and B for public sector applicants or Worksheets~~

~~A and G for private system applicants, except where these worksheets are inappropriate for the activity, in which case applicants may substitute materials that provide equivalent information. These forms are found in the EPA guidance document (Economic Guidance).~~

~~2. Additionally, to provide information to the Department regarding the applicant's claim of economic/social necessity, public sector applicants shall complete and submit, at a minimum, Forms O, P, Q, S, T, U, and AA, found in the EPA guidance document (Economic Guidance). Private sector applicants shall complete and submit, at a minimum, Forms O, R, V, W, X, Y, Z, and AB, found in the EPA guidance document (Economic Guidance). In instances when these worksheets are inappropriate for the activity, those applicants may substitute materials that provide equivalent information.~~

~~(f) Public Participation~~

~~1. NPDES - Applicants seeking permission to degrade Exceptional Tennessee Waters shall publish a notice in a newspaper of general distribution in the area of the degradation. The notice shall identify the proposed discharge, provide the specific location including affected waters, describe the general basis for requesting permission to degrade Exceptional Tennessee Waters, inform the public of their opportunity to provide comments, and that a local public meeting will be held by the Department unless the Department notifies the public of its determination that the discharge will not result in degradation. The applicant shall also post a sign within sight of a public road containing the same general information as the newspaper notice. A copy of the newspaper notice and proof of signage shall be provided to the Department. The public meeting held by the Department shall be near the proposed degradation.~~

~~2. ARAP/Section 401 Water Quality Certification - If the Department determines that an applicant's proposed activity will not result in degradation, it will so notify the public. If the Department determines that the proposed activity will degrade Exceptional Tennessee Waters, and the applicant intends to seek permission to do so, then the applicant shall publish a notice in a newspaper of general distribution in the area of the degradation. The notice shall identify the proposed activity, provide the specific location including affected waters, describe the general basis for requesting permission to degrade Exceptional Tennessee Waters, inform the public of their opportunity to submit comments, and that a local public meeting will be held by the Department. The public meeting held by the Department shall be near the proposed degradation.~~

~~3. Timing of Public Participation - Within 14 days of the Department being informed that an applicant will seek degradation, the applicant shall provide notice, as identified above, to the affected public. After the applicant provides public notice, the Department shall notify the public of the location, date and time of the public meeting in the area of degradation. Public notice by the Department shall occur at least 45 days prior to the meeting. For a proposed discharge, if the Department determines that the discharge will not result in degradation, it will so notify the public and in this circumstance, there will be no public meeting.~~

~~(g) Intergovernmental Coordination - A notice concerning the request for an economic/social necessity determination shall be provided by the Department to federal and state agencies with jurisdiction over fish, wildlife, shellfish, plant and wildlife resources, parks, and advisory councils for historic preservation.~~

(5) Outstanding National Resource Waters

(a) The following streams or portions of streams are designated as ONRW:

| | WATERBODY | PORTION DESIGNATED AS ONRW |
|---|---|---|
| ~~(a)~~1. | Little River | Portion within Great Smoky Mountains National Park. |
| ~~(b)~~2. | Abrams Creek | Portion within Great Smoky Mountains National Park. |

| | | |
|---|---|---|
| ~~(c)~~3. | West Prong Little Pigeon River | Portion within Great Smoky Mountains National Park upstream of Gatlinburg. |
| ~~(d)~~4. | Little Pigeon River | From the headwaters within Great Smoky Mountains National Park downstream to the confluence of Mill Branch. |
| ~~(e)~~5. | Big South Fork Cumberland River | Portion within Big South Fork National River and Recreation Area. |
| ~~(f)~~6. | Reelfoot Lake | Tennessee portion of the lake and its associated wetlands. |

7. The portion of the Obed River that is designated as a federal wild and scenic river as of June 22, 1999 is designated as ONRW, provided however, that if the current search for a regional water supply by the Cumberland Plateau Regional Water Authority results in a determination that it is necessary to utilize the Obed River as its source of drinking water, for that purpose the Obed shall be designated as an Exceptional Tennessee Water and any permit issued for that project, whether state, federal, or otherwise, shall be considered under the requirements for Exceptional Tennessee Waters.

(b) The Department may recommend to the Board of Water Quality, ~~Control Board~~ Oil and Gas that certain waterbodies be designated as Outstanding National Resource Waters (ONRWs). These shall be high quality waters which constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance. Designation of ONRWs must be made by the Board of Water Quality, ~~Control Board~~ Oil and Gas and will be accomplished in accordance with Section 69-3-105(a)(1) of the Tennessee Water Quality Control Act and through the appropriate rulemaking process.

1. In surface waters designated by the Board of Water Quality, ~~Control Board~~ Oil and Gas as ONRWs, no new discharges, expansions of existing discharges, water withdrawals or mixing zones will be permitted unless such activity will not result in either measurable degradation ~~of the water quality. Existing water quality will be the criteria in these waters~~ or discernible effect. ~~Physical alterations that cause degradation to the ONRW will not be allowed.~~ At the time of permit renewal, previously authorized discharges, including upstream discharges and withdrawals, which presently degrade an ONRW, will be subject to alternatives analysis. Public participation for these existing discharges will be provided in conjunction with permitting activities.

2. In waters designated by the Board of Water Quality, ~~Control Board~~ Oil and Gas as ONRWs, no new or increased habitat alteration that would cause degradation of habitat above the level of de minimis or degrade water chemistry for more than a short duration will be authorized.

~~An assessment of environmental, economic, and social impacts will be prepared for each stream or stream segment proposed for ONRW designation. The assessment content and process will be determined by the department but will contain sufficient data and information to inform the Water Quality Control Board about environmental, economic, and social impact of ONRW designation. Further, the process will provide for comprehensive public participation with a solicitation of position statements from appropriate local government agencies including but not limited to county and municipal governments, Soil Conservation Districts, Utility Districts, as well as other local, state, and federal agencies that may have responsibility for land and water resource management within the watershed of the proposed stream segment.~~

~~(6) All discharges of municipal sewage, industrial waste, or other wastes shall receive the greatest degree of effluent reduction which the Commissioner of the Tennessee Department of Environment and Conservation determines to be achievable through application of stringent effluent limitations and schedules of compliance either promulgated by the Water Quality Control Board; required to implement any applicable water quality standards, including where practicable, a standard permitting no discharge of pollutants; necessary to comply with a State Water Quality Plan; or necessary to comply with other State~~

~~or Federal laws or regulations.~~

~~(7) In implementing the provisions of these rules as they relate to interstate streams, the Commissioner of the Tennessee Department of Environment and Conservation and the Tennessee Water Quality Control Board will cooperate with the appropriate Federal Agency in order to assist in carrying out responsibilities under the Federal Water Pollution Control Act, as amended.~~

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.07 Ground Water Classification

(1) Purpose and Intent

(a) It is one of the primary goals of the Tennessee Water Quality Control Act, Tennessee Code Annotated (T.C.A.) §§ 69-3-101 et seq. (the "Act") to protect our valuable ground water resource. This rule classifies ground water across the state based on the factors stated in T.C.A. § 69-3-105(a)(2) of the Act and establishes ground water quality criteria. The quality of ground water varies in Tennessee. Some ground water is sufficient to be used by our citizens directly as a drinking water supply with limited or no treatment. Other ground water would require more extensive treatment before it could be used as a water supply. Further, some ground water may be of such value as to warrant special protection. The board recognizes that some water below the surface of the ground may be present in a zone of aeration between ground surface and the water table. The zone of aeration is where treatment from household septic systems occurs and water in the zone of aeration is not classified as ground water in these regulations. Perched water above the zone of saturation may, in some areas, be used as a water supply or may migrate to either ground water or surface water and is included in these regulations to protect for its direct use or impact on ground water or surface water. Additionally, some ground water has levels of naturally occurring constituents that make the resource unusable as a drinking water supply.

(b) The board recognizes these rules apply to both permitting activities and response actions that involve water beneath the surface of the ground. The permitting of underground injection is governed by Rule Chapter ~~1200-4-6~~ 0400-45-06.

(c) These rules provide appropriate flexibility in the regulatory process to protect our ground water resource and to allow the productive use of land. Reuse of brownfield areas is encouraged and reduces the use of greenfield areas.

(d) The board recognizes that several divisions within the department have a role in protecting ground water resources. It is not the intent of these rules to change the responsibilities of those programs. It is, however, the intent of these rules to provide a basis for decisions involving ground water that may be applied by all divisions of the department. The board does not intend these rules to affect in any way the ability of the State to seek natural resource damages from responsible parties when ground water has been contaminated by human activity.

(e) Ground water that enters a stream or other water classified as surface water becomes surface water and is subject to respective criteria applicable to that water. The board expects that the department will use prudent judgment where ground water mixes with water on the surface of the ground.

(2) Definitions

(a) "Area of Control" means a volume designated by the commissioner underlying or surrounding a site, including the zone of aeration and the zone of saturation, containing water, some of which the commissioner has determined not to meet applicable criteria.

(b) "Ground Water" means water beneath the surface of the ground within the zone of saturation, whether or not flowing through known and definite channels.

(c) "Perched water" means water that accumulates above an aquitard that limits downward migration where there is an unsaturated interval below it, between the aquitard and the zone of saturation.

(d) "Point of Classification Change" means the boundary of the volume within which ground water is classified as Site Specific Impaired as established under Rule 1200-04-03-.09.

(e) "Response action" means a clean up, remedial action, remedy, remedial investigation or other action taken by the department to address the presence of contaminants at levels that have been determined by the Department to require an appropriate response.

(f) "Zone of Aeration" means a subsurface zone extending from the water table to the surface of the land.

(g) "Zone of Saturation" means a subsurface zone below the water table in which all of the interconnected voids and pore spaces are filled with water.

(3) Water in the Zone of Aeration

Water in the zone of aeration is not defined as ground water in this rule, but it may occur as perched water. This perched water may be above ground water of any of the classifications used in this rule. Perched water is protected under this rule in accordance with its use as follows:

(a) Perched water that is used for drinking water or reasonably anticipated to be used as a drinking water supply shall meet the criteria listed for General Use in Rule 1200-04-03-.08(2). Other perched water shall not contain constituents, other than of natural origin, that cause or are reasonably likely to cause a violation of criteria of underlying ground water or surface water where the perched water enters those waters.

(b) Except for naturally occurring levels, perched water shall contain no other constituents at levels and conditions that pose an unreasonable risk to public health or the environment.

(c) If perched water, such as in a cave system, is habitat for fish and aquatic life, it shall contain no constituents except for naturally occurring substances at levels and concentrations that violate the criteria of Rule 1200-04-03-.03(3) for fish and aquatic life.

(4) Water below the surface of the ground is classified as follows:

(a) Special Source Waters

This is ground water or perched water with exceptional quality or quantity, which may serve as a valuable source for water supply or which is ecologically significant.

When the board finds water to be Special Source Water, then through the rulemaking process, the board will amend these rules to include the specific location and the boundaries of ground water or perched water designated as Special Source Water. To initiate this process, a petition shall address the factors listed below for board consideration. Any cost involved in making the petition shall be borne by the petitioner. In making this decision, the board may consider the following factors and relevant public input:

1. The vulnerability of the water in the proposed area to contamination due to hydrogeologic characteristics;

2. The number of persons or the proportion of the population using the water as a drinking water supply;

3. Existing water quality in the proposed Special Source Water area;

4. An evaluation of the ecological and environmental impact should the quality of the Special Source Water be compromised; and

5. Other pertinent information as deemed necessary by the petitioner, department, or board. Because such action is a rulemaking procedure, public input may be made as provided in the Uniform Administrative Procedures Act, T.C.A. §§ 4-5-201 et. seq., but not as a contested case under T.C.A. §§ 4-5-301 et seq.

(b) General Use Ground Water

Except for ground water in areas that have been designated as Special Source Water, Site Specific Impaired Ground Water, or meet the definition of Unusable Ground Water, all ground water is designated General Use Ground Water.

(c) Site Specific Impaired Ground Water

This is ground water that has been contaminated by human activity and the board finds that either it is not technologically feasible to remediate the ground water to the criteria required by other classifications or it is not reasonable to remediate to that criteria based on information provided in accordance with Rule 1200-04-03-.09. Ground water shall be classified as Site Specific Impaired upon approval of a petition to the Water Quality Control Board and completion of the rulemaking process to amend these rules to identify the reclassified ground water. When ground water is reclassified to Site Specific Impaired the areal extent of the Site Specific Impaired Ground Water shall be delineated. The boundaries of the Site Specific Impaired Ground Water cannot extend beyond the perimeter and depth investigated with an appropriate safety factor as determined under Rule 1200-04-03-.09. Figures which clearly depict the horizontal and vertical boundaries of the Site Specific Impaired Ground Water must be submitted to the department in the plans/reports required by Rule 1200-04-03-.09.

(d) Unusable Ground Water

Ground water in the following areas are classified as Unusable Ground Water:

1. A "High Dissolved Solids Zone" is an area in which ground water has naturally occurring total dissolved solids of more than 10,000 ppm.

2. A "Historical Injection Zone" is an area in which the ground water and the injection zone designated to receive fluids and other substances from deep well injection initiated prior to September 1985 and operated under compliance with the Department at the time of injection is no longer subject to injection. The certification as a historical injection zone subclass of Unusable Ground Water does not provide authorization for future injection activities and shall not be construed as Class I zone designation under Rule Chapter ~~1200-4-6~~ 0400-45-06, Underground Injection Control. The zone may be subsequently considered for Class I zone designation under that Rule Chapter provided it meets the criteria based on naturally occurring conditions and not from changes as a result of the previously injected fluids.

3. A "Class I Injection Zone" is an area in which ground water has been demonstrated by a permit applicant as a part of a Class I operation under Rule Chapter ~~1200-4-6~~ 0400-45-06, Underground Injection Control, to be suitable for Class I injection.

4. A "Class II or III Injection Zone" is an area in which ground water is mineral, hydrocarbon or geothermal energy producing, or has been demonstrated by a permit applicant as a part of a permit application for a Class II or III operation under Rule Chapter ~~1200-4-6~~ 0400-45-06 Underground Injection Control to contain minerals or hydrocarbons that, considering their quality and location, are expected to be commercially producible. The designation as Class II or III injection zone subclass of Unusable Ground Water shall not be construed as a Class I zone designation under Rule Chapter ~~1200-4-6~~ 0400-45-06, Underground Injection Control.

5. An "Acid Production Zone from Mining Activities" is an area in which ground water occurs within an excavated area where reaction with naturally occurring minerals generates acid rock drainage or acid mine drainage. An excavated area may be a surface or underground mined area as well as a subsidence area whether or not the mined area is backfilled. Ground water beyond the excavated area is classified as described elsewhere in this rule.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.08 Criteria

The water quality criteria for the different classes are as follows:

(1) Special Source Water

The board will consider the special protection needs of any water identified as Special Source Water and promulgate criteria at the time of designation.

(2) General Use Ground Water

Except for naturally occurring levels, General Use Ground Water:

(a) shall not contain constituents that exceed those levels specified in Rules 1200-04-03-.03(1)(j) and (k); and

(b) shall contain no other constituents at levels and conditions which pose an unreasonable risk to the public health or the environment.

(3) Site Specific Impaired Ground Water

Except for naturally occurring levels, Site Specific Impaired Ground Water:

(a) shall contain no substances, whether alone or in combination with other substances , that are toxic, carcinogenic, mutagenic or teratogenic, other than those of natural origin, at levels and conditions which pose an unreasonable risk to public health or the environment;

(b) shall contain no other constituents at levels and conditions which pose an unreasonable risk to the public health or the environment;

(c) shall contain no constituents at levels that will prevent ground waters beyond the point of classification change from meeting the classification and criteria for those waters; and

(d) other criteria established by the board as appropriate to the site.

(4) Unusable Ground Water

Except for naturally occurring levels, Unusable Ground Water:

(a) shall contain no substances, whether alone or in combination with other substances, that are toxic, carcinogenic, mutagenic or teratogenic, other than those of natural origin, at levels and conditions which pose an unreasonable risk to the public health;

(b) shall contain no other constituents at levels and conditions which pose an unreasonable risk to the public health;

(c) shall not discharge to surface water causing a violation of surface water quality criteria or biological integrity; and

(d) naturally occurring levels as used in subparagraph (a) of this paragraph shall include the natural minerals, mining wastes, and the reaction products of oxidation and reduction associated with these materials in Unusable Ground Water in an Acid Production Zone from Mining Activities. These substances shall not pose an unreasonable public health or safety risk to the public. Physical barriers and institutional controls satisfy that requirement.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.09 Site Specific Impaired Classification Petition Process

(1) Any person who encounters ground water that may meet the requirements for Site Specific Impaired, may

petition the board to adopt a rule reclassifying that ground water as Site Specific Impaired, using the process set forth in this rule. Any costs involved in making the petition shall be borne by the petitioner. The petition shall include the following, unless it is determined by the department in writing that the site conditions render any of them unnecessary:

(a) An assessment of the horizontal and vertical extent of the contamination;

(b) An evaluation of the hydrogeology of the area including but not limited to the ground water flow rate and direction, permeability, recharge area, ground water classification and location of local water wells, springs and seeps;

(c) An evaluation of the area geology including, but not limited to, soil type, soil permeability, soil porosity, depth to bedrock, and identification of geologic formations;

(d) A description of the corrective actions or response actions taken or proposed;

(e) The chemical characteristics of the constituents(s) including, but not limited to, the constituent's solubility, mobility, toxicity, and carcinogenicity, the nature of and the level of constituents to remain or be present in the ground water and the calculations and rationale used in the determination;

(f) A feasibility study, which evaluates clean-up alternatives, the cost, and the time to complete each alternative;

(g) An evaluation of current and reasonably anticipated future ground water use within the proposed site specific impaired area and within a one-half (1/2) mile radius of the proposed Site Specific Impaired area; the impact of conduit flow shall be evaluated in karst areas;

(h) An evaluation of current and reasonably anticipated future land uses within the proposed Site Specific Impaired area and within a one-half (1/2) mile radius of the proposed Site Specific Impaired area;

(i) An evaluation of the potential of the constituent to migrate through soil and ground water to:

1. homes;

2. buildings;

3. surface waters;

4. subsurface utilities; and

5. adjacent properties.

(j) A description of any existing or proposed monitoring program to observe constituent levels in soil and ground water;

(k) Evaluation of the existing or anticipated actual exposure pathways (inhalation, ingestion, dermal contact, etc.) of the constituents and an assessment of the human health risks presented by exposure to the constituents as well as the impact, if any, of the constituents on fish and aquatic life pursuant to Rule Chapter 1200-04-03;

(l) Consideration of the classification in Rule 1200-04-03-.07 that would apply to the ground water at the site if it were not contaminated;

(m) Analysis of the benefits of the restored resource;

(n) A description of how and when the contamination occurred, if known;

(o) A plat map with the proposed site-specific ground water area superimposed on it that shows all property owners for properties included in the Site Specific Impaired classification with contact

information for owners of each property and identification and contact information for the parties paying property taxes on each property in the proposed Site Specific Impaired classification area; and

(p) Other items as requested by the department associated with the evaluation of the petition.

(2) Because Site Specific Impaired classification is a rulemaking procedure, public input may be made as provided in the Uniform Administrative Procedures Act, T.C.A. §§ 4-5-201 et seq., but not as a contested case under T.C.A. §§ 4-5-301 et seq. In addition to the requirements for public input under the Uniform Administrative Procedures Act, T.C.A. §§ 4-5-201 et seq., the petitioner shall, at a minimum, notify the party of record paying property taxes for each property subject to the Site Specific Impaired classification of the petition and the process for submitting comments on said petition. The petitioner shall provide a copy of such notification to the department.

(3) In the evaluation of a petition to classify ground water as Site Specific Impaired, the board may consider the following:

(a) the extent of any threat to human health or safety;

(b) the extent of damage to the environment;

(c) technology commercially available to accomplish restoration;

(d) a comparison of the environmental and economic costs and benefits to be derived from ground water quality restoration with the environmental and economic costs and benefits to be derived from classification as Site Specific Impaired;

(e) analysis of the restored resource;

(f) the point of classification change;

(g) contaminant or pollution source identification and cleanup;

(h) public comments; and

(i) other appropriate information presented in the petition.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.10 Remediation of Ground Water or Perched Water

(1) When a release or other event occurs that causes subsurface water to not meet the criteria in these rules, the commissioner has authority under a number of statutes to cause remediation of the water. These statutes include the Solid Waste Disposal Control Act, T.C.A. §§ 68-211-101 et seq., the Hazardous Waste Management Act, parts 1 and 2, T.C.A. §§ 68-212-101 et seq., and §§ 68-212-201 et seq., the Petroleum Underground Storage Tank Act, T.C.A. §§ 68-215-101 et seq., and the Drycleaner Environmental Response Act, T.C.A. §§ 68-217-101 et seq. The goals of all such remediation actions are:

(a) to return waters to meeting standards when practicable by such methods as source removal, bioremediation, pump and treat, and natural attenuation; and

(b) to protect the public from exposure to water that does not meet standards through such methods as physical and institutional controls.

(2) In order to accomplish these goals the commissioner may establish an Area of Control when contamination has caused water to exceed the standards in these rules. In establishing an Area of Control, the commissioner shall use the authorities of the remediation statutes and rules to;

(a) describe the extent of an Area of Control; and

(b) protect the public from exposure to the water in the Area of Control.

Where the commissioner identifies the source of pollution or water of sufficient contamination as to warrant contaminant mass reduction, he may further prescribe the actions to be taken to reduce the levels of contamination within the Area of Control.

(3) The commissioner may establish such an Area of Control for water contaminated by human activity prior to November 19, 1980 if there are no liable parties as defined in T.C.A. § 68-212-202 (3) (B), (C), or (D) and the current property owner did not cause the water contamination. This could be done in conjunction with imposing land use restrictions to protect the public from any harm caused by the site whether or not the department expends funds to remediate the site. In establishing such an Area of Control, the commissioner may use the authorities of the remediation statutes and rules to:

(a) describe the extent of an Area of Control;

(b) prescribe the actions to be taken to reduce the levels of contamination within the Area of control; and

(c) protect the public from exposure to the water in the Area of Control.

(4) Any current or future "alternate concentration limit" or "ground water protection standard" established within a Tennessee Hazardous Waste Management enforceable document in accordance with Tennessee Rule ~~Chapter 1200-1-11-.06~~ 0400-12-01-.06 identifies an Area of Control in accordance with this Rule. Compliance with the enforceable document constitutes compliance with the remediation actions identified in paragraph (1) of this Rule.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.11 Classified Site Specific Impaired Ground Water and Respective Criteria

The following ground water is classified as site specific impaired ground water with the respective criteria:

(1) Porter Cable

(a) Description of the site

The area of ground water classified is the ground water within the boundaries of the Porter Cable/Rockwell facility that is within the rectangle with the following boundary points to a depth equivalent to 250 feet mean sea level.

Northwest boundary point...35°44'27.5"N, 88°51'19.8"W

Northeast boundary point ...35°44'27.5"N, 88°51'05.7"W

Southwest boundary point...35°44'13.8"N, 88°51'19.8"W

Southeast boundary point... 35°44'13.8"N, 88°51'05.7"W

A solvent plume under the western edge of the building is moving very slowly to the north-northwest. Since the plant began operation in the mid-1970's, the plume has migrated approximately 400 feet, with the property boundary another 1500 feet down gradient. Sampling has shown that the plume is degrading to a certain extent by natural and biologic processes, and this process can be enhanced with the addition of nutrients to fuel the biologic activity in the contaminated zone.

(b) Criteria

Nutrient addition is allowed to promote enhanced natural attenuation of the plume in accordance with the remediation remedy being used at the site. Deed restrictions will insure the site will not be used as residential and that ground water will not be used for potable purposes. The point of classification change is totally within the boundaries of the Porter-Cable facility. The plume shall

not cross the point of classification change at levels exceeding general use criteria.

(2) Isabella Mine Pit

(a) Description of the site

The area of ground water classified is the ground water in mined areas of the former Isabella/Eureka Mine, the connected Isabella pit, ground water between the Isabella pit and North Potato Creek, and an approximate 500 foot buffer around the mined areas. This ground water classification applies to part of the land that was previously abandoned by the bankruptcy court and is now either under control of a court-appointed receiver or trustee for the Irrevocable Trust of the Tennessee Chemical company (receiver or trustee). If the 500 foot buffer boundary would extend beyond a property line, then the property line shall be the point of classification change. The depth of ground water classification is from ground surface to 1400 feet. The mined areas are delineated as shown on the former mining company's mine maps. The point of classification change for this area is the outer boundary of the area classified as described above and a depth of 1400 feet.

There is a bulkhead or plug between the Isabella/Eureka Mine and the Burra Burra Mine and this Site Specific Impaired classification includes the drift between the Isabella and Burra Burra Mines on the Isabella side of the drift plug but does not apply to water in the Burra Burra Mine. The drift does not require a 500-foot wide buffer zone.

(b) Criteria

The Site Specific Impaired Ground Water criteria for the water in the Isabella pit, associated Isabella/Eureka mine workings, and ground water between the Isabella pit and North Potato Creek shall be:

1. Any concentration of inorganic constituents or elements associated with acid mine drainage and any pH or other physical standard associated with acid mine drainage;

2. Any concentration of inorganic constituents or elements associated with approved backfilling or addition of ore, waste rock, calcine, concentrate, granulated slag, tailings, or other acid-generating materials from historic mining and ore beneficiation processes in the Copper Basin;

3. Criteria for other constituents are those required for General Use Ground Water as of November 3, 2004;

4. The continued use of institutional controls to avoid the potential for human contact with this ground water; and

5. Institute a monitoring program, acceptable to TDEC, that monitors the water level in the pit and is sufficient to assure protection of human health and the environment.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-03-.12 Reporting Requirement

(1) The board acknowledges that the General Assembly has given it the authority to promulgate rules for the prevention, control, and abatement of pollution in T.C.A. § 69-3-105(b). The board finds a necessary first step toward controlling and abating pollution is becoming aware of the situation. This is especially needed in the case of ground water, as it is not in plain view as surface water often is. Furthermore, once the department has documents relating to an instance of pollution, they are generally going to be open to the public. Making the public aware of pollution both increases the likelihood that the pollution will be abated and that the public will be able to take appropriate action to reduce harmful exposure. These findings, in addition to the provision of T.C.A. § 69-3-114(b) making it unlawful to refuse to furnish any information required by the Board, are the basis for the requirement stated in paragraph (2) of this rule.

(2) Owners or prospective purchasers of property used for commercial or industrial purposes who test the

ground water or perched water on the property shall notify the commissioner of any contamination of such water if it is currently used as potable water and it exceeds general use criteria or if an environmental professional engaged by such owner or prospective purchaser reasonably concludes that it poses some other substantial risk to health or safety, including but not limited to, situations in which vapors released from the water are causing an explosion hazard or a current inhalation hazard with a hazard quotient of greater than 1 or a cancer risk of greater than $1 \times 10^{-6}$

(3) Routine sampling and reporting of ground water or perched water data required by an agency of the Department as part of a regulatory program obligation shall constitute reporting for the purposes of this rule.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

Chapter 1200-04-04
Use Classifications for Surface Waters

Amendments

Chapter 1200-04-04 Use Classifications for Surface Waters is deleted in its entirety and replaced with the following so that, as amended, Chapter 1200-04-04 shall read as follows:

Chapter 1200-04-04
Use Classification for Surface Waters

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Abbreviations for Designated Uses and Trout Streams:

| | |
|---|---|
| Domestic Water Supply | ~~DWS~~ DOM |
| Industrial Water Supply | IWS |
| Fish and Aquatic Life | FAL |
| Trout Stream | TS |
| Naturally Reproducing Trout Stream | NRTS |
| Recreation | REC |
| Livestock Watering and Wildlife | LWW |
| Irrigation | IRR |
| Navigation | NAV |

1200-04-04-.01 Memphis Area Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi River | Mississippi-Tennessee State Line (Mile 714.0) to Upstream End of Loosahatchie Bar (Mile 741.0) | | X | X | X | X | X | X | | |
| McKellar Lake | Mouth on Mississippi R. to Origin | | X | X | X | | | X | | |
| Nonconnah Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Wolf River | Mile 0.0 to 6.7 (L & N Railroad Bridge) | | | X | X | X | X | | | |
| Cypress Creek | Mile 0.0 to origin | | | X | X | X | X | | | |
| Wolf River | Mile 6.7 to Miss.-TN State Line (Mile 77.0) | | X | X | X | X | X | X | | |
| Loosahatchie River | Mile 0.0. to 20.9 (Austin Peay Hwy Bridge) | | | X | X | X | X | | | |
| Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Crooked Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 3.0 of Crooked Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Loosahatchie River | Mile 20.9 (Austin Peay Hwy) to 30.7 | | | X | X | X | X | | | |
| Clear Creek Canal | Mile 0.0 to Origin at Mile 2.6 (Confluence of Hall Creek and Cypress Creek Canal) | | | X | X | X | X | | | |
| Cypress Creek Canal | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Loosahatchie River | Mile 30.7 to 45.5 | | | X | X | X | X | | | |
| Middle Beaver Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| West Beaver Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| East Beaver Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Cypress Creek Canal | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Loosahatchie River | Mile 45.5 to 50.2 | | | X | X | X | X | | | |
| Davis Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Town Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Loosahatchie River | Mile 50.2 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed in the Memphis Area Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-04-.02 Hatchie River Basin

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi River | Mile 741.0 to 820.0 | X | X | X | X | X | X | X | | |
| Hatchie River | Mile 0.0 to Mile 129.0 | X | X | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Alston Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Muddy Canal | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Trib. to Mile 3.1 of Big Muddy Canal | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sugar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Mill Creek | Mile 0.0 to 2.0 | | | X | X | X | X | | | |
| Pugh Creek South | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Mill Creek | Mile 2.0 to Origin | | | X | X | X | X | | | |
| Hatchie River | Mile 129.0 to Mile 131.0 | | X | X | X | X | X | | | |
| Hatchie River | Mile 131.0 to Miss-Tenn State Line (Mile 188.5) | X | X | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cypress Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Tuscumbia River | Mile 0.0 to Miss-Tenn State Line (Mile 10.5) | X | | X | X | X | X | | | |
| Cypress Creek | Mile 0.0 to 14.2 | | | X | X | X | X | | | |
| Cypress Creek | Mile 14.2 to 15.2 | | | X | X | X | X | | | |
| Cypress Creek | Mile 15.2 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed in the Hatchie Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.03 Obion-Forked Deer Basin

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi River | Mile 820.0 to Mile 905.0 (Kentucky State Line) | X | X | X | X | X | X | X | | |
| Obion River | Mile 0.0 to Confluence of North and | | | X | X | X | X | | | |
| | South Fork Obion River (Mile 71.8) | | | X | X | X | X | | | |
| Running Reelfoot Bayou | Mile 0.0 to Reelfoot Lake Spillway | | | X | X | X | X | | | |
| Reelfoot Lake | Entirety | | | X | X | X | X | | | |
| Biffle Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Reeds Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cool Springs Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Fork Obion River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hoosier Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| First Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Grove Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harris Fork Creek | Mile 0.0 to Kentucky-Tennessee State Line | | | X | X | X | X | | | |
| Walnut Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 3.8 of Walnut Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Fork Obion River | Mile 0.0 to 38.9 (Formed at Confluence of Beaver Creek and Crooked Creek) | | | X | X | X | X | | | |
| Mud Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 9.8 of Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 11.0 of Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Brassfield Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 0.5 of Brassfield Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Rutherford Fork | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Carroll Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Wolf Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| E. Fork Wolf Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 27.7 of Rutherford Fork | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Middle Fork Obion River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Buckor Ditch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Pritchett Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bradford Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Reedy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lick Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beaver Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Crooked Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Guins Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Trib. to Mile 9.7 of Guins Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Forked Deer River | Mouth at Obion River Mile 3.3 to Mile 20.3 at Confluence of North and South Fork | | | X | X | X | X | X | | |
| South Fork Forked Deer | Mile 0.0 to 48.8 | | | X | X | X | X | X | | |
| Nixon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Nixon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Old Channel Forked Deer- Trib. at Mile 35.8 | Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Fork Forked Deer River | Mile 48.8 to 70.3 | | | X | X | X | X | X | | |
| North Fork of South Fork Forked Deer River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Johnson Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Anderson Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Turkey Creek | Mile 0.0 to 1.2 | | | X | X | X | X | | | |
| Trib. to Mile 1.0 of Turkey Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Turkey Creek | Mile 1.2 to Origin | | | X | X | X | X | | | |
| South Fork Forked Deer River | Mile 70.3 to Origin | | | X | X | X | X | | | |
| Sugar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Fork Forked Deer River | Mile 0.0 to 5.8 | | | X | X | X | X | X | | |
| North Fork Forked Deer River | Mile 5.8 to 33.9 | | | X | X | X | X | | | |
| Middle Fork Forked Deer River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Mosquito Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Moize Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Dyer Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Mud Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cow Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sand Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| North Fork Forked Deer River | Mile 33.9 to Origin | | | X | X | X | X | | | |
| Trib. to Mile 857.5 of Mississippi River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harris Ditch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed in the Obion-Forked Deer Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified. | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

217

1200-04-04-.04 Tennessee River Basin - Western Valley.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Tennessee River | Mile 49.1 (Tenn-Ky Line) to 215.1 (Tn-Miss Line) | X | X | X | X | X | X | X | | |
| Big Sandy River | Mile 0.0 to 15.1 | | X | X | X | X | X | X | | |
| Big Sandy River | Mile 15.1 to Origin | | X | X | X | X | X | | | |
| West Sandy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Holly Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bailey Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Beaver Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Beaver Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| S. Fk Hurricane Cr | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beaverdam Creek | First bridge above mouth to origin. | | | X | X | X | X | | X | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trace Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cypress Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Indian Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Birdsong Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Wolf Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Eagle Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Morgan Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beech River | Mile 0.0 to 7.2 | X | X | X | X | X | X | X | | |
| Beech River | Mile 7.2 to 27.4 | X | X | X | X | X | X | | | |
| Beech River | Mile 27.4 to 30.4 | | X | X | X | X | X | | | |
| Beech River | Mile 30.4 to Origin | X | X | X | X | X | X | | | |
| Rushing Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harmon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Wolf Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Doe Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| East Prong Doe Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| White Oak Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Horse Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beason Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Fork Beason Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Dollar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beech Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Leatherwood Creek | First bridge to origin | | | X | X | X | X | | X | |
| E. Fork Leatherwood Cr | Mile 0.0 to second tributary | | | X | X | X | X | | X | |
| N. Fork Leatherwood Cr | Mile 0.0 to second tributary | | | X | X | X | X | | X | |
| Town Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Chambers Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed in the Western Valley Tennessee River Basin, with the exception of wet weather conveyances,which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

219

1200-04-04-.05 Duck River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Duck River | Mile 0.0 to 67.0 | X | X | X | X | X | X | | | |
| Blue Creek | Mile 0.0 to 14.0 | X | X | X | X | X | X | | | |
| Blue Creek | Mile 14.0 to 16.2 | | X | X | X | X | X | | | |
| Blue Creek | Mile 16.2 to Origin | | | X | X | X | X | | | |
| Buffalo River | Mile 0.0 to 24.0 | X | X | X | X | X | X | | | |
| Cane Creek | Hickman Co. line to Lewis Co. line | | | X | X | X | X | | X | |
| Buffalo River | Mile 24.0 to 26.0 | | X | X | X | X | X | | | |
| Buffalo River | Mile 26.0 to 38.0 | X | X | X | X | X | X | | | |
| Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sinking Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Buffalo River | Mile 38.0 to 41.1 | | X | X | X | X | X | | | |
| Buffalo River | Mile 41.1 to Origin | X | X | X | X | X | X | | | |
| Green River | Mile 0.0 to 9.0 | X | X | X | X | X | X | | | |
| Green River | Mile 9.0 to 11.7 | | X | X | X | X | X | | | |
| Green River | Mile 11.7 to Origin | X | X | X | X | X | X | | | |
| Rockhouse Creek | Mile 0.0 to 6.0 | X | X | X | X | X | X | | | |
| Rockhouse Creek | Mile 6.0 to 9.5 | | X | X | X | X | X | | | |
| Rockhouse Creek | Mile 9.5 to Origin | X | X | X | X | X | X | | | |
| Little Buffalo River | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Beaverdam Creek | Highway 100 to Sulfur Fork Cr | | | X | X | X | X | | | X |
| Sulfur Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Piney River | Mile 0.0 to Origin | X | X | X | X | X | X | | | X |
| Mill Creek | Mile 0.0 to Origin | X | | X | X | X | X | | X | |
| Little Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Big Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Garner Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Bear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| East Piney River | Mile 0.0 to 4.0 | X | X | X | X | X | X | | | |
| East Piney River | Mile 4.0 to 6.1 | | X | X | X | X | X | | | |
| East Piney River | Mile 6.1 to Origin | X | X | X | X | X | X | | | |
| Defeated Camp Creek | Mile 0.0 to 4.4 | | X | X | X | X | X | | | |
| Defeated Camp Creek | Mile 4.4 to Origin | | | X | X | X | X | | | |
| Defeated Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Duck River | Mile 67.0 to 71.5 | | X | X | X | X | X | | | |
| Duck River | Mile 71.5 to 123.2 | X | X | X | X | X | X | | | |
| Big Bigby Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Sugar Fork | Mile 0.0 to 1.9 | X | X | X | X | X | X | | | |
| Sugar Fork | Mile 1.9 to 2.9 | | X | X | X | X | X | | | |
| Sugar Creek | Mile 0.0 to 0.7 | | X | X | X | X | X | | | |
| Sugar Creek | Mile 0.7 to Origin | X | X | X | X | X | X | | | |
| Quality Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Big Swan Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Little Swan Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Cathey's Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Duck River | Mile 123.2 to 127.2 | | X | X | X | X | X | | | |
| Little Bigby Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Rutherford Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Duck River | Mile 127.2 to 217.0 | X | X | X | X | X | X | | | |
| Big Rock Creek | Mile 0.0 to 14.0 | X | X | X | X | X | X | | | |
| Big Rock Creek | Mile 14.0 to 16.9 | | X | X | X | X | X | | | |
| Big Rock Creek | Mile 16.9 to Origin | X | X | X | X | X | X | | | |
| Duck River | Mile 217.0 to 221.3 | | X | X | X | X | X | | | |
| Duck River | Mile 221.3 to 244.0 | X | X | X | X | X | X | | | |
| Duck River | Mile 244.0 to 248.6 (Normandy Dam) | X | | X | X | X | X | | X | |
| Duck River | Mile 248.6 to 266.5 | X | X | X | X | X | X | | | |
| Garrison Fork Creek | Mile 0.0 to 2.7 | X | X | X | X | X | X | | | |
| Garrison Fork Creek | Mile 2.7 to 3.3 | | X | X | X | X | X | | | |
| Garrison Fork Creek | Mile 3.3 to Origin | X | X | X | X | X | X | | | |
| Duck River | Mile 266.5 to 268.5 | | X | X | X | X | X | | | |
| Duck River | Mile 268.5 to Origin | X | X | X | X | X | X | | | |
| Little Duck River | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| All other surface waters named and unnamed in the Duck River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

221

1200-04-04-.06 Elk River Basin (including Shoal Creek).

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Shoal Creek | Tenn-Ala State Line (Mile 20.6) to Mile 56.9 | X | X | X | X | X | X | | | |
| Clack Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Loretto Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Little Shoal Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Shoal Creek | Mile 56.9 to Origin (Jct of B. Dry Branch & Beeler Fk) | | X | X | X | X | X | | X | |
| Factory Creek | Mile 0.0 to Origin | X | | X | X | X | X | | X | |
| Chisholm Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Crowson Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Elk River | Tenn-Ala State Line (Mile 33.6) to 36.3 | X | X | X | X | X | X | X | | |
| Elk River | Mile 36.3 to 90.5 | X | X | X | X | X | X | | | |
| Richland Creek | Mile 0.0 to 20.0 | | X | X | X | X | X | | | |
| Buchannan Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Richland Creek | Mile 20.0 to 23.3 | | | X | X | | X | | | |
| Richland Creek | Mile 23.3 to Origin | X | X | X | X | X | X | | | |
| Pigeon Roost Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Robertson Fork | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Holland Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Elk River | Mile 90.5 to 119.0 ~~133.3 (Tims Ford Dam)~~ | X | X | X | X | X | X | | ~~X~~ | |
| Mulberry Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| East Fork Mulberry Cr. | Mile 0.0 to 11.1 | | X | X | X | X | X | | | |
| East Fork Mulberry Cr. | Mile 11.1 to Origin | X | X | X | X | X | X | | | |
| Spring Branch | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Elk River | Mile 119.0 to 133.3 (Tims Ford Dam) | X | X | X | X | X | X | | X | |
| Elk River | Mile 133.3 to Origin | X | X | X | X | X | X | | | |
| Beans Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Factory Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Mathias Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Hurricane Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Boiling Fork Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Wagner Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Rock Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Rollins Creek | Mile 0.0 to 2.5 | X | X | X | X | X | X | | | |
| Rollins Creek | Mile 2.5 to Origin | | | X | X | X | X | | | |
| Mud Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Caldwell Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |

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| STREAM | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|
| All other surface waters named and unnamed in the Elk River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

223

1200-04-04-.07 Lower Tennessee River Basin (including Conasauga River).

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Tennessee River | Tenn-Ala State Line (Mile 416.5) to the POT Light (Mile 448.0) | X | X | X | X | X | X | X | | |
| Unnamed Tributary | At Tenn. River Mile 417.5; Mile 0.0 to Origin | | | X | X | X | X | | | |
| Battle Creek | Mile 0.0 to 17.3 (Martin Spring) | X | X | X | X | X | X | | X | |
| Swedens Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Big Fiery Gizzard | Mile 0.0 to 4.5 | | | X | X | X | X | | | |
| Little Fiery Gizzard | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Trib. | At Little Fiery Gizzard Mile 0.6; Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Fiery Gizzard | Mile 4.5 to 5.5 | | | X | X | X | X | | X | |
| Big Fiery Gizzard | Mile 5.5 to Origin | | | X | X | X | X | | | |
| Battle Creek | Mile 17.3 to Origin | X | X | X | X | X | X | | | |
| Sequatchie River | Mile 0.0 to 3.5 | X | X | X | X | X | X | X | | |
| Sequatchie River | Mile 3.5 to 41.0 | X | X | X | X | X | X | | | |
| Little Sequatchie River | Mile 0.0 to confluence of Sawmill Creek | | | X | X | X | X | | | |
| Little Sequatchie River | Confluence of Sawmill Creek to confluence of Grays Creek | | X | X | X | X | | X | | |
| Little Sequatchie River | Confluence of Grays Creek to Origin | | | X | X | X | X | | | |
| Pocket Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Clifty Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sewanee Creek | Mile 0.0 to 4.0 | | | X | X | X | X | | | |
| Sewanee Creek | Mile 4.0 to Origin | X | | X | X | X | X | | | |
| Holywater Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Scott Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Coops Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sequatchie River | Mile 41.0 to 43.9 | | | X | X | X | X | | | |
| Sequatchie River | Mile 43.9 to 74.0 | X | X | X | X | X | X | | | |
| Sequatchie River | Mile 74.0 to 78.4 | | | X | X | X | X | | | |
| Sequatchie River | Mile 78.4 to 105.9 | X | X | X | X | X | X | | | |
| Sequatchie River | Mile 105.9 to 108.9 | X | X | X | X | X | X | | X | |
| Sequatchie River | 108.8 to Origin | | | X | X | X | X | | | |
| Tennessee River | Mile 448.0 to 460.6 (Chattanooga Creek) | | X | X | X | X | X | X | | |
| Shoal Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Tenn. River Mile 458.7; Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lookout Creek | Mile 0.0 to Georgia-Tenn State Line | | X | X | X | X | X | | | |
| Black Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Chattanooga Creek | Mile 0.0 to Georgia-Tenn State Line | | X | X | X | X | X | | | |
| Tennessee River | Mile 460.6 to 499.4 (Hiwassee) | X | X | X | X | X | X | X | | |
| Citico Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| South Chickamauga Creek | Mile 0.0 to Georgia-Tenn State Line | | X | X | X | X | X | | | |
| Friar Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| West Chickamauga Creek | Mile 0.0 to Georgia-Tenn State Line | | X | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to Georgia-Tenn State Line | | X | X | X | X | X | | | |
| Mackey Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Ryall Springs Br. | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Tenn. River Mile 469.2; Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Chickamauga Creek | Mile 0.0 to 13.2 | | | X | X | X | X | | | |
| Unnamed Tributary | At N. Chickamauga Creek Mile 0.7; Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Chickamauga Creek | Mile 13.2 to 15.0 | | | X | X | X | X | | X | |
| North Chickamauga Creek | Mile 15.0 to Origin | | | X | X | X | X | | | |
| Wolftever Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sale Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Roaring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Brush Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hiwassee River | Mile 0.0 to 23.9 | X | X | X | X | X | X | X | | |
| Candies Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Mouse Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Chatata Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Chatata Cr. | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Chestuee Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Middle Creek | Mile 0.0 to 1.9 | | | X | X | X | X | | | |
| Middle Creek | Mile 1.9 to Origin | X | | X | X | X | X | | | |
| Ocoee River | Mile 0.0 to Benton Station Bridge | X | X | X | X | X | X | | X | |
| Ocoee River | Benton Station Bridge to mile 17.0 | X | X | X | X | X | X | | | |
| Sylco Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Dutch Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Greasy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Rock Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Clear Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Ocoee River | Mile 17.0 to Ocoee #3 Powerhouse | | X | X | X | X | X | | | |
| Caney Creek (East Fork) | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Goforth Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Ocoee River | Ocoee #3 Powerhouse to Rock Creek | | X | X | X | X | X | | X | |
| Rock Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Ocoee River | Rock Creek to mile 37.9 (Georgia-Tenn State Line) | | X | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Rough Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| West Fork Rough Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| North Potato Creek | Mile 0.0 to North Carolina-Tenn State Line) | | | X | X | X | X | | | |
| Burra Creek | Mile 0.0 to 1.5 | | | X | X | X | X | | | |
| Brush Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Belcher Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Deweese Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Conasauga Creek | Mile 0.0 to Cog Hill Mill Dam | | | X | X | X | X | | X | |
| Conasauga Creek | Cog Hill Mill Dam to Ruralville Mill | | | X | X | X | X | | | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Crockett Spring Cr | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Conasauga Creek | Ruralville Mill to Origin | | | X | X | X | X | | X | |
| Gee Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Yellow Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Big Lost Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Little Lost Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Smith Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Wolf Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Turtletown Creek | Mile 0.0 to N. Carolina Line | | | X | X | X | X | | X | |
| Brushy Creek | Mile 0.0 to N. Carolina Line | | | X | X | X | X | | X | |
| Coker Creek | Joe Brown Highway to Origin | | | X | X | X | X | | X | |
| Hiwassee River | Mile 23.9 to 34.4 | X | X | X | X | X | X | X | | |
| North Mouse Creek | Mile 0.0 to 10.0 | X | X | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to 18.7 | | X | X | X | X | X | | | |
| Spring Creek | Mile 18.7 to Origin | | | X | X | X | X | | | |
| Dry Valley Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Mouse Creek | Mile 10.0 to 30.1 | | X | X | X | X | X | | | |
| Little North Mouse Cr. | Mile 0.0 to 4.1 | | | X | X | X | X | | | |
| Little North Mouse Cr. | Mile 4.1 to Origin | | | X | X | X | X | | | |
| North Mouse Creek | Mile 30.1 to Origin | | | X | X | X | X | | | |
| Oostanaula Creek | Mile 0.0 to 26.0 | X | X | X | X | X | X | | | |
| Oostanaula Creek | Mile 26.0 to 28.0 | | X | X | X | X | X | | | |
| Oostanaula Creek | Mile 28.0 to 33.8 | | X | X | X | X | X | | | |
| Oostanaula Creek | Mile 33.8 to 37.5 | X | X | X | X | X | X | | | |
| Oostanaula Creek | Mile 37.5 to Origin | | | X | X | X | X | | | |
| Hiwassee River | Mile 34.4 to 64.9 (North Carolina Line) | X | X | X | X | X | X | | X | |
| All other surface waters named and unnamed in the Lower Tennessee River Basin, with the exception of wet weather | | | | X | X | X | X | | | |

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conveyances, which have not been specifically noted shall be classified

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-04-.08 Upper Tennessee River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Tennessee River | Mile 499.4 (Hiwassee) to 567.8 (Clinch) | X | X | X | X | X | X | X | | |
| Richland Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Little Richland Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Broyles Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Piney River | Mile 0.0 to 5.5 | | X | X | X | X | X | X | | |
| Piney River | Mile 5.5 to 6.5 (U.S. Hwy. 27 Bridge) | X | X | X | X | X | X | | | |
| Piney River | Mile 6.5 to Origin | | X | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Whites Creek | Mile 0.0 to 5.1 | | | X | X | X | X | X | | |
| Whites Creek | Mile 5.1 to Origin | | | X | X | X | X | | | |
| Black Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Caney Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Post Oak Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cardiff Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clear Creek | Mile 0.0 to 3.0 | | | X | X | X | X | | X | |
| Tennessee River | Mile 567.8 to 601.1 | X | X | X | X | X | X | X | | |
| Martin Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Stamp Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Greenbriar Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hines Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sweetwater Creek | Mile 0.0 to 9.4 | X | X | X | X | X | X | | | |
| Bacon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sweetwater Creek | Mile 9.4 to 19.0 | | | X | X | X | X | | | |
| Sweetwater Creek | Mile 19.0 to 21.0 | X | | X | X | X | X | | | |
| Sweetwater Creek | Mile 21.0 to Origin | X | X | X | X | X | X | | | |
| Unnamed Spring Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Tennessee River | Mile 0.0 to 19.0 | X | X | X | X | X | X | X | | |
| Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bat Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Tellico River | Mile 0.0 to 5.0 | X | X | X | X | X | X | X | | |
| Tellico River | Mile 5.0 to 28.0 | X | X | X | X | X | X | | | |
| Ballplay Creek | Upper 7 miles | | | X | X | X | X | | X | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Tellico River | Mile 28.0 to 41.0 | X | | X | X | X | X | | X | |
| Wildcat Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Turkey Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Bald River | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Kirkland Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Henderson Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Barrett Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Service Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Brookshire Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| North River | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Long Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Hemlock Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| McNabb Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Big Cove Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Round Mountain Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Service Tree Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sugar Cove Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Meadow Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Roaring Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Indian Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Panther Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tellico River | Mile 41.0 to 50.0 (TN - NC Line) | X | X | X | X | X | X | | | X |
| Sycamore Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rough Ridge Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Tennessee River | Mile 19.0 to 30.0 | X | X | X | X | X | X | X | X | |
| Citico Creek | Mile 4.5 to 16.0 | | | X | X | X | X | | X | |
| Jakes Creek | Mile 0.0 to 3.0 | | | X | X | X | X | | | X |
| Slide Hollow | Mile 0.0 to 2.0 | | | X | X | X | X | | X | |
| Little Citico Creek | Mile 0.0 to 3.5 | | | X | X | X | X | | | X |
| Jake Best Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Doublecamp Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Mill Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Flint Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Crowder Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Citico Creek | Mile 16.0 to Origin | | | X | X | X | X | | | X |
| N. Fk Citico Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Indian Valley Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| South Fork Citico Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Ike Camp Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Falls Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Cochran Creek | Mile 0.0 to mile 2.0 | | | X | X | X | X | | X | |
| Abrams Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Panther Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Bell Cove Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Kingfisher Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Buckshank Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Rabbit Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Hannah Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Peckerwood Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Wilson Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Stony Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Arbutus Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Forge Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Coalen Ground Br | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Bower Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tipton Sugar Cove | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Ekanneetlee Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tater Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| McCaulley Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Rowans Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Anthony Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Shop Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tabcat Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Parson Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Bible Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Slickrock Creek | Tennessee portion | | | X | X | X | X | | | X |
| Little Slickrock Cr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Tennessee River | Mile 30.0 to 49.7 (TN.-N.C. Line) | X | X | X | X | X | X | | X | |
| Morgan Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Abrams Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| First Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Tennessee River | Mile 601.1 to 636.6 (Little River) | X | X | X | X | X | X | X | | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Gallagher Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Turkey Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sinking Creek #1 | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Ten Mile Creek | From Sink to Origin | | | X | X | X | X | | | |
| Sinking Creek #2 | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Trib. | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lackey Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Little River | Mile 0.0 to 33.0 | X | X | X | X | X | X | | | |
| Polecat Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Stock Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| McCall Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Russell's Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Pistol Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Duncan Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Culton Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Tedford Br | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hesse Creek | Upper 5 miles | | | X | X | X | X | | X | |
| Cane Creek | Upper 2.0 miles | | | X | X | X | X | | X | |
| Beard Cane Cr | Upper 1.5 miles | | | X | X | X | X | | X | |
| Little River | Mile 33.0 to Origin | X | | X | X | X | X | | | X |
| M. Pr. Little River | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| W. Prong Little R. | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Meadow Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Spruce Flats Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sams Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Thunderhead Pr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Shut-in Cr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Lynn Camp Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Marks Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Meigs Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Greenbriar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Mannis Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Blanket Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Shields Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Jakes Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Newt Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Fish Camp Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Goshen Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Silers Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rich Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rough Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Meigs Post Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Grouse Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tennessee River | Mile 636.6 to 638.6 | X | X | X | X | X | X | X | | |
| Tennessee River | Mile 638.6 to 640.0 | | X | X | X | X | X | X | | |
| Tennessee River | Mile 640.0 to 643.4 | X | X | X | X | X | X | X | | |
| Tennessee River | Mile 643.4 to 646.4 | | X | X | X | X | X | X | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Tennessee River | Mile 646.4 to 652.2 | X | X | X | X | X | X | X | | |
| Knob Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Flenniken Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Fourth Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Third Creek | Mile 0.0 to 4.9 | | | X | X | X | X | | | |
| Third Creek | Mile 4.9 to Origin | X | X | X | X | X | X | | | |
| Second Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| First Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| All other surface water named and unnamed in the Upper Tennessee River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.09 Clinch River Basin

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Clinch River | Mile 0.0 to 4.4 (Emory River) | X | X | X | X | X | X | X | | |
| Emory River | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Little Emory River | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Middle Fork Little Emory River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Davis Branch | Mile 0.0 to 0.2 | | | X | X | X | X | | | |
| Unnamed Tributary | At Emory River (Mile 16.4); Mile 0.0 to 1.0 | | | X | X | X | X | | | |
| Crooked Fork Creek | Mile 0.0 to 4.9 | | | X | X | X | X | | | |
| Unnamed Tributary | At Crooked Fork Creek (Mile 4.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Crooked Fork Creek | Mile 4.9 to Origin | X | | X | X | X | X | | | |
| Flat Fork Creek | Mile 0.0 to Origin | X | | X | X | X | X | | X | |
| Unnamed Tributary | At Flat Fork (Mile 2.3); Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Stockstill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Obed River | Mile 0.0 to 40.1 | | | X | X | X | X | | | |
| Daddy's Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Basses Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Fox Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Scantling Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Trib. | At Scantling Branch (Mile 1.2); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Obed River (Mile 34.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Obed River | Mile 40.1 to Origin | X | X | X | X | X | X | | | |
| Unnamed Tributary | At Obed River (Mile 45.4); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 4.4 to 12.0 (Poplar Creek) | X | X | X | X | X | X | X | | |
| Poplar Creek | Mile 0.0 to 0.5 | | X | X | X | X | X | | | |
| Poplar Creek | Mile 0.5 to Origin | | | X | X | X | X | | | |
| East Fork Poplar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Indian Creek | At Poplar Creek (Mile 14.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 12.0 to 20.0 | X | X | X | X | X | X | | | |
| White Oak Creek | Mile 0.0 to Origin | | | X | X | | X | | | |
| Melton Branch | Mile 0.0 to Origin | | | X | X | | X | | | |
| Clinch River | Mile 20.0 to 39.6 | X | X | X | X | X | X | X | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Beaver Creek | Mile 0.0 to 8.4 | X | X | X | X | X | X | | | |
| Beaver Creek | Mile 8.4 to 10.4 | | X | X | X | X | X | | | |
| Beaver Creek | Mile 10.4 to 17.5 | X | X | X | X | X | X | | | |
| Beaver Creek | Mile 17.5 to 17.9 | | X | X | X | X | X | | | |
| Beaver Creek | Mile 17.9 to 21.6 | X | X | X | X | X | X | | | |
| Beaver Creek | Mile 21.6 to 23.6 | | | X | X | X | X | | | |
| Beaver Creek | Mile 23.6 to 29.4 | X | X | X | X | X | X | | | |
| Beaver Creek | Mile 29.4 to 31.4 | | | X | X | X | X | | | |
| Beaver Creek | Mile 31.4 to Origin | X | X | X | X | X | X | | | |
| Unnamed Tributary | At Beaver Creek (Mile 44.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 39.6 to 41.1 | X | X | X | X | X | X | X | | |
| Scarboro Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 41.1 to 46.7 | X | X | X | X | X | X | X | | |
| Bull Run Creek | Mile 0.0 to 1.0 | | | X | X | X | X | | | |
| Bull Run Creek | Mile 1.0 to Origin | X | | X | X | X | X | | | |
| Nelson Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Blaze Branch | At Nelson Branch (Mile 5.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 46.7 to 47.8 | X | X | X | X | X | X | X | | |
| Worthington Branch | At Clinch River (Mile 47.8); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 47.8 to 50.7 | X | X | X | X | X | X | X | | |
| Braden Branch | At Clinch River (Mile 50.7); Mile 0.0 to 1.7 | | | X | X | | X | | | |
| Braden Branch | Mile 1.7 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 50.7 to 51.1 | X | X | X | X | X | X | X | | |
| Unnamed Tributary | At Clinch River (Mile 51.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 51.1 to 61.5 | X | X | X | X | X | X | X | | |
| Clinch River | Mile 61.5 to 66.2 | X | X | X | X | X | X | | | |
| Hinds Creek | At Clinch River (Mile 65.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Buffalo Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 66.2 to 79.8 | X | X | X | X | X | X | | X | |
| Cane Creek | At Clinch River (Mile 71.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Blowing Spring Fork | At Cane Creek (Mile 1.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Coal Creek | At Clinch River (Mile 75.0); Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Unnamed Tributary | At Coal Creek (Mile 8.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clinch River | Mile 79.8 to 202.1 (Virginia Stateline) | X | X | X | X | X | X | | | |
| Cove Creek | Mile 0.0 to 15.1 | X | X | X | X | X | X | | | |
| Unnamed Tributary | At Cover Creek (Mile 13.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cove Creek | Mile 15.1 to 16.1 | | X | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Cove Creek | Mile 16.1 to Origin | X | X | X | X | X | X | | | |
| Bruce (Brush) Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Dog Creek | At Bruce Creek (Mile 0.9); Mile 0.0 toOrigin | | | X | X | X | X | | | |
| Unnamed Trib. | At Dog Creek (Mile 2.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Creek | At Clinch River (Mile 83.0); Mile 0.0 to 15.6 | X | X | X | X | X | X | | | |
| Big Creek | Mile 15.6 to 17.6 | | X | X | X | X | X | | | |
| Big Creek | Mile 17.6 to Origin | | | X | X | X | X | | | |
| Ollis Creek | At Big Creek (Mile 20.4); Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Powell River | At Clinch River (Mile 88.8); Mile 0.0 to 115.7 | X | X | X | X | X | X | | | |
| Gap Creek | At Powell River (Mile 57.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Spring Br. | From Sinkhole to Origin | | | X | X | X | X | | | |
| Russell Creek | At Powell River (Mile 82.4); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clear Creek | Mile 0.0 to 2.0 | | | X | X | X | X | | X | |
| White Creek | Mile 0.0 to 2.0 | | | X | X | X | X | | X | |
| Mill Creek | At Clinch River (Mile 98.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Byram's Creek | At Mill Creek (Mile 0.5); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Byram's Creek (Mile 2.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Ball Creek | Mile 0.0 to Origin | X | | X | X | X | X | | X | |
| Poorland Creek | At Clinch River (Mile 104.2); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Dry Tributary | At Poorland Creek (Mile 2.5); Mile 0.0 to Waste Outfall | | | X | X | | X | | | |
| Hunting Creek | At Clinch River (Mile 118.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Hunting Creek (Mile 2.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big War Creek | At Clinch River (Mile 164.4); Mile 0.0 to 8.0 | | | X | X | X | X | | | |
| Flat Gap Creek | At Big War Branch (Mile 7.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big War Creek | Mile 8.0 to Origin | | | X | X | X | X | | | |
| North Fork Clinch River | At Clinch River (Mile 192.0); Mile 0.0 to 2.2 | | | X | X | X | X | | X | |
| All other surface waters named and unnamed in the Clinch River Basin, with the exception of wet weather conveyances, which have not been specifically treated shall be classified | | | | X | X | X | X | | | |

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Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

1200-04-04-.10 French Broad River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| French Broad River | Mile 0.0 to 102.2 (N. Carolina-Tenn Line) | X | X | X | X | X | X | | | |
| Hines Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Unnamed Tributary | At Hines Creek (Mile 1.7) | | | X | X | | X | | | |
| Unnamed Tributary | At Hines Creek (Mile 3.7) | | | X | X | | X | | | |
| Cement Mill Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Boyds Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Unnamed Tributary | At Boyds Creek (Mile 9.7) | | | X | X | | X | | | |
| Unnamed Tributary | At Boyds Creek (Mile 11.5) | | | X | X | | X | | | |
| Little Pigeon River | Mile 0.0 to 2.9 | X | X | X | X | X | X | | | |
| Gist (Guess) Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Pigeon River | Mile 2.9 to 4.8 | | X | X | X | X | X | | | |
| W. Prong Little Pigeon R. | Mile 0.0 to 4.5 | X | X | X | X | X | X | | | |
| W. Prong Little Pigeon R. | Mile 4.5 to 7.9 | X | X | X | X | X | X | | X | |
| W. Prong Little Pigeon R. | Mile 7.9 to 8.8 | | X | X | X | X | X | | X | |
| W. Prong Little Pigeon R. | Mile 8.8 to 13.0 | X | X | X | X | X | X | | X | |
| W. Prong Little Pigeon R. | Mile 13.0 to 14.0 | | X | X | X | X | X | | X | |
| W. Prong Little Pigeon R. | Mile 14.0 to 19.0 | | X | X | X | X | X | | X | |
| Dudley Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Little Dudley Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Roaring Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Baskins Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Norton Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Leconte Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| W. Prong Little Pigeon R. | Mile 19.0 to Origin | X | | X | X | X | X | | | X |
| Twomile Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Fighting Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sugarland Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Big Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Road Prong | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Cole Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Alum Cave Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Walker Camp Pr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Pigeon River | Mile 4.8 to 20.3 | X | X | X | X | X | X | | | |
| Little Pigeon River | Mile 20.3 to Origin | X | | X | X | X | X | | X | |
| E.F. Little Pigeon R. | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Dunn Creek | Mile 0.0 to 15.8 | X | X | X | X | X | X | | X | |
| Dunn Creek | Mile 15.8 to Origin | X | X | X | X | X | X | | | X |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Ogle Springs Br | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bird Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Webb Creek | Mile 0.0 to Great Smoky Mtns Pk Boundary (Mile 5.8) | | | X | X | X | X | | X | |
| Soak Ash Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Timothy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Redwine Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Noisy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Texas Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Webb Creek | Great Smoky Mts boundary to origin | | | X | X | X | X | | | X |
| Copeland Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Injun Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Rhododendron Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Porters Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| False Gap Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Kalanu Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Long Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Cannon Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Lowes Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Boulevard Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Shutts Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Middle Prong Little Pigeon | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Ramsey Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Chapman Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Eagle Rocks Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Lost Prong | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Buck Fork | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Muddy Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clear Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| City Spring Tributary | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Indian Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Ball Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Ball Creek (Mile 2.9); Mile 0.0 to Origin | | | X | X | | X | | | |
| Leadvale Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Clear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Nolichucky River | Mile 0.0 to 5.3 | X | X | X | X | X | X | | | |
| Long Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sinking Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Nolichucky River | Mile 5.3 to 7.7 | | X | X | X | X | X | | | |

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Nolichucky River | Mile 7.7 to 100.8 (N. Carolina-Tenn Line) | X | X | X | X | X | X | | | |
| Slate Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bent Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Mud Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Williams Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lick Creek | Mile 0.0 to 49.0 | | X | X | X | X | X | | | |
| Lick Creek | Mile 49.0 to Origin | X | X | X | X | X | X | | | |
| Black Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| War Branch | Mile 0.0 to 0.5 | | | X | X | X | X | | | |
| Unnamed Tributary | At Lick Creek (Mile 36.1); Mile 0.0 to Origin | | | X | X | | X | | | |
| Little Chucky Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Mosheim Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Trib. | At Mosheim Branch (Mile 2.0); Mile 0.0 to Origin | | | X | X | | X | | | |
| Unnamed Tributary | At Little Chucky Creek (Mile 17.2); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Gap Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Furness Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cove Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Flag Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Richland Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Crazy Creek | Sinkhole to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At Crazy Creek (Mile 1.3); Mile 0.0 to 0.5 | | | X | X | X | X | | | |
| Unnamed Tributary | Mile 0.5 to Origin | | | X | X | | X | | | |
| Camp Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | X |
| Jennings Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Dry Creek | Mile 0.0 to 1.3 | | | X | X | X | X | | | |
| Dry Creek | Mile 1.3 to Origin | | | X | X | X | X | | | X |
| Davis Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| College Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Moon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sinking Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Limestone Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Horse Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Squibb Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Cassi Creek, East and West Fork | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Painter Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Clarks Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Devil Fork Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Long Arm Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Chigger Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Dry Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Ramsey Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Briar Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Straight Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Bumpus Cove Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Broad Shoal Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| California Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| North Indian Creek | Upstream of Erwin | X | X | X | X | X | X | | | X |
| Rock Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Duck Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Red Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Clear Fork Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| South Indian Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Granny Lewis Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Lower Higgins Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Birchfield Camp Br | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Big Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Spivey Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Coffee Ridge Cr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Watts Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tumbling Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rocky Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Flint Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Devil Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sams Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Upper Higgins Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| E. Fk Higgins Cr | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rice Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Jones Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Long Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Pigeon River | Mile 0.0 to 25.9 (Tenn-N. Car. Line) | | X | X | X | X | X | | | |
| Matthew Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Sinking Creek | Mile 0.0 to 5.2 | | X | X | X | X | X | | | X |
| Sinking Creek | Mile 5.2 to Origin | X | | X | X | X | X | | X | |
| Cosby Creek | Mile 0.0 to 4.3 | | | X | X | X | X | | X | |
| Cosby Creek | Mile 4.3 to Origin | | | X | X | X | X | | | X |
| N. Fork Bogard Cr | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Indian Camp Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Gulf Fork Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Trail Fork Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Dry Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Bailey Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Bear Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Laurel Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Moss Camp Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Deep Gap Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| M. Prong Gulf Fork | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Brown Gap Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tom Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Wolf Creek | Mile 0.0 to 2.0 | | | X | X | X | X | | X | |
| Wolf Creek | Mile 2.0 to Origin | | | X | X | X | X | | | X |
| Brush Creek | Mile 0.0 to 1.0 | | | X | X | X | X | | X | |
| Paint Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| All other surface waters named and unnamed in the French Broad River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.11 Holston River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Holston River | Mile 0.0 to 131.5 (Church Hill Bridge) | X | X | X | X | X | X | | | |
| Unnamed Branch | At Holston River (Mile 1.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sand Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Swan Pond Creek | Mile 0.0 to 5.0 | | | X | X | X | X | | | |
| Pratt Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Woods Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Holston River (Mile 6.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Maccash Branch | At Holston River (Mile 10.8); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Roseberry Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Roseberry Creek (Mile 1.7); Mile 0.0 to 0.5 | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.5 to 0.7 | | | X | X | X | X | | | |
| Big Flat Creek | Mile 0.0 to 8.0 | | X | X | X | X | X | | | |
| Little Flat Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Tributary | At L. Flat Creek (Mile 1.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Flat Creek | Mile 8.0 to Origin | | | X | X | X | X | | | |
| Lyon Creek | Mile 0.0 to 0.3 | | X | X | X | X | X | | | |
| Lyon Creek | Mile 0.3 to 1.9 | | X | X | X | X | X | | | |
| Unnamed Branch | At Lyon Creek (Mile 1.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lyon Creek | Mile 1.9 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Lyon Creek (Mile 2.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Richland Creek | At Holston River (Mile 27.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beaver Creek | At Holston River (Mile 30.4); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lost Creek at New Market | Sink at Mile 1.9 to Origin | | | X | X | X | X | | | |
| Buffalo Creek | Below Buffalo Springs | | | X | X | X | X | | X | |
| Mossy Creek | At Holston River (Mile 52.4); Mile 0.0 to 3.9 | X | X | X | X | X | X | | | |
| Mossy Creek | Mile 3.9 to Origin | | X | X | X | X | X | | X | |
| Unnamed Branch | At Holston River (Mile 55.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| German Creek | At Holston River (Mile 70.2); Mile 0.0 to 8.1 | X | X | X | X | X | X | | | |
| German Creek | Mile 8.1 to Origin | | | X | X | X | X | | | |
| Turkey Creek | At Holston River (Mile 75.2); Mile 0.0 to 1.2 | X | X | X | X | X | X | | | |
| Turkey Creek | Mile 1.2 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Spring Creek | At Holston River (Mile 76.0); Mile 0.0 to 1.2 | X | X | X | X | X | X | | | |
| Spring Creek | Mile 1.2 to Origin | | | X | X | X | X | | | |
| Thompson Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Fall Creek | At Holston River (Mile 80.7); Mile 0.0 to 1.0 | X | X | X | X | X | X | | | |
| Fall Creek | Mile 1.0 to Origin | | | X | X | X | X | | | |
| Poor Valley Creek | At Holston River (Mile 89.2); Mile 0.0 to 6.8 | X | X | X | X | X | X | | | |
| Mooresburg Branch | Mile 0.0 to 1.6 | X | X | X | X | X | X | | | |
| Mooresburg Branch | Mile 1.6 to Origin | | | X | X | X | X | | | |
| Poor Valley Creek | Mile 6.8 to Origin | | | X | X | X | X | | | |
| Beech Creek | At Holston River (Mile 108.8); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Creek (Stanley Prong) | Holston River (Mile 109.1); Mile 0.0 to Origin | X | X | X | X | X | X | | X | |
| Forgey Creek | At Holston River (Mile 116.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Forgey Creek (Mile 1.1); Mile 0.0 to 1.0 | | | X | X | | X | | | |
| Stoney Point Creek | At Holston River (Mile 123.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Stoney Point Creek (Mile 0.2); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bradley Creek | At Holston River (Mile 128.8); Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Holston River | Mile 131.5 to Origin (Mile 142.2) | | | X | X | X | X | | | |
| Alexander Creek | At Holston River (Mile 131.9); Mile 0.0 to 3.4 | X | X | X | X | X | X | | X | |
| Unnamed Branch | At Alexander Creek (Mile 3.4); Mile 0.0 to 0.3 | | | X | X | X | X | | | |
| Alexander Creek | Mile 3.4 to Origin | | | X | X | X | X | | X | |
| Smith Creek | At Holston River (Mile 135.5); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Arnott Branch | At Holston River (Mile 137.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| North Fork Holston River | Mile 0.0 to 5.2 (Tenn-Virginia Line) | | | X | X | | X | | | |
| South Fork Holston River | Mile 0.0 to 2.3 | | X | X | X | | | | | |
| Reedy Creek | Mile 0.0 to 7.1 | | X | X | X | X | X | | | |
| Reedy Creek | Mile 7.1 to Tenn-Virginia Line | X | X | X | X | X | X | | | |
| South Fork Holston River | Mile 2.3 to 5.7 | | X | X | X | | | | | |
| Horse Creek | Mile 0.0 to 1.3 | | X | X | X | X | X | | | |
| Horse Creek | Mile 1.3 to Origin | | | X | X | X | X | | | |
| Little Horse Creek | At Horse Creek (Mile 3.6); Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Dolan Branch | At Little Horse Creek (Mile 2.8); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At S.F. Holston River (Mile 4.0); Mile 0.0 to Origin | | X | X | X | X | X | | | |
| South Fork Holston River | Mile 5.7 to 19.6 | X | X | X | X | X | X | | X | |
| Kendrick Creek | Mile 0.0 to 1.0 | | | X | X | X | X | | X | |
| Kendrick Creek | Mile 1.0 to Origin | | | X | X | X | X | | | |
| Fall Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At S. F. Holston River (Mile 13.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sinking Creek | At S. F. Holston River (Mile 14.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Ford Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Ford Creek (Mile 1.3); Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Cedar Creek | At S. F. Holston (Mile 18.0); Mile 0.0 to 2.3 | | | X | X | X | X | | | |
| Unnamed Branch | At Cedar Creek (Mile 2.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cedar Creek | Mile 2.3 to Origin | | | X | X | X | X | | | |
| Watauga River | At S. F. Holston (Mile 19.6); Mile 0.0 to 15.0 | X | X | X | X | X | X | | | |
| Boone's Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Knob Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Watauga River | Mile 15.0 to 16.4 | | X | X | X | X | X | | | |
| Brush Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Lick Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Watauga River | Mile 16.4 to 18.0 | X | X | X | X | X | X | | X | |
| Watauga River | Mile 18.0 to 25.8 | | X | X | X | X | X | | X | |
| Buffalo Creek | At Watauga River (Mile 22.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Toll Branch | Mile 0.0 to 0.1 | | | X | X | X | X | | | |
| Toll Branch | Mile 0.1 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | Mile 0.2 to Origin | | | X | X | X | X | | | |
| Dry Creek | At Buffalo Creek (Mile 3.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Buffalo Creek (Mile 3.0); Mile 0.0 to 0.2 | | | X | X | X | X | | | |
| Campbell Creek | At Watauga River (Mile 25.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Campbell Creek (Mile 1.6): Mile 0.0 to Origin | | | X | X | X | X | | | |
| Campbell Branch | Mile 1.6 to Origin | | | X | X | X | X | | | |
| Watauga River | Mile 25.8 to 55.1 (N.C.-Tenn. Line) | X | X | X | X | X | X | | | X |
| Stony Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Little Stony Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Pierce Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Bartree Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| North Fork Stony Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Upper Hinkle Branch | Mile 0.0 to Origin | | | X | X | X | X | | ~~X~~ | |
| Doe River | Mile 0.0 to 21.0 | X | X | X | X | X | X | | X | |
| Laurel Fork Creek | At Doe River (Mile 7.0); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Laurel Fork | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Wagner Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Simerly Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Clarke Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Tiger Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Roaring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Georges Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Buck Creek | At Doe River (Mile 20.9); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Shell Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Hampton Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| L. Prong Hampton Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sugar Hollow Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Hampton Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| L. Prong Hampton Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Shell Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Cove Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Fork Creek | At Doe River (Mile 7.0); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Laurel Fork | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Wagner Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Buck Creek | At Doe River (Mile 20.9); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Doe River | Mile 21.0 to Origin | X | X | X | X | X | X | | | X |
| Little Stony Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Elk River | At Watauga (Mile 46.8); Mile 0.0 to 14.5 (Stateline) | | | X | X | X | X | | X | |
| Black Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Row Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Heaton Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Little Laurel Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Cobb Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Cress Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Roan Creek | At Watauga River (Mile 45.5); Mile 0.0 to 16.7 | X | X | X | X | X | X | | | X |
| Doe Creek | At Roan Creek (Mile 10.9); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Spruce Branch | At Doe Creek (Mile 10.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Timothy Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Campbell's Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Roan Creek | Mile 16.7 to 17.7 | | | X | X | X | X | | X | |
| Mill Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Stout Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Vaught Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | X |
| Town Creek | At Roan Creek (Mile 17.7); Mile 0.0 to 0.2 | | | X | X | X | X | | | |
| Town Creek | Mile 0.2 to Origin | | | X | X | X | X | | | |
| Furnace Creek | At Town Creek (Mile 3.0); Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Goose Creek | At Town Creek (Mile 3.0); Mile ~~0.0~~ 1.5 to Origin | | | X | X | X | X | | | X |
| Patrick Creek | At Goose Creek (Mile 2.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Roan Creek | Mile 17.7 to Origin | X | | X | X | X | X | | | X |
| Corn Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Forge Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Brush Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Big Dry Run Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Buffalo Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Gap Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| South Fork Holston River | Mile 19.6 to 35.5 (above Bluff City) | X | X | X | X | X | X | | | |
| Muddy Creek | At S. F. Holston (Mile 25.5); Mile 0.0 to 2.6 | | | X | X | X | X | | | |
| Booher Creek | At Muddy Creek (Mile 2.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Muddy Creek | Mile 2.6 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Muddy Creek (Mile 4.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beaver Creek | At S. F. Holston (Mile 29.6); Mile 0.0 to 9.1 | | X | X | X | X | X | | | |
| Back (Beck) Creek | At Beaver Creek (Mile 6.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Univac Branch | At Back Creek (Mile 0.5); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Beaver Creek (Mile 7.3); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cedar Creek | At Beaver Creek (Mile 7.9); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Beeler Road Branch | At Cedar Creek (Mile 3.2); Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Raytheon Branch | At Beeler Road Branch (Mile 1.2); Mile 0.0 to 0.2 | | | X | X | | X | | | |
| Beaver Creek | Mile 9.1 to 15.3 (Tenn-Virginia Line) | | X | X | X | X | X | | | |
| Steele Creek | At Beaver Creek (Mile 11.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Indian Creek | At S. F. Holston (Mile 35.0); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Booher Creek | At Indian Creek (Mile 3.7); Mile 0.0 to Origin | | | X | X | X | X | | | |
| Unnamed Branch | At Booher Creek (Mile 0.6); Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Fork Holston River | Mile 35.5 to South Holston Dam | X | X | X | X | X | X | | X | |
| Unnamed Branch | At S. F. Holston (Mile 39.1); Mile 0.0 to Origin | | | X | X | X | X | | | |
| South Fork Holston River | South Holston Dam to mile 62.8 (Virginia Line) | X | X | X | X | X | X | | | |
| Big Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Kendrick Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Fishdam Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sulphur Springs Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Sharps Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Little Jacobs Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | X |
| Jacobs Creek | At S. F. Holston (Mile 59.8); Mile 0.0 to 3.4 | X | X | X | X | X | X | | | X |
| Jacobs Creek | Mile 3.4 to 3.6 | | X | X | X | X | X | | | X |
| Jacobs Creek | Mile 3.6 to Origin | | | X | X | X | X | | | X |
| Harpers Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Rockhouse Run Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Laurel Creek | Stateline to Origin | | | X | X | X | X | | | X |
| Beaverdam Creek | Stateline to Origin | | | X | X | X | X | | | X |
| London Bridge Br | Stateline to Origin | | | X | X | X | X | | X | |
| Reservoir Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Stillhouse Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Chalk Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Chestnut Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Haunted Hollow Br. | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Fagall Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Birch Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Parks Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| David Blevin Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Johnson Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Jim Wright Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Ledford Branch | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| W. Fk Beaverdam | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| M. Fk Beaverdam | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| E. Fk Beaverdam | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Lyons Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Gentry Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Dry Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Grindstone Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Flatwood Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| Corum Branch | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| West Fork Laurel Creek | Mile 0.0 to Origin | | | X | X | X | X | | | X |
| All other surface tributaries named and unnamed in the Holston River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.12 Lower Cumberland River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRT |
|---|---|---|---|---|---|---|---|---|---|---|
| Cumberland River | Mile 74.6 (Ky-Tenn Line) to 118.3 (Cummings Cr.) | X | X | X | X | X | X | X | | |
| Saline Creek | Mile 0.0 to Hwy 120 | | X | X | X | X | X | | | |
| Saline Creek | Hwy 120 to Fort Campbell boundary | | X | X | X | X | X | | X | |
| Saline Creek | Fort Campbell Boundary to Origin | | X | X | X | X | X | | | |
| Bear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Long Creek | Highway 49 to Origin | | | X | X | X | X | | X | |
| Elk Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Wells Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Yellow Creek | Mile 3.4 to Ruskin Cave | | | X | X | X | X | | X | |
| Cumberland River | Mile 118.3 to 125.3 (Red River) | X | X | X | X | X | X | X | | |
| Cumberland River | Mile 125.3 to 175.7 (Richland Creek) | X | X | X | X | X | X | X | | |
| Red River | Mile 0.0 to 2.0 | | X | X | X | X | X | X | | |
| Red River | Mile 2.0 to 15.0 | X | X | X | X | X | X | X | | |
| Red River | Mile 15.0 to 51.2 (Ky-Tenn Line) | X | X | X | X | X | X | | | |
| South Fork Red River | Mile 20.4 (Ky-Tenn Line) to Origin | | | X | X | X | X | | | |
| Big West Fork | Mile 0.0 to 14.6 (Ky-Tenn Line) | | X | X | X | | X | X | | |
| Little West Fork | Mile 0.0 to 10.4 | | X | X | X | X | X | | | |
| Sulphur Fork | Mile 0.0 to 26.6 | X | X | X | X | X | X | | | |
| Sulphur Fork | Mile 26.6 to 28.6 | | X | X | X | X | X | | | |
| Sulphur Fork | Mile 28.6 to Origin | X | X | X | X | X | X | | | |
| Carr Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Red River | Mile 81.0 (Ky-Tenn Line) to Origin | X | X | X | X | X | X | | | |
| Summers Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sulphur Springs Cr | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harpeth River | Mile 0.0 to 10.3 | X | X | X | X | X | X | | | |
| Jones Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Town Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Harpeth River | Mile 10.3 to 52.8 | X | X | X | X | X | X | | | |
| Trace Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Turnbull Creek | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Sullivans Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Beaver Dam Creek | Mile to 0.0 to Origin | | X | X | X | X | X | | | |
| Gin Branch | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Brush Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Caney Fork Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Harpeth River | Mile 52.8 to 55.8 | | X | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NR |
|---|---|---|---|---|---|---|---|---|---|---|
| Harpeth River | Mile 55.8 to 57.8 | | X | X | X | X | X | | | |
| Harpeth River | Mile 57.8 to 61.9 (Little Harpeth) | X | X | X | X | X | X | | | |
| Little Harpeth River | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Harpeth River | Mile 61.9 to 68.3 (Cartwright Creek) | | X | X | X | X | X | | | |
| Cartwright Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harpeth River | Mile 68.3 to 79.0 | X | X | X | X | X | X | | | |
| West Harpeth River | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Harpeth River | Mile 79.0 to 85.2 | | X | X | X | X | X | | | |
| Spencer Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harpeth River | Mile 85.2 to Origin | X | X | X | X | X | X | | | |
| Sycamore Creek | Mile 0.0 to 10.0 | X | X | X | X | X | X | | | |
| Sycamore Creek | Mile 10.0 to Origin | X | | X | X | X | X | | | |
| Marrowbone Creek | Mile 0.0 to 3.0 | X | X | X | X | X | X | | | |
| Marrowbone Creek | Mile 3.0 to Origin | X | | X | X | X | X | | | |
| Cumberland River | Mile 175.7 to 189.5 | X | X | X | X | X | X | X | | |
| Richland Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Whites Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Ewing Creek | Mile 0.0 to Origin | | X | X | X | X | X | | | |
| Cumberland River | Mile 189.5 to 216.2 (Old Hickory Dam) | X | X | X | X | X | X | X | | |
| Mill Creek | Mile 0.0 to 11.5 | | X | X | X | X | X | | | |
| Mill Creek | Mile 11.5 to 23.0 | | | X | X | X | X | | | |
| Mill Creek | Mile 23.0 to Origin | | | X | X | X | X | | | |
| Stones River | Mile 0.0 to 6.8 | X | X | X | X | X | X | | | |
| Stoners Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| McCrory Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Stones River (Percy Priest Res.) | Mile 6.8 to 38.7 (Confluence-East & West Fork) | X | X | X | X | X | X | | | |
| Suggs Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Smith Springs Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hurricane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Stewart Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Harts Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Fall Creek & Tributaries | Mile 0.0 to Origin | | | X | X | X | X | | | |
| East Fork Stones River | Mile 0.0 to 44.5 (Near Woodbury) | X | X | X | X | X | X | | | |
| Bradley Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cripple Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| East Fork Stones River | Mile 44.5 to 45.2 | | X | X | X | X | X | | | |
| East Fork Stones River | Mile 45.2 to Origin | X | X | X | X | X | X | | | |
| West Fork Stones River | Mile 0.0 to 10.0 | X | X | X | X | X | X | | | |
| Overall Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| West Fork Stones River | Mile 10.0 to 15.2 | | X | X | X | X | X | | | |
| West Fork Stones River | Mile 15.2 to Origin | X | X | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRT |
|---|---|---|---|---|---|---|---|---|---|---|
| Lytle Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Middle Fork Stones | Mile 0.0 to Origin | X | X | X | X | X | X | | | |
| Christmas Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cumberland River | Mile 216.2 to 309.2 (Caney Fork River) | X | X | X | X | X | X | X | | |
| Drakes Creek | Mile 0.0 to 4.9 | X | X | X | X | X | X | X | | |
| Drakes Creek | Mile 4.9 to Origin | | | X | X | X | X | | | |
| Smiths Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cedar Creek | Mile 0.0 to 2.0 | X | X | X | X | X | X | X | | |
| Cedar Creek | Mile 2.0 to Origin | | | X | X | X | X | | | |
| Spencer Creek | Mile 0.0 to 2.8 | X | X | X | X | X | X | X | | |
| Spencer Creek | Mile 2.8 to Origin | | | X | X | X | X | | | |
| Bartons Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Sinking Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big Goose Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Goose Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Round Lick Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed in the Lower Cumberland River Basin (and Green River Basin), with the exception of wet weather conveyances, which have not been specifically noted shall be classified. | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.13 Upper Cumberland River Basin.

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Cumberland River | Mile 309.2 to 385.5 (Ky-Tenn Line) | X | X | X | X | X | X | X | | |
| Caney Fork River | Mile 0.0 to 25.4 | X | X | X | X | X | X | X | X | |
| Mulherrin Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hickman Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Smith Fork Creek | Mile 0.0 to Mile 3.0 | | | X | X | X | X | | X | |
| Smith Fork Creek | Mile 3.0 to Origin | | | X | X | X | X | | | |
| Dry Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Jones Fork | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Caney Fork River | Mile 25.4 to Origin | X | X | X | X | X | X | | | |
| Mine Lick Creek | Mile 0.0 to 5.0 | X | | X | X | X | X | | | |
| Mine Lick Creek | Mile 5.0 to Origin | | | X | X | X | X | | | |
| Falling Water River | Mile 0.0 to 39.0 | X | | X | X | X | X | | | |
| Falling Water River | Mile 39.0 to Origin | | | X | X | X | X | | | |
| Cane Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Pigeon Roost Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Fall Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Pine Creek | Mile 2.4 to Origin | | | X | X | X | X | | X | |
| Turner Branch | Mile 0.0 to 0.5 | | | X | X | X | X | | X | |
| Sink Creek | Mile 4.6 to Origin | | | X | X | X | X | | X | |
| Collins River | Mile 0.0 to 43.0 | X | X | X | X | X | X | | | |
| Mountain Creek | Mile 0.0 to 6.0 | | | X | X | X | X | | X | |
| Charles Creek | Mile 0.0 to 9.0 | | | X | X | X | X | | X | |
| Barren Fork River | Mile 0.0 to 4.5 | | | X | X | X | X | | | |
| Barren Fork River | Mile 4.5 to Origin | X | X | X | X | X | X | | X | |
| Hickory Creek | Mile 19.0 to 24.0 | | | X | X | X | X | | X | |
| W.F. Hickory C | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Keel Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Hills Creek | Mile 0.0 to Origin | | | X | X | X | X | | X | |
| Collins River | Mile 43.0 to 49.0 | X | | X | X | X | X | | X | |
| Big Creek | Mile 0.0 to 6.0 | X | | X | X | X | X | | | |
| Big Creek | Mile 6.0 to Origin | | | X | X | X | X | | | |
| Collins River | Mile 49.0 to Origin | | | X | X | X | X | | | |
| Caney Fork River | Mile 92.2 to Origin | X | X | X | X | X | X | | | |
| Rocky River | Mile 0.0 to 9.0 | X | X | X | X | X | X | | | |
| Rocky River | Mile 9.0 to 13.0 | X | X | X | X | X | X | | X | |
| Rocky River | Mile 13.0 to Origin | X | X | X | X | X | X | | | |
| Calfkiller River | Mile 0.0 to 14.1 | X | X | X | X | X | X | | | |
| Calfkiller River | Mile 14.1 to 30.8 | X | X | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |

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| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Calfkiller River | Mile 30.8 to Origin | X | X | X | X | X | X | | X | |
| Cane Creek | Mile 1.0 to 8.0 | X | X | X | X | X | X | | X | |
| Falls Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Cane Creek | Mile 8.0 to Origin | X | X | X | X | X | X | | | |
| Bee Creek | Mile 0.0 to 7.3 | | | X | X | X | X | | | |
| Bee Creek | Mile 7.3 to Origin | X | | X | X | X | X | | | |
| Wilkerson Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Frey Branch | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Roaring River | Mile 0.0 to 29.9 | | | X | X | X | X | | | |
| Roaring River | Mile 29.9 to Origin | X | | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Bear Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Carr Creek | Mile 0.0 to 4.2 | | | X | X | X | X | | | |
| Carr Creek | Mile 4.2 to Origin | X | | X | X | X | X | | | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Goose Creek | Mile 0.0 to 12.0 | | | X | X | X | X | | X | |
| Flynns Creek | Mile 0.0 to 5.0 | | | X | X | X | X | | X | |
| Obey River | Mile 0.0 to 7.3 | X | X | X | X | X | X | | X | |
| Neely Creek | Mile 0.0 to Origin (3.3 miles) | | | X | X | X | X | | X | |
| Wolf River | Mile 0.0 to Ky State Line | | X | X | X | X | X | | | |
| Wolf River | Ky State Line to Origin | | | X | X | X | X | | X | |
| Town Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Obey River | Mile 7.3 to confluence of East and West Forks | X | X | X | X | X | X | | | |
| West Fork Obey River | Mile 0.0 to Origin | | | X | X | X | X | | | |
| East Fork Obey River | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Buffalo Cove Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Rock Castle Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Big South Fork Cumberland River | Mile 55.5 (Ky-Tenn Line) to Origin (Mile 77.0) | X | X | X | X | X | X | | | |
| No Business Creek | Upper 4.0 miles | | | X | X | X | X | | X | |
| Parch Corn Creek | Upper 1.5 miles | | | X | X | X | X | | X | |
| Station Camp Creek | Upper 4.8 miles | | | X | X | X | X | | X | |
| Laurel Fork Creek | Upper 4.9 miles | | | X | X | X | X | | X | |
| North White Oak Creek | Upper 3.9 miles | | | X | X | X | X | | X | |
| Williams Creek | Upper 7.6 miles | | | X | X | X | X | | X | |
| Pine Creek | Mile 0.0 to 10.5 | | | X | X | X | X | | | |
| Pine Creek | Mile 10.5 to Origin | X | | X | X | X | X | | | |
| New River | Mile 0.0 to 15.0 | | | X | X | X | X | | | |
| New River | Mile 15.0 to Origin | X | | X | X | X | X | | | |
| Clear Fork River | Mile 0.0 to Origin | | | X | X | X | X | | | |

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| Elk Fork Creek | Mile 1.8 (KY Line) to Origin | X | | X | X | X | X | | | |
| All other surface waters named and unnamed, within the Upper Cumberland River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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1200-04-04-.14 Barren River ~~Watershed~~ Basin

| STREAM | DESCRIPTION | DOM | IWS | FAL | REC | LWW | IRR | NAV | TS | NRTS |
|---|---|---|---|---|---|---|---|---|---|---|
| West Fork Drakes Creek | Mile 33.0 (stateline) to Origin | | | X | X | X | X | | | |
| Caney Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Dry Fork Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Middle Fork Drakes Creek | Mile 22.2 (stateline) to Origin | X | | X | X | X | X | | | |
| Sulphur Fork Creek | Mile 9.0 (stateline) to Origin | | | X | X | X | X | | | |
| Dutch Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Trammel Creek | Mile 30.7 (stateline) to Origin | | | X | X | X | X | | | |
| Little Trammel Creek | Mile 4.7 (stateline) to Origin | | | X | X | X | X | | | |
| Long Creek | Mile 14.6 (stateline) to Origin | | | X | X | X | X | | | |
| West Fork Long Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Puncheon Creek | Mile 4.3 (stateline) to Origin | | | X | X | X | X | | | |
| Unnamed Tributary (Adams Spring) | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Little Puncheon Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Spring Creek | Mile 0.0 to Origin | X | | X | X | X | X | | | |
| Salt Lick Creek | Mile 4.7 (stateline) to mile 6.8 | | | X | X | X | X | | | |
| Salt Lick Creek | Mile 6.8 to mile 9.9 | | | X | X | X | X | | X | |
| Salt Lick Creek | Mile 9.9 to Origin | | | X | X | X | X | | | |
| Long Fork | Mile 4.5 (stateline) Origin | | | X | X | X | X | | | |
| White Oak Creek | Mile 4.1 (stateline) to Origin | | | X | X | X | X | | | |
| Long Hungry Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Line Creek | Mile 14.2 (stateline) to Origin | | | X | X | X | X | | | |
| Trace Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| Little Trace Creek | Mile 0.0 to Origin | | | X | X | X | X | | | |
| All other surface waters named and unnamed, within the Barren River Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified | | | | X | X | X | X | | | |

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

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* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| James W. Cameron III | X | | | | |
| Jill E. Davis | X | | | | |
| Mayor Kevin Davis | | | | X | |
| Derek Gernt | X | | | | |
| John Guoynes | X | | | | |
| C. Monty Halcomb | | | | X | |
| Chuck Head | X | | | | |
| Charlie R. Johnson | X | | | | |
| Judy Manners | | | | X | |
| John McClurkan | X | | | | |
| Frank McGinley | X | | | | |
| D. Anthony Robinson | X | | | | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Tennessee Board of Water Quality, Oil and Gas on 01/15/2013, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 10/21/09 and 12/16/11

Rulemaking Hearing(s) Conducted on: (add more dates). 12/15/09, 01/05/10, 01/06/10, 01/07/10, 01/13/10, 01/14/10 and 02/23/12

CAROL L. GRICE STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY, TENN.

Date: January 15, 2013

Signature: James W. Cameron III

Name of Officer: James W. Cameron III

Title of Officer: Chairman

Subscribed and sworn to before me on: January 15, 2013

Notary Public Signature: Carol L. Grice

My commission expires on: June 21, 2016

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All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

R E Cooper Jr.

Robert E. Cooper, Jr.
Attorney General and Reporter

4-1-13
Date

**Department of State Use Only**

Filed with the Department of State on: 4/3/13

Effective on: 7/2/13

Tre Hargett
Secretary of State

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## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Environment and Conservation |
| DIVISION: | Water Resources |
| SUBJECT: | Biosolids Management |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Section 69-3-101 et. seq. and 4-5-201 et. seq. |
| EFFECTIVE DATES: | June 30, 2013 to June 30, 2014 |
| FISCAL IMPACT: | Minimal |
| STAFF RULE ABSTRACT: | These rules establish new standards that govern applying biosolids to land. Biosolids are solid organic matter recovered from a sewage treatment plant that may be used as fertilizer. Biosolids are regulated by federal regulations; however, the state currently has no authority to enforce such regulations without promulgating state rules.<br>These proposed rules include general requirements, contaminant limits, management practices, operational standards, record keeping and reporting requirements.<br>The division of water resources may impose additional or more stringent requirements on a case-by-case basis to protect public health, to protect the environment from any adverse effect of a contaminant in biosolids, or to ensure compliance with these rules.<br>These rules apply to any person who applies biosolids to the land or to any land in which biosolids are applied. The rules specify the new standards may be implemented through a permit issued under the Water Quality Control Act.<br>EQ biosolids (or "exceptional quality biosolids") are exempt from all requirements of these rules, other than an annual reporting requirement. |

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

**Comment 1:** **There is no need for state rules for the land application of Class B biosolids, because there will be another 42 pages of regulations in addition to the federal 40 CFR Part 503 regulations, two permits, more paper works, and more costs with no benefits. Things are working pretty good now—leave them as they are. Several commenters shared this opinion.**

Response 1: The federal 40 CFR Part 503 program has been in existence since 1993 and is regulated by EPA in all but 8 states (OK, UT, AZ, TX, WI, MI, SD, and OH). There are no delegated states for biosolids in EPA-Region 4, and only Tennessee and Alabama do not currently have state rules regulating biosolids. Overall, the biosolids program from a federal standpoint has not worked very well, because there been very little oversight by EPA in the past and there will be virtually none in future, because of the agency's divestment in biosolids enforcement and compliance.

The fact that 40 CFR Part 503 is a "self-implementing" rule means that no permits have to be issued but compliance is still required. Much like the IRS rules--they are self-implementing also--if you don't comply, there are potentially significant penalties. The same is basically true for 40 CFR Part 503, except there has been little to no enforcement by EPA on biosolids issues.

The self-implementing aspect of 40 CFR Part 503 is especially problematic because as one commenter noted, the 40 CFR Part 503 is very complex and confusing, with more than 300 different ways to interpret the regulation. This statement can probably be made about many laws and regulations, one of which would be NPDES permitting. There is a large volume of material relative to NPDES permitting, but all of that gets boiled down into an NPDES permit that serves as a compliance checklist for the permittee. The same concept applies to eliminating the confusion and uncertainty under the self-implementing aspect of 40 CFR Part 503 by having state rules.

History with the self-implementing aspect of 40 CFR Part 503 has revealed that even some of most knowledgeable and trusted wastewater professionals do not have a full understanding of 40 CFR Part 503. In one instance an instructor in a wastewater operator training class was using an outdated version of 40 CFR Part 503. Many municipal utilities in Tennessee have limited and sometimes incorrect information regarding 40 CFR Part 503 and the guidance documents supporting the regulation. Placing all of the up to date regulatory requirements regarding the land application of Class B biosolids into state rules will do much to resolve this problem.

Deborah G. Nagle, Director, Water Permits Division, EPA-HQ in Washington, D.C. wrote a comment letter stating: "*The Environmental Protection Agency (EPA) expects that the state rules will place Tennessee in a much stronger position to ensure that Class B biosolids are properly managed and public health is appropriately protected. EPA thus encourages Tennessee to finalize State rules that are as stringent as the 40 CFR Part 503 for land application of Class B biosolids.*"

The proposed biosolids rules are not more restrictive that 40 CFR Part 503 in terms of contaminant (metals or pollutant) concentrations, pathogen reduction requirements and vector attraction reduction requirements. Those are the big 3 compliance areas and compliance with our states rules means compliance with 40 CFR Part 503.

One of the areas that is important to us is the protection is waters of the state. This requires among other things, the proper application of biosolids in terms of nutrients. Waters of the state include surface water and ground water whereas, waters of the United States is confined to only

surface water. Furthermore, 40 CFR Part 503 requires applications at an "agronomic rate" but is silent on how to determine that rate.

Another short coming of 40 CFR Part 503 is the lack of adequate buffers/setbacks. The only setback required by 40 CFR Part 503 is 10 meters from waters of the U.S. This setback alone is not adequate to protect surface waters.

Therefore the proposed states rules provide specific guidance that will help to ensure that an over application of nutrients does not occur, which helps to ensure protection of our state ground and surface waters. Our rules also propose additional setbacks.

One commenter stated that the proposed biosolids rules are more stringent than federal statutes and will result in increased expenditure requirements on rate payers and other biosolids producers across the state, beyond those required to meet the federal requirements.

The proposed state rules are more restrictive than 40 CFR Part 503 in regard to setbacks and agronomic rate. However, the current requirements in Tennessee to land apply Class B biosolids are more restrictive than 40 CFR Part 503, because state guidelines are also used. The proposed rules will combine the current requirements contained in 40 CFR Part 503 and state guidelines and make a seamless transition for municipal utilities.

It is important to note that it was expected by EPA that states would need to be more restrictive to properly consider local and regional condition. Terrains vary greatly across the United States, for example compare the desert southwest to the Pacific Northwest. As such EPA provided 40 CFR Part 503.5 (b) allowing for state requirements to be more stringent than in 40 CFR Part 503.

EPA's position on the matter of states being expected to be more restrictive than 40 CFR Part 503 when it comes to agronomic rate and setbacks is well documented by the written comments received relative to the proposed state rules.

**Rick Stevens, EPA-HQ:**

*"I am in favor of state or local regulations that may be more restrictive than the EPA regulations to address local concerns about the application. Such regulations may include setback distances."*

**Mike Hom, EPA-Region 4**

*Other states have setbacks from other structures other than waters of the state, eg, public roads, drinking wells, houses, etc. I like that you will require a specific ag rate, something Part 503 does not specify in detail."*

**Bob Brobst, EPA-Region 8**

*"If 503 is enough --- then 503.5(b) is also enough which allow States to be more stringent. Remember 503 is a National rule using national condition not conditions that are unique to a specific state like Tennessee."*

*"Your agronomic rate calculation instructions are NOT more stringent but instead clarify how it is to be implemented. The 503 regulations are not clear in the meaning of calculating the agronomic rate or how to do it in the field. I would expect nothing less from Tennessee."*

**Dr. Alan B. Rubin, retired EPA-HQ, the person who was in responsible charge of drafting 40 CFR Part 503**

*"Indeed, EPA expected that the States would supplement the qualitative agronomic rate standard found in Part 503 with specific calculations leading to agronomic rate standards to fully protect public health and the environment for all State citizens."*

It was noted by one commenter that currently municipalities in the state that apply wastewater sludge to land are regulated by the EPA through 40 CFR Part 503. While the EPA is the

permitting authority, NPDES permits specify that Tennessee municipalities comply with the federal rule, along with Tennessee Guidelines Land Application issued by TDEC. The question was asked as to what authority this permit language gives TDEC. Without TDEC being a delegated state for biosolids management, this permit language gives TDEC very little if any authority.

The Clean Water Act (CWA) §405(f), requires that all NPDES permits issued to municipalities contain the requirement to comply with 40 CFR Part 503. It is important for municipalities to comply with 40 CFR Part 503 and to know that they are in compliance. We also believe that in order to ensure protection of our state waters (surface and ground) that biosolids land application be properly managed with additional management practices employed beyond that of 40 CFR Part 503. These additional requirements beyond those specifically states in 40 CFR Part 503 are currently contained in state guidelines which are difficult to enforce. For these reasons, compliance with state rules via an individual or general permit will provide a significantly value added element to all municipal utilities that land apply Class B biosolids in the State of Tennessee.

Comments were made that additional rules are not needed and put a burden on rate payers. The proposed state rules for the land application of Class B biosolids are needed for the reasons stated above. These rules will not impose any noticeable or significant financial burden on municipal utilities or their rate payers. There are no fees associated with the proposed biosolids rules.

Having state rules ensures a level playing field. It also helps to provide assurance and confidence to elected officials that their program is in compliance with all applicable laws, rules and regulations, because the State of Tennessee is overseeing a program that mimics 40 CFR Part 503 requirements.

Additionally, with 8 environmental field office and approximately 500 sites where biosolids are being applied, having consistency across the state is imperative and is another benefit of having state rules.

The comment was made: "*Why do we need approximately 42 pages of additional rules*?" 40 CFR Part 503 is 52 pages and the proposed state rules are 43 pages, but the rules are not "additional rules" because they mimic 40 CFR Part 503 with regard to contaminants (metals, pollutants), pathogen reduction and vector attraction reduction. Whether one is using 40 CFR Part 503 or the proposed state rules, in either case only a few pages are applicable to any one biosolids scenario.

**Comment 2:** **One commenter stated that a colleague had contacted him in 2008 and stated that TDEC was meeting with certain individuals on the development of new rules for biosolids. The commenter said this was the first time he had heard this and that his municipality along with other biosolids producers in the state should have been individually notified. The commenter said that suggestion was conveyed to TDEC on numerous occasions, but to no avail.**

Response 2: The comments included in his comments package a copy of email exchanges between him and TDEC dating back to 2008, in which proposed state biosolids rules were discussed. Furthermore, the commenter was also a member of the Technical Advisory Committee (TAC) for the State of Tennessee Biosolids Rules. The TAC consisted of over 40 people who received numerous mailings and drafts of the proposed rules dating back to 2008.

Every attempt was made by TDEC to have an open, interactive and transparent process for drafting the proposed rules for the land application of Class B biosolids in Tennessee. In fact, the Tennessee Association of Utility Districts (TAUD) sent a letter to TDEC's Commissioner, Robert J. Martineau, Jr. stating that TAUD and its members appreciated the opportunity to work with TDEC staff concerning the proposed draft biosolids rules and general permit rule making process. TAUD stated that it felt that the proposed draft biosolids rules had been reviewed and amended fairly and were ready for the public comment process. It should be noted that through TAUD's

Tennessee Utility News magazine that TAUD informed over 5,000 subscribers with articles pertaining to TDEC's proposed draft biosolids rules and general permit rule making process.

**Comment 3:** **One commenter said that TDEC has written and tried to enforce unenforceable guidelines for years and that this has been pointed out to TDEC on numerous occasions. There already is consistency in permitting, oversight, and enforcement and that is provided by the Federal 503 Rule and enforced by EPA. So stating that we need 42 additional pages of rules to create consistency and timeliness is simply not true.**

Response 3: There is no consistency in permitting, oversight and compliance, because EPA has done very little in Tennessee in the almost 2 decades since the promulgation of 40 CFR Part 503. There is no permitting and during these 20 years EPA has inspected 26 municipalities. EPA first visited Tennessee in 1998, five years after the promulgation of 40 CFR Part 503, so initially, EPA provided little if any training to municipal utilities to help them to understand and comply with 40 CFR Part 503. EPA has made it clear that the agency is divesting itself in the area of biosolids compliance and enforcement. The proof is in their words and actions. EPA-Region 4 has not made a biosolids inspection in the State since 2010. Mike Hom, EPA-Region 4 recently wrote: *"It is a safe bet that R4 will not be in Tennessee in FY-12 or FY-13 to conduct Part 503 inspections."*

**Comment 4:** **One commenter did not believe that EPA is divesting itself of responsibility of compliance enforcement. The commenter noted, and if they are then one must assume that EPA has not experienced significant problems with the 503 rule within Tennessee.**

Response 4: EPA's Office of Enforcement and Compliance Assurance (OECA) published their FY 2013 – National Program Manager Guidance in which they stated: *"All states now have their own safety program for biosolids, and there are also third party verification programs that support compliance in this area. In light of these facts, and the scientific studies indicating that biosolids present a lower risk than other substances, EPA expects to reduce investment in this area to support other high priority enforcement work. OECA is considering a number of program areas in which to reduce resources devoted to monitoring, compliance, and enforcement, as well as rely more on states or local entities to do the work."*

EPA has stated that they plan to reduce investment in biosolids compliance and enforcement in 2013. The proof is in EPA's actions. EPA has not made a biosolids inspection since 2010 in Tennessee and they don't plan to make any in FY 2012 and FY 2013, as noted by their correspondence. EPA's actions are divestment. The agency expects the states to do the job with assistance from the National Biosolids Partnership.

Furthermore, the absence of evidence of biosolids problems by EPA, is not proof of the absence of problems, especially since there have been a very limited number of inspections by EPA and none in Tennessee since 2010.

The same comment can be made relative to complaints. One commenter noted that they had requested information on all of the complaints that the state received regarding biosolids from July 1, 2009 through July 6, 2012. There were 37 recorded complaints and issues associated with biosolids, most of these were odor complaints and none of those had documented water quality problems. Complaints do not document water quality problems and the lack of complaints, problems and evidence, do not provide evidence that there are not problems. Odor issues are not addressed in 40 CFR Part 503 nor in the proposed state rules for biosolids.

**Comment 5:** **Several commenters questioned if there were "huge" biosolids problems in Tennessee. One commenter said this sort of reminds me of a situation from a book that I recently read where one of the characters asked the question, "If something is real, if it is a genuine problem that requires action, then why does anybody have to exaggerate their claims?"**

Response 5: Everything is relative, but the following incidents are considered huge problems:

1. Dumping 4.5 million gallons of biosolids on a site with karst topography with no crop harvesting.
2. Dumping over 1 million pounds of BOD into a sink hole over a 10 year period.

3. Dumping approximately 500,000 pounds of nitrogen on a site adjacent to an Exceptional Tennessee Water with no crop harvesting over the 20 year period. This is enough nitrogen to supply the fertilizer needs for about 10,000 acres of wheat.

**Comment 6:** **One commenter asked why is the National Biosolids Partnership named specifically in the rule when there are engineering firms located within the State of Tennessee that can provide the same services? Just because a municipality has the ability to pay the National Biosolids Partnership to certify their program should not exempt that municipality from complying with all of the requirements of the rule. This creates a disadvantage to the rate payers of smaller, more rural biosolids systems, in that those systems cannot afford to "buy" their way out of complying with certain aspects of the proposed rule.**

Response 6: National Biosolids Partnership certified agencies are not exempt from the proposed rules—they must comply with every aspect of these rules. However, by being a certified program via a 3rd party independent auditor, these agencies will be able to self-certify for coverage under the general permit. No agency can "buy" their way in—this is payment for a 3rd party audit much like the audits conducted in ISO programs.

**Comment 7:** **Several commenters took issue with the concept that compliance with state rules and a state permit provided compliance assurance safeguards to all municipal utilities in the state.**

Response 7: Having the State of Tennessee issue rules that mimic 40 CFR Part 503 and place a municipal utility under a permit in accordance with those rules provides compliance safeguards to the municipal utility. The State of Tennessee is defining what is necessary for compliance in a permit rather than leave the municipal utility on its own in a cloud of confusion and uncertainty under the self-implementing aspects of 40 CFR Part 503.

**Comment 8:** **One commenter stated that one reason given for the need of these rules is that the State's rules will be a compliance safeguard and that the definition of alkali does not include lime.**

Response 8: Compliance safeguards are associated with the proposed state rules because of the self-implementing aspect of 40 CFR Part 503. This is especially problematic because as one commenter noted, 40 CFR Part 503 is very complex and confusing, with more than 300 different ways to interpret the regulation. Without state rules and the municipal utility applying biosolids under a permit, the utility is on their own if questions arise as to their compliance with 40 CFR Part 503. If this situation happens, then the State of Tennessee is standing with the utility and not leaving the utility on their own, trying to defend their position under the "self-implementing" aspect of 40 CFR Part 503. State rules help to eliminate the confusion and uncertainty under the self-implementing aspect of 40 CFR Part 503.

The fact that the definition of alkali does not include lime has been pointed out to EPA by the National Lime Association, yet the 40 CFR Part 503 regulations have not yet been changed to correct this problem. The commenter points to the EPA White House Manual and Preamble, but these are not the regulations which trump any guidance or preamble language. From a practical standpoint, EPA and other regulatory agencies recognize the intent of the 40 CFR Part 503, but nevertheless, that does not change the fact that anyone using lime to adjust pH is in technical violation of 40 CFR Part 503. The facts of the matter are that an "alkali" is defined as any of the hydroxides and carbonates of alkali metals. The alkali metals are: Lithium, Sodium, Potassium, Rubidium, Cesium and Francium. Since Calcium is not an alkali metal, then lime is not an alkali and as such using lime to comply with certain provisions of 40 CFR Part 503 is a technical violation of the rule.

There are similar problems with certain analytical methods and this is yet another reason why there is added protection to municipal utilities if the State of Tennessee also acknowledges the reality of these errors in 40 CFR Part 503 and stands with the municipal utilities in the case there are challenges.

**Comment 9:** **One commenter stated that another reason given is it promotes, encourages and supports the recycling of an organic material. However, the commenter hadn't found one comment**

**in the proposed rules that supports this claim. Changing the status quo and having new regulations to follow will force utilities to reevaluate what they are doing with their biosolids and this change may be enough for them to opt to take their sludge to the landfill. The addition of these regulations may reduce the beneficial reuse of biosolids in Tennessee. The commenter certainly didn't want to see that. Another commented said that these rules will be a barrier to the reuse of a valuable resource. If they are implemented they will result in a decrease in land application and an increase in landfill disposal.**

Response 9: The state rules remove the confusion and uncertainty associated with the self-implementing aspects of 40 CFR Part 503 with over 300 different scenarios for compliance. The logical assumption is that this will encourage land application rather than landfilling. Recent surveys indicate that more than 50% of all biosolids in Tennessee are either landfilled or surface disposed of and thus not being beneficially recycled. By eliminating confusion and uncertainty, it is anticipated that the proposed rules will encourage and promote more beneficial recycling of biosolids.

**Comment 10: On page 2 in the Additional Hearing Information (6th paragraph), it states that the monitoring frequency is the same. While this is initially true 40 CFR Part 503.16 (a)(2) allows for a reduction in monitoring frequency whereas the proposed state rules do not. The proposed rules should be changed to allow this reduction in monitoring frequency if approved by EPA.**

Response 10: TDEC agrees and the appropriate changes have been made to Rule 0400-40-15-.02(7)(a).

**Comment 11: On page 5 in the table of contents, there is a section titled Surface Disposal yet it doesn't exist. It appears that this type of activity will be regulated solely by the 40 CFR Part 503 regulations.**

Response 11: TDEC agrees and appropriate changes have been made to the Table of Contents.

**Comment 12: On page 5 in the table of contents, there is a section titled fees. Also on page 40 subparagraph (e) there is a mention of fees. This leads one to believe that it is the intent to start charging fees in the not too distant future. If the state is intending to eventually start charging for the permit this should be brought up now so that it would get people's attention so they would read these proposed rules. I think a lot of people assume they are virtually the same as the 40 CFR Part 503 regulations and haven't bothered to read them.**

Response 12: There are no fees associated with these proposed rules and the noted references to fees have been deleted.

**Comment 13: On page 5, subparagraph (1)(b) Applicability, this seems to require EQ biosolids producers to complete the requirements of the annual report in paragraph (9) of Rule 0400-40-15-.02 which includes nutrients applied on each field, latitude and longitude of each site, and information on each field just to prove that they produce EQ biosolids. The way I interpret these rules, I'll spend more time preparing the report for the state than I do preparing the report for EPA even though the EQ biosolids that we produce are supposed to be exempt from these rules. What would be simpler, and just as effective, would be that EQ producers submit to the state a copy of the report prepared for EPA. Making this change is the only way to effectively exempt EQ biosolids producers.**

Response 13: TDEC agrees and appropriate changes have been made to Rule 0400-40-15-.01(1)(b).

**Comment 14: On page 6, paragraph (6) and on page 38, paragraph (16) there is the ability for the Director or the Division to implement additional or more stringent requirements. This appears to allow implementation of additional rules without the rule making process being followed.**

Response 14: The proposed Rule 0400-40-15-.01(4), additional or more stringent requirements is similar to the provision in 40 CFR Part 503.5. It allows the Director, on a case-by-case basis to impose more stringent requirements when necessary to protect public health or the environment from any

reasonable anticipated adverse effect that may occur due to any characteristic of the biosolids or the site.

Rule 0400-40-15-.06(16)(c) has been modified to make it clear that in the case where the general permit is not used because of different conditions that the individual permit will impose additional or more stringent requirements as compared to the general permit. In this case, the issuance of an individual permit will follow the public notice and comment period associated with individual permits.

**Comment 15: Looking on page 8, the City of Cookeville does not meet the definition of Exceptional Quality Biosolids or EQ Biosolids. I think this is a typographical error in that the 3 in the next to last line needs to be an 8.**

Response 15: TDEC agrees and the typographical error has been corrected in the definition of Exceptional Quality Biosolids or EQ Biosolids in Rule 0400-40-15-.01(8).

**Comment 16: On page 10, the definition of "Staging of biosolids" allows only 7 days. This should be changed to at least 21 days. There needs to be the time to allow the biosolids to be hauled to the different land application sites and the spreading equipment moved from site to site, and this would also allow some flexibility for the weather and equipment breakdowns.**

Response 16: The definition of Staging of biosolids in Rule 0400-40-15-.01(8) has been removed.

**Comment 17: On page 10, the definition of surface disposal of biosolids and the definition of surface disposal of sewage sludge are very different, but seem to mean the same thing—in looking at this I think that both are only regulated by the 40 CFR Part 503 regulations – More confusion.**

Response 17: TDEC agrees and both the definition of "surface disposal of biosolids" and the definition of "surface disposal of sewage sludge" have been deleted from Rule 0400-40-15-.01(8). The proposed Chapter 0400-40-15 regulates the land application of Class B biosolids only and does not cover surface disposal of biosolids or sewage sludge.

**Comment 18: On page 15 subparagraph (5)(c) the setbacks from the creek are greater than in the 40 CFR Part 503 regulations. In some cases setbacks larger than in the 40 CFR Part 503 regulations are needed. When spreading manure, if the ground was steeper or the ground cover was thinner we'd stay a little further away from the creek. There is no reference to slope or ground cover mentioned in the proposed rules. Neither is the application method, such as whether it is surface applied or injected. It appears these things should be taken into consideration in determining the buffer zones and that's why EPA just established a minimum setback. In the 40 CFR Part 503 regulations the 10 meter setback is probably sufficient under ideal conditions and should then be based on the conditions I have mentioned. An alternate way of doing this would be to have a provision in the proposed rule to decrease the setbacks with better site conditions.**

Response 18: TDEC agrees with the comment that in some cases setbacks larger than in the 40 CFR Part 503 regulations are needed. This is also the position of EPA officials and is discussed in Comment 1 above. Rule 0400-40-15-.02(5)(c) does consider gradient or slope, but not in specifics. The commenter is correct that differences and allowances could be made for different sites, if the product is liquid or cake, injected or incorporated, etc. However, if there are significant differences these situations could be covered under an individual permit rather than coverage under a general permit.

**Comment 19: Page 34, part 6, exempts agencies certified under the National Biosolids Partnership's Environmental Management System from applying for coverage under a general permit. It appears that these agencies with Class B biosolids must still comply with the other parts of the rules such as the management practices and reporting, but if the goal is to regulate the Class B biosolids and to provide consistency in permitting, oversight and enforcement across the State of Tennessee, then why exempt agencies from being permitted that have some type of certification. This is especially troublesome when about half of the**

**complaints received are on certified agencies.**

Response 19: The intent of the proposed Rules is to recognize exemplar agencies that are certified under the National Biosolids Partnership's Environmental Management System and allow those certified agencies to self-certify under the general permit. As such these certified agencies must comply with all of the requirements of the proposed rules, including submitting and notice of intent (NOI) or an application for an individual permit. If a certified agency submits an NOI, the rule intends to allow those agencies to be self-certified which means they do not have to wait for TDEC to issue a notice of coverage (NOC). However, Rule 0400-40-15-.06(3)(a)6 has been deleted because a certified agency is not exempt from the rules as is an agency producing Exception Quality (EQ) biosolids. It is also important to note that complaints, especially about odor are not directly related to non-compliance with 40 CFR Part 503 or other applicable laws and regulations governing the land application of Class B biosolids. (See additional comments in Response 4 above).

**Comment 20: Rule 0400-40-15-.01(8) General Definitions Agronomic Loading Rate: this definition is confusing because it appears to mix requirements of the metals tables and the nitrogen loading rate.**

Response 20: TDEC agrees with the commenter, there is a typographical error in the proposed rules, the reference in the definition of agronomic rate should read (5)(d) rather than (4)(d) of Rule 0400-40-15-.02. This correction has been made to the proposed rules.

**Comment 21: Rule 0400-40-15-.01(8) Contaminant: changing the 40 CFR Part 503.13 term from "pollutant" to "contaminant" will be confusing. If you mean "metals" use "metals."**

Response 21: This was a change recommended by legal staff to avoid confusion and conflict with other state statues. 40 CFR Part 503 uses pollutant concentrations, not metals.

**Comment 22: Rule 0400-40-15-.01(8) Cover Crop: what about annual and perennial grasses or legumes?**

Response 22: The definition has been changed to a quick growing crop planted between periods of regular crop production to prevent soil erosion and provide humus or nitrogen.

**Comment 23: Rule 0400-40-15-.01(8) Forest: most forest acres receive little management but simply grow naturally. Does the second sentence mean TDEC is regulating agricultural land?**

Response 23: TDEC is not regulating agricultural only a product that is sometimes used in agricultural. The definition has been modified in the proposed rule.

**Comment 24: Rule 0400-40-15-.01(8) Staging: a confusing term when paired with storage. Is this definition establishing a requirement? What is temporary storage as different from temporary small-scale storage? Is there temporary storage for dry or dewatered biosolids? Staging restrictions should be omitted from the rules. If implemented as written, it will be a major barrier to land application and will result in current land application stopping with a return to landfill disposal.**

Response 24: TDEC agrees with the commenter and the definition of staging and temporary small-scale storage has been removed from the proposed rules.

**Comment 25: Rule 0400-40-15-.01(8) Store or storage of biosolids or sewage sludge: these need clarification along with staging. There is great potential for multiple interpretations.**

Response 25: TDEC agrees with the commenter and the definition of store or storage of biosolids or sewage sludge has been removed from the proposed rules.

**Comment 26: Rule 0400-40-15-.02(2)(c)2(i) Land Application: How should EPA be contacted which office, position, or person?**

Response 26: The proposed rules specify EPA Region 4, since Tennessee is in EPA-Region 4. 40 CFR Part

503.12 (General Requirements) says the permitting authority; otherwise the requirement and wording is the same.

**Comment 27: Rule 0400-40-15-.02(2)(d) Land Application: Where is the NANI information specified?**

Response 27: The proposed rules states exactly the same thing as 40 CFR Part 503.12 (f) with regard to the NANI.

**Comment 28: Rule 0400-40-15-.02(4)(d)3 Land Application: Shouldn't Table 1 be included here also?**

Response 28: TDEC agrees with the commenter and has made the appropriate change in the proposed rules.

**Comment 29: Rule 0400-40-15-.02(5)(a) Land Application: How is adverse effect determined?**

Response 29: This wording is the same as 40 CFR Part 503.14(a).

**Comment 30: Rule 0400-40-15-.02(5)(b) Land Application: What does frozen mean? Is it a thin layer of ice from a cold night with dry or moist soil underlying or deep frozen soil with thawed soil on top? Another commenter stated that liquid injection should not be prohibited on frozen ground.**

- **Injection typically takes place at depth of between 8-12".**
- **Ground in Tennessee is rarely actually frozen at this depth.**
- **Injection poses no runoff threat, whether the ground is frozen or not.**

Response 30: The wording in the proposed rules has been changed to match the wording in 40 CFR Part 503.14(b).

**Comment 31: Rule 0400-40-15-.02(5)(d) Land Application: This appears to require two approvals? The second sentence has problems. It appears to say TDEC will make a blanket rate for the entire state.**

Response 31: The only situation that would require two approvals is when an application rate would exceed the agronomic rate, in the case of a reclamation site. To be as stringent as 40 CFR Part 503 this requirement is necessary. Nothing has changed because regardless of what EPA-Region 4 says the State of Tennessee would have to approve the application with or without the proposed rules. TDEC is by no means making a "blanket rate" for the entire state. There are many variables that have to be considered in determining the agronomic rate and many crop options with varying nitrogen requirements. All of this information is contained in Rule 0400-40-15-.02(5)(d).

**Comment 32: Rule 0400-40-15-.02(7)(c) Land Application: Does this include all TCLP parameters or just the nine 40 CFR Part 503.13 metal?**

Response 32: There is no TCLP for just the nine 40 CFR Part 503.13 metals. The proposed rules require the toxicity characteristic leaching procedure (TCLP) to be the test method, Method 1311 (1992 or latest version) of Test Methods for Evaluating Solid Wastes (EPA Publication SW-846), Volume IC: Laboratory Manual, Physical/Chemical Methods) used to determine the mobility of both organic and inorganic contaminants present in liquid, solid and multiphasic wastes.

**Comment 33: Rule 0400-40-15-.02(8)(a)7 Land Application: This full list is not applicable for many systems. It should read "...shall record the applicable information on a truck...." For example in a small system, the transporter will always be the City. The date hauled and delivered will be the same and the point of origin will always be the same as well as the application method. This appears to be lots of redundant and trivial information, but in some cases it could be necessary.**

Response 33: TDEC agrees that this full list is not applicable for many systems and has been deleted from the proposed rules.

**Comment 34: Rule 0400-40-15-.02(9)(b) Land Application: The Biosolids Coordinator "should" not "may" issue a waiver if electronic submittal is not available.**

Response 34: The proposed rules have been changed to "will" issue a waiver if it is demonstrated that the electronic submittal is not available.

**Comment 35: Rule 0400-40-15-.02(9)(d)1 Land Application: Why latitude and longitude? This gives the perception of cradle to grave tracking as though biosolids are a highly dangerous material.**

Response 35: Knowing the exact location of a site is important information, especially when there are many application sites in the same proximity.

**Comment 36: Rule 0400-40-15-.02(9)(d)3 Land Application: What does "Residual source" mean?**

Response 36: Residual source means where did the residual come from—animal manure, commercial fertilizer or municipal utility.

**Comment 37: Rule 0400-40-15-.02(9)(d)5 and 6 Land Application: Why is target application rate of PAN and PAN applied requested? What happened to agronomic loading rate? This appears to be another change of terminology that will only add confusion.**

Response 37: TDEC agrees with the commenter and has changed "target application" to agronomic in the proposed rules.

**Comment 38: Rule 0400-40-15-.02(10)(b) Land Application: Where blowing dust is possible this is understandable, but many biosolids are transported in a semi-solid, relatively high moisture condition that does not leak from a truck or blow off. Stating "all" biosolids must be covered is extreme.**

Response 38: TDEC agrees with the commenter and has deleted this requirement from the proposed rules.

**Comment 39: Rule 0400-40-15-.02(10)(d) Land Application: What makes up an adequate Spill Control and Prevention Plan?**

Response 39: TDEC agrees with the commenter and has deleted this requirement from the proposed rules.

**Comment 40: Rule 0400-40-15-.06(1)(a) Permitting: This paragraph states that "all" facilities shall apply... Don't these rules only apply to certain facilities that actually land apply biosolids and not to "all" facilities.**

Response 40: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 41: Throughout this rule there is conflicting verbiage about a NOI and/or and application. Rule 0400-40-15-.06(2)(b) Permitting states that those seeking coverage under a General Permit submit a NOI; (3)(b) appears to state that a permit application be submitted for a General Permit; and (4)(a) States for a General Permit submit a permit application.**

Response 41: The proposed rules have been modified to ensure that it is clear that a notice of intent (NOI) is used only with regard to a general permit and a permit "application" is used for an individual permit.

**Comment 42: Under Rule 0400-40-15-.06(7) Permitting is there a "form provided by the Division?" Also, reference to Appendix .06-B. But in Appendix .06-A (1) it appears to state that an application in needed if seeking coverage under the general permit.**

Response 42: There is no form as yet provided by the Division. If the proposed rules are adopted, the Division most likely will develop a standard form. Nevertheless, the minimum requirements for the content of an individual permit application for the land application of Class B biosolids are listed in Appendix .06-A. The minimum requirements for the content of notice of intent (NOI) for the land application of Class B biosolids under a general permit are listed in Appendix .06-B.

**Comment 43: Under Rule 0400-40-15-.06(10) Permitting, for simplicity, why not require the same person who signs the DMR's to sign this document?**

Response 43: Signatory requirements for applications and reports are always different. While application(s) can be signed only by relatively narrow list of executive or elected personnel, the reporting portion of the permitting process can be delegated. In other words, we consider that it would be an unnecessary regulatory burden for a mayor or a CEO to have to sign a DMR form every month. Reverse authorization is not possible; that is, a mayor cannot authorize a wastewater treatment plant operator to sign a permit application.

**Comment 44: Under Rule 0400-40-15-.06(17) Permitting is the current Regional Administrator on-board with these Rules?**

Response 44: The Regional Administrator (US EPA, Region 4, Atlanta) will be provided with an opportunity to review and comment of this General Permit at the time it is placed on a public notice.

**Comment 45: Under Rule 0400-40-15-.06(18) Permitting what would happen if a permit expired because of a TDEC delay?**

Response 45: It is likely that the final version of the General Permit will contain a provision for the permit coverage could be administratively extended if the next permit issuance is delayed.

**Comment 46: Under Rule 0400-40-15-.06(20)(b)4 does the term "strike" refer to a labor strike or a lightning strike?**

Response 46: The proposed rules were modified to remove this confusion.

**Comment 47: Under Rule 0400-40-15-.06(21)(a) Permitting: Could a permit be terminated for noncompliance with administrative or paperwork issues that may arise due to the confusing nature of the multiple rules, guidance documents and regulators and which has no negative impact upon public health or the environment?**

Response 47: The rule is self-explanatory as to reasons and conditions under which the Director can terminate permits, deny permit applications, or deny an expansion of an existing permit. However, the Division has always been very deliberate when making such decisions. There is no reason to believe such enforcement discretion would not be used in the future.

**Comment 48: Under Rule 0400-40-15-.06(21)(e) Permitting: It appears that Rule 0400-40-15-.07 has been omitted.**

Response 48: The commenter is correct, Rule 0400-40-15-.07 dealt with fees and since there are no fees associated with the proposed rules; Rule 0400-40-15-.07 was not needed. The reference to Rule 0400-40-15-.07 has been deleted from the proposed rules.

**Comment 49: Appendices .06-A(5): Is staging regulated? It appears to be through the definition. This should be omitted from the Rules. Without the ability to stage or store for times ranging from days to months many land application processes will be forced back to landfilling. For example, few sewer plants have on-site storage but the sludge dewatering processes will operate daily or weekly in order to prevent solids backups and possible effluent violations. Without on-farm storage either through the crop growing season or winter there is simply no location to put the dewatered biosolids until favorable spreading conditions are available.**

Response 49: Staging and storage requirements and references have been deleted from the proposed rules and Appendices .06-A(5) has been modified accordingly in the proposed rules.

**Comment 50: Appendices .06-C(5): What is Daily Timing? How is this related to proper land application?**

Response 50: Daily timing has been deleted from Appendices .06-C(5) in the proposed rules.

**Comment 51: Appendices .06-C(7): This issue of storage, on-site, off-site and staging needs to be more clearly described. As it reads there is significant perplexity about what is appropriate and acceptable. This leaves open the possibility of misinterpretation and possibility abuse from regulators as well as appliers.**

Response 51: References to staging have been deleted from the proposed rules; however, it is appropriate to require a site specific land application plan to address storage. The lack of adequate storage can pose significant problems. Additionally, the type, size and location of storage facilities are important to ensure that any potential runoff and/or leaching does not jeopardize waters of the state.

**Comment 52: Appendices .06-C(8)(a): How much legend information is needed? Is simple distance acceptable?**

Response 52: The legend information should match what is required on the map to ensure that anyone looking at the map can identify the features on the map. An accurate distance scale is mandatory.

**Comment 53: Appendices .06-C(8)(c): What is a Unit ID number?**

Response 53: A Unit ID or site(s) may be needed where multiple land application units exist within a single site or where multiple sites are located on the same map.

**Comment 54: Appendices .06-C(8)(m): What is an adequate Land Owner agreement?**

Response 54: What is an adequate land owner agreement will be at the discretion of the permittee. The importance of the land owner agreement is to ensure that land owner understands his responsibilities with regard to the land application of Class B biosolids under the proposed rules.

**Comment 55: Appendices .06-E(b): The word "of" should be "or".**

Response 55: TDEC agrees with the commenter and the typographical error in Appendices .06-E(b) has been corrected from "of" to "or".

**Comment 56: What will become of the *Guidelines*? Many of those requirements are incorporated in these Rules, but not all of them. The Guidelines had restrictions or suggestions on land applications on land with steeper slopes. Because most of the state has gently rolling to steep farmland, is there a way to facilitate application to these slopes such as using application rates that are less than the agronomic loading rate?**

Response 56: The Guidelines will go away if the proposed rules are adopted. It is true that many of the requirements from the Guidelines are incorporated in the proposed rules but not all of them. The Guidelines contain provisions that are "more restrictive" than 40 CFR Part 503 in terms of setbacks and suggestions relative to steeper slopes. The proposed rules eliminate most of the setbacks which will allow much more land to be utilized than in the past under the old Guidelines. Slopes could be a factor, but TDEC's thinking on this issue is that most sites will be properly managed under rules and a general permit. For difficult sites with problematic slopes there will always be the option to issue an individual permit and address all of the site specific conditions in that individual permit.

**Comment 57: Two permits will create confusion, will require more time with reporting processes, more chances for error, seems impossible to keep up with 2 permits.**

Response 57: Currently, there are no permits being issued by either the state or EPA-Region 4. Being subject to a self-implementing federal rule that is very complex and has over 300 different scenarios for interpretation is extremely confusion and provides a great deal of uncertainty relative to compliance. A program under the proposed state rules and general permit will solve this dilemma.

**Comment 58: Farms? Will existing farms qualify under new permit? Will they be grandfathered in? Will inspectors have a set of rules to go by so all utilities are treated the same?**

Response 58: It is anticipated that all farms, existing land application sites where Class B biosolids are being applied will qualify for coverage under the general permit and the plan is to grandfather all of those sites in under the general permit. Inspectors will have rules and/or the general permit or individual permit and it will be a level playing field across the state, because all utilities will be treated the same. The uncertainty and any inconsistencies will be eliminated under the proposed rules.

**Comment 59: Loading rates Table 3 Selenium changed from 36 to 100 and PCB's and TCLP not monitoring now.**

Response 59: Table 3 of 40 CFR Part 503.13 was amended several years ago and one of changes was changing the Selenium value from 36 mg/kg to 100 mg/kg. The proposed state rules are the same as 40 CFR Part 503 for all metal limits. 40 CFR Part 503 and the proposed state rules have requirements for PCB's (must be less than 50 mg/kg) and the requirement to be non-hazardous, but there is no monitoring requirement for either PCB's or TCLP (a test to determine is a solid waste is hazardous) contained in 40 CFR Part 503. The only way to document that the biosolids is less than 50 mg/kg in PCB's and is non-hazardous is to do analytical testing to prove it.

**Comment 60: Time? We have had a couple of farms for over a year waiting for TDEC to check, TDEC claims they are under staffed, so what will this new permit create?**

Response 60: Under the proposed rules and general permit, once the applicant certifies via a notice of intent (NOI), TDEC will have no more than 60 days to issue a notice of coverage. If TDEC fails to act, coverage will automatic. The proposed rules and general permit will eliminate confusion and uncertainty about compliance with the requirements for the land application of Class B biosolids and will create a consistent and level playing field for all municipal utilities in the State of Tennessee.

**Comment 61: Costs—this rule will add unnecessary costs at a time of extreme budget stress.**

**Response 61:** The overall costs for municipal utilities applying Class B biosolids should not change significantly from the current situation. For all practical purposes the information required now for site approvals is the same as will be required under the proposed rules. Municipal utilities should find it easier and quicker to obtain site approvals and more land base will be available per site under the proposed rules as opposed the old Guidelines. The added cost of PCB and TCLP testing is once per 5 years and will average about $40 per month. There is no anticipated scenario for a municipal utility that would require any kind of a rate increase.

**Comment 62: One commenter stated that most cities understand that it is their responsibility to follow the NPDES permit and they make every effort to comply with 40 CFR Part 503 and the Guidelines. If these requirements already exist, why are rules needed.**

Response 62: TDEC agrees that most cities make an effort to comply with 40 CFR Part 503 and the Guidelines. The problem is centered on the confusion and uncertainty for a municipal utility to try to understand accurately and completely a very complex 40 CFR Part 503 regulations that has at least 300 different ways to be interpreted. The problem expands since the municipal utility must comply via self-implementation. State rules will remove the uncertainty and confusion for municipal utilities that land applies Class B biosolids.

**Comment 63: The proposed TN rule will not replace 40 CFR Part 503, but will add another layer of regulation on top of the EPA authority. Why do we need two regulators? If TDEC wants to be the land application regulator, why doesn't the Department seek delegation of 40 CFR Part 503 from the EPA.**

Response 63: The proposed Tennessee biosolids rules will not replace 40 CFR Part 503, but mimic and enhance those federal regulations and also make them enforceable by the State of Tennessee. There is not another layer of regulation, just enhancement and clarification that was anticipated by EPA when they promulgated 40 CFR Part 503 in 1993. Theoretically, there are two

regulators, but for all practical purposes there has not been one, since EPA has had a very limited presence in Tennessee, has not conducted a biosolids inspection since 2010 and has stated that it unlikely that they will return any time soon, if at all. This is one of the primary reasons that TDEC believed that is was time to have state rules to cover the land application of Class B biosolids. These proposed rules do not, and are not intended, to lay the ground work for TDEC seeking delegation of 40 CFR Part 503. Seeking delegation of 40 CFR Part 503 would require a significant expansion of TDEC's biosolids program and require fees to fund the activity. What is proposed is to keep the status quo on costs and staff oversight and make a seamless transition from the current program of self-implementation of Part 503 and compliance with state guidelines to rules which will facilitate a general permit or an individual permit for the land application of Class B biosolids.

**Comment 64: One commenter noted that "Table 1- Crop Nitrogen Requirements" that Bermuda grass, which has a nitrogen requirement of 200 lbs/acre/year is not listed in Table 1. In item 4 below Table 1, the proposed rule states: "All nitrogen requirements greater than 150 lbs/ac/yr, must be approved in advance by the Director." We have established a good beneficial reuse program with Bermuda hay as a summertime crop, and would like to see it listed in Table 1.**

Response 64: TDEC agrees with the commenter and has made the appropriate changes to Table 1 in Rule 0400-40-15-.02(5)(d)3, and the wording in Rule 0400-40-15-.02(5)(d)4.

**Comment 65: With regard to Rule 0400-40-15-.02(9)(c), one commenters stated that this refers to providing per application event or monthly, a Farm Operator Report to the grower. We would like to see wording inserted that relieves generators, who also are the growers from this requirement.**

Response 65: TDEC agrees with the commenter and the appropriate changes have been made to Rule 0400-40-15 .02(9)(c).

**Comment 66: One commenter noted that Rule 0400-40-15-.02(8)(a)7(i) through (vii) refer to: "Each load of biosolids hauled must be recorded on a truck report that maintained on file for five years and includes the following:" Do these subparts refer solely to biosolids being hauled on public roadways? If this is not clarified, it could lead to confusion later.**

Response 66: **Rule** 0400-40-15-.02(8)(a)7(i) through (vii) have been deleted from the proposed rules.

**Comment 67: One commenter noted that Rule 0400-40-15-.02(10) contains subparagraphs (a) through (e). Although it seems that this pertains solely to biosolids that are being transported on public roadways, this is not completely clear. Do any of these subparagraphs apply to biosolids that are generated and applied on the same property? Language should be inserted that clarify this position.**

Response 67: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 68: Will the language related to preventing the land application of biosolids at sites below the 100-year flood plain elevation be removed from the Final Rule? [ref. 0400-40-15-.02(5)(f)]. This management practice as stated is more stringent than the current Guidance from TDEC and 40 CFR Part 503. The inclusion of this management practice as is would be a detriment to many biosolids management programs throughout the state affecting WWTP facilities, farmers. One program would incur a loss of an estimated 40% of its agricultural land base.**

Response 68: Rule 0400-40-15-.02(5)(f) has been deleted from the proposed state rules.

**Comment 69: Will the fee identified in the Draft Rule be removed from the Final Rule? [ref. 0400-40-15-.06(21)(e)]**

Response 69: There are no fees associated with the proposed rules and Rule 0400-40-15-.06(21)(e) has been deleted from the proposed draft rules.

**Comment 70: For facilities currently land applying Class B biosolids utilizing "Site Suitability" letters from TDEC, will a re-submittal of all land base book information, including application maps, vicinity maps, soil maps, etc., be required to achieve coverage under the general permit?**

Response 70: It is anticipated that all existing sites that have site suitability letters from TDEC will be grandfathered in at the time of issuance of the general permit.

**Comment 71: If and when the final general permit is issued, what time frame should a municipality expect to achieve coverage under the general permit granted no special circumstances exist?**

Response 71: It is anticipated that once the general permit is issued that all existing sites that have been approved by TDEC will be grandfathered in and that other new sites submitting a notice of intent will receive a notice of coverage within 60 days.

**Comment 72: One commenter stated that they manage several biosolids programs in the state which offsite staging and offsite storage is utilized as part of the management process. The definition of staging of biosolids is included in the definitions section but not addressed in the rules and also the definition imposes impractical limitations on storage of biosolids in the field. The offsite staging and storage of biosolids is essential for programs which do not have sufficient onsite storage capabilities**

Response 72: The definitions relative to staging and storage have been deleted from the proposed rules. If there are special situations with regard to staging and storage that cannot be covered sufficiently by the general permit, TDEC will have the option to issue an individual permit for the land application of Class B biosolids.

**Comment 73: One commenter objected to the definition included for the "*staging of biosolids*" in Rule 0400-40-15-.01(8). This definition does not appear to be used in the new rules and puts impractical time limitations on the storage of biosolids in the field prior to land application. The definition also states that "*staging of biosolids*" is not temporary storage but does not provide sufficient clarification. The commenter requested that this definition be removed to avoid confusion since it is not included anywhere else in the proposed rules**

Response 73: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 74: One commenter objected to the definition included for "*temporary, small scale storage*" in Rule 0400-40-15-.01(8). This definition does not appear to be used in the new rules and requires storage in a tank constructed of non-earthen material with a limited capacity of 20,000 gallons. Temporary storage in the field on the farm is sometimes necessary, and it is impractical to require construction of tanks to do so. The commenter requested that this definition be removed to avoid confusion since it is not used anywhere else in the new rules.**

Response 74: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 75: One commenter objected to the sentence included in Rule 0400-40-15-.02(5)(f) Management Practices that states "*Biosolids shall not be applied to a site that is below the 100-year flood plain elevation unless the application is approved in writing by the State Biosolids Coordinator.*" While we agree that land application programs should not impact the Waters of the State, this requirement is not included in 40 CFR Part 503. 40 CFR Part 503.14 (b) Management Practices limits its guidance to the statement that "*Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.*"**

**The commenter noted that the new biosolids rules also do not include sufficient information regarding which entity will officially designate land areas as being within a 100 year floodplain. Without clear guidance, this subparagraph can result inconsistencies in approvals and practices by the (state biosolids) coordinator.**

Response 75: TDEC agrees and notes a similar statement in comment #68. Rule 0400-40-15-.02(5)(f) has been deleted from the proposed state rules.

**Comment 76: One commenter noted that the Notice of Rulemaking indicates that there are no fees associated with these new rules or the general permitting process for land application of biosolids. Rule 0400-40-15-.06(21)(e) indicates that "*Failure by the permittee to pay all or part of the annual permit maintenance fee in accordance with Rule 0400-40-15-.07*" can result in termination of a permit. This statement should be removed. Rule 0400-40-15-.07 does not appear to be included anywhere in the rules but in the Table of Contents.**

Response 76: TDEC agrees with the commenter--similar to comment #69. There are no fees associated with the proposed rules and Rule 0400-40-15-.06(21)(e) has been deleted from the proposed rules.

**Comment 77: One commenter stated, per Notice of Rulemaking Hearing SS-7037, "Biosolids are currently regulated under 40 CFR Part 503. However, the State of Tennessee has no authority to enforce 40 CFR Part 503. EPA-Region 4 is the permitting authority per 40 CFR Part 503 but has had a very small presence in Tennessee since the promulgation of 40 CFR Part 503 in 1993. Furthermore, with EPA's national divestment in biosolids' enforcement, it is highly unlikely that there will be a future EPA presence in Tennessee relative to biosolids."**

**The commenter believes that this is speculative on the State's part and if any utility does not follow 40 CFR Part 503 regulations, the EPA would insure that these rules be enforced and that the alleged perpetrators be held accountable.**

Response 77: EPA's Office of Enforcement and Compliance Assurance (OECA) published their FY 2013 – National Program Manager Guidance in which they stated: *"All states now have their own safety program for biosolids, and there are also third party verification programs that support compliance in this area. In light of these facts, and the scientific studies indicating that biosolids present a lower risk than other substances, EPA expects to reduce investment in this area to support other high priority enforcement work. OECA is considering a number of program areas in which to reduce resources devoted to monitoring, compliance, and enforcement, as well as rely more on states or local entities to do the work."*

EPA has stated that they plan to reduce investment in biosolids compliance and enforcement in 2013. The proof is in EPA's actions. EPA has not made a biosolids inspection since 2010 in Tennessee and they don't plan to make any in FY 2012 and FY 2013, as noted by their correspondence. EPA's actions are divestment. The agency expects the states to do the job with assistance from the National Biosolids Partnership.

The commenter believes that any utility does not follow 40 CFR Part 503 regulations, the EPA would insure that these rules be enforced and that the alleged perpetrators be held accountable. But there is no evidence that EPA has done this, especially since EPA has not made a biosolids inspection in the State of Tennessee since 2010 and made it clear that they won't be back any time soon, if at all.

Furthermore, there have been several huge problems as noted in response #5 which are as follows:

1. Dumping 4.5 million gallons of biosolids on a site with karst topography with no crop harvesting.
2. Dumping over 1 million pounds of BOD into a sink hole over a 10 year period.
3. Dumping approximately 500,000 pounds of nitrogen on a site adjacent to an Exceptional Tennessee Water with no crop harvesting over the 20 year period.

In each of the above 3 situations there is no record to document that EPA insured that 40 CFR Part 503 was enforced by taking action against the alleged perpetrators and held them accountable. This again makes the point as to why the State of Tennessee needs the proposed rules for the land application of Class B biosolids.

**Comment 78: One commenter stated that "The monitoring frequency, the recording keeping and reporting requirements are also the same. The only "differences" are that these proposed rules provide specifics for the agronomic rate calculation and add a few more setbacks to ensure protection of the waters of the State of Tennessee."**

**The commenter noted that with the addition of the new setbacks, the commenter would be required to acquire additional land and transport biosolids off the existing treatment plant site. Both instances would require additional cost to the commenter and its ratepayers. The current practices followed by the 40 CFR Part 503 regulations have not impaired the waters of Tennessee nor brought any public harm.**

Response 78: The proposed state rules have fewer and less restrictive setback requirements than the old state guidelines. Thus, more land base will be available than under the old system which we provide cost savings by reducing land base requirements and transportation costs; thus, there will be no additional costs to rate payers.

One of the areas that is important is the protection is waters of the state. This requires among other things, the proper application of biosolids in terms of nutrients. Waters of the state include surface water and ground water whereas, waters of the United States is confined to only surface water. Furthermore, 40 CFR Part 503 requires applications at an "agronomic rate" but is silent on how to determine that rate.

Another short coming of 40 CFR Part 503 is the lack of adequate buffers/setbacks. The only setback required by 40 CFR Part 503 is 10 meters from waters of the U.S. This setback alone is not adequate to protect surface waters.

Therefore the proposed states rules provide specific guidance that will help to ensure that an over application of nutrients does not occur, which helps to ensure protection of our state ground and surface waters. As noted the proposed rules propose additional setbacks compared to 40 CFR Part 503, but fewer when compared to old state guidelines.

**Comment 79: Rule 0400-40-15-.01(4) Additional or more stringent requirements [40 CFR Part 503.5]: On a case-by-case basis, the Director may impose requirements for the application of biosolids in addition to or more stringent than the requirements in these rules when necessary to protect public health or the environment from any reasonably anticipated adverse effect that may occur due to any characteristic of the biosolids or the site.**

**One commenter stated that they would prefer this part of the rule be deleted in its entirety. If a utility is not abiding by the existing rules, then that utility should be held accountable. The State should not impose more rules that may not be followed and would impose more burdens on the other utilities.**

Response 79: The proposed Rule 0400-40-15-.01(4), Additional or more stringent requirements is similar to the provision in 40 CFR Part 503.5. It allows the Director, on a case-by-case basis to impose more stringent requirements when necessary to protect public health or the environment from any reasonable anticipated adverse effect that may occur due to any characteristic of the biosolids or the site.

**Comment 80: One commented referenced Rule 0400-40-15-.02(7)(b) Frequency of Monitoring/PCBs shall be monitored at least once every 5 years unless otherwise specified by the State Biosolids. The commenter believes this would impose more unnecessary cost on the utility which would in turn impose higher cost to the ratepayer. PCBs are already tested on industries every five years and the plant effluent based on the utilities' NPDES permit at the same interval.**

**The same commented referenced 0400-40-15-.02(7)(c) Frequency of Monitoring/A Toxicity Characteristic Leaching Procedure (TCLP) using SW-846 Method 1311 in accordance with 40 CFR 261.24 shall be conducted at least once every 5 years unless otherwise specified by the State Biosolids Coordinator. The commenter considers this to be more unnecessary cost to the utility and the ratepayer. Metals are already tested on industries and treatment plant influent, effluent, and biosolids. These analyses are conducted at a minimum semiannually.**

Response 80: 40 CFR Part 503 and the proposed state rules have requirements for PCB's (must be less than 50 mg/kg) and the requirement to be non-hazardous, but there is no monitoring requirement for either PCB's or TCLP (a test to determine is a solid waste is hazardous) contained in 40 CFR Part 503. The only way to document that the biosolids is less than 50 mg/kg in PCB's and is non-hazardous is to do analytical testing to prove it.

The overall costs for municipal utilities applying Class B biosolids should not change significantly from the current situation. For all practical purposes the information required now for site approvals is the same as will be required under the proposed rules. Municipal utilities should find it easier and quicker to obtain site approvals and more land base will be available per site under the proposed rules as opposed the old Guidelines. The added cost of PCB and TCLP testing is once per 5 years and will average about $40 per month. There is no anticipated scenario for a municipal utility that would require any kind of a rate increase.

**Comment 81: One commenter referenced the following: Rule 0400-40-15-.06(16) Permitting/Additional or more stringent requirements:**

**(a) On a case-by-case basis, the Division may impose requirements for the land application of biosolids that are in addition to or more stringent that the requirements in these rules if the Division believes that the additional or more stringent requirements are necessary to protect public health or the environment from any adverse effect of a contaminant in the biosolids or to ensure compliance with these rules.**

**(b) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of these rules may be cause to impose additional or more stringent requirements.**

**(c) The Division will impose any additional or more stringent requirements in an individual permit issued to a facility in general permits issued in accordance with paragraph (23) of Appendix .06-E of this rule, and in the issuance of final coverage under a general permit.**

**(d) Any additional or more stringent requirements imposed in accordance with this paragraph are considered to be permit requirements, fully enforceable in accordance with the provisions of these rules and the applicable permit.**

**(e) If known, any additional requirements shall be disclosed at a public hearing if a public hearing is held.**

**The commenter considers this to be another opportunity by the State to impose more regulations on a utility that is not following existing rules. Again, the current rules are enforceable and should be sufficient for environmental protection.**

Response 81: Rule 0400-40-15-.06(16)(c) has been modified to make it clear that in the case where the general permit is not used because of different conditions that the individual permit will impose additional or more stringent requirements as compared to the general permit. In this case, the issuance of an individual permit will follow the public notice and comment period associated with individual permits.

**Comment 82: In reference to Land Application Rule 0400-40-15-.02(4)(b)3. One commenter suggested removing "monthly" from column in Table 3. The use of "monthly" implies that the**

**generator should be calculating monthly averages, when in fact, the standard applies to the average over the minimum monitoring frequency for the generator (based on annual biosolids production). There are several places in the regulations where "average" should be inserted, as follows:**

**a. Land Application Rule 0400-40-15-.02(4)(a)2(ii): Suggest using: The "average" concentration.....to be clear that this is different from the ceiling concentration in Table 1.**

**b. Land Application Rule 0400-40-15-.02(4)(a)3: Is "average" concentration also being considered for use in home garden or sold or given away? Or is Table 3 being used here to indicate a ceiling concentration?**

**c. Land Application Rule 0400-40-15-.02(4)(a)4: Here reference is made to Table 1 and Table 3. Suggest using the term "average" to indicate use of Table 3, to be clear.**

Response 82: The changes suggested have made in the proposed rules for clarification of meaning.

**Comment 83: One commenter referenced Land Application Rule 0400-40-15-.02(5)(d)1: Yields should be based on all criteria required in the rules, with the exception of the "recommendation of owner". Using the average of the actual yields documented from the best 3 years during a 5-year cycle is typical and is suggested.**

Response 83: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 84: One commenter referenced: Land Application Rule 0400-40-15-.02(9)(d). The commenter suggested the following language be substituted to enhance organization and clarity. A key change is to remove the requirement to report detailed daily activity. The following summary information for each field captures the information necessary to convey field activity. It is reasonable to require daily information for recordkeeping, but is onerous for reporting purposes.**

**Rule 0400-40-15-.02(9)(d): A form shall be included in the annual report submitted to the State Biosolids Coordinator which contains at a minimum:**

**1. A summary of calendar year annual activity, for all sites.**
   - **a. Residual sources and annual dry tons applied of each**

**2. For each site, provide:**
   - **a. Summary information:**
     - **i. The applier**
     - **ii. Land owner or operator**
     - **iii. Latitude and longitude**
     - **iv. County**
     - **v. Summary of overall site activity:**
       - **1. Approved acres**
       - **2. Applied acres**
       - **3. Total tonnage or volume (wet weight)**
       - **4. Dry tons total**
   - **b. Detailed information for each field:**
     - **i. Field number/name**
     - **ii. Field acres, excluding setbacks**
     - **iii. Crop**
     - **iv. First application date**
     - **v. Last application date**
     - **vi. PAN applied (plant available nitrogen in pounds per acre)**
     - **vii. Application method**

viii. **Calculated application rate (DT/Ac) to meet crop PAN need**

ix. **Actual dry tons per acre**

x. **Actual per acre tonnage or volume (wet weight)**

xi. **Total dry tons**

xii. **Total tonnage or volume (wet weight)**

Response 84: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 85: One commenter referenced Land Application Rule 0400-40-15-.02(5)(b) and asked to consider adding definitions for "flooded, frozen, or snow-covered" ground.**

Response 85: Rule 0400-40-15-.02 has been modified to match the wording in 40 CFR Part 503.14.

**Comment 86: One commenter referenced Land Application Rule 0400-40-15-.02(5)(c) and asked if reservoirs and/or public wells be given separate setbacks?**

Response 86: Rule 0400-40-15-.02 contains a 100 foot setback from public wells and a 100 foot setback is being added for water supply reservoirs to avoid confusion with the setbacks relative to surface waters.

**Comment 87: One commenter referenced Land Application 0400-40-15-.02(5)(d)5. And noted that the rules state that in cases where the biosolids has substantial liming value, the agronomic rate shall be the lesser of the whole biosolids application rate that provides crop nitrogen needs as determined by parts 1 and 2 of this subparagraph or required liming equivalent necessary to raise the soil pH to the value most conductive for productivity of the crop(s) to be grown. As you know, crops generally have an optimum range of pH requirements. However, this optimum range does not denote limitations to crop growth or environmental harm. We suggest requiring multi-year cycles for application of lime amended biosolids when soil pH levels reach a certain maximum. It is common for land application sites downwind of quarries and lime kilns to have soil pH close to or greater than a value of 8. There was no crop yield reduction noted in these cases. The United States Department of Agricultural Natural Resources Conservation Districts states that a moderately alkaline soil ranges from 7.9 to 8.4. We suggest that this upper limit should be used for soil pH.**

Response 87: TDEC agrees with the commenter and the appropriate changes have been made to the proposed rules.

**Comment 88: One commenter referenced Land Application 0400-40-15-.02(5)(d)2, and asked TDEC to consider adding "lime stabilized sewage sludge" to the table, with a mineralization rate of 30%. Or, consider adding a footnote that directs generators to use the mineralization rate that applies to their biosolids digestion type, prior to lime addition.**

Response 88: TDEC recognizes this oversight and has corrected Rule 0400-40-15-.02(5)(d)2 by adding alkaline stabilized sewage sludge to the table with a mineralization rate of 30%.

**Comment 89: One commenter referenced Pathogens and Vector Attraction Reduction Rule 0400-40-15-.04(2) and noted that in the rule, "unstabilized solids" are defined as organic materials in biosolids or sewage sludge that have not been treated in either an aerobic or anaerobic treatment process. Does this definition also apply to lime amended biosolids that has not been aerobically or anaerobically digested first?**

Response 89: The answer to the commenter's question is "no". The definition of "unstabilized solids" in Rule 0400-40-15-.04(2) is the same as the definition in 40 CFR Part 503.31(j). The key to the definition is treatment in either an aerobic or anaerobic treatment process. Lime or alkaline stabilization would not meet the definition of an aerobic or anaerobic treatment process. As noted in the White House Manual (page 62), the addition of alkaline material reduces biological activity, but this reduction is not permanent. If the pH drops, surviving bacteria become biologically active and the biosolids will again putrefy and potentially attract vectors.

**Comment 90: One commenter referenced Permitting Rule 0400-40-15-.06(3)(a)5 and 6 and noted that we also commend the TDEC for providing incentives to generators to consider EQ processes, and for participating in the National Biosolids Partnership's Environmental Management System program. However, it is unclear as to which other biosolids program requirements will also be exempted; such as recordkeeping.**

Response 90: The intent of the proposed Rules is to recognize exemplar agencies that are certified under the National Biosolids Partnership's Environmental Management System and allow those certified agencies to self-certify under the general permit. As such these certified agencies must comply with all of the requirements of the proposed rules, such as recordkeeping, etc., including submitting a notice of intent (NOI) or an application for an individual permit. If a certified agency submits an NOI, the rule intends to allow those agencies to be self-certified which means they do not have to wait for TDEC to issue a notice of coverage (NOC). However, Rule 0400-40-15-.06(3)(a)6 has been deleted because a certified agency is not exempt from the rules as is an agency producing Exception Quality (EQ) biosolids. Rule 0400-40-15-.06(3)(c)1, has been added to clarify this situation.

**Comment 91: One commenter referenced Reporting Rule 0400-40-15-.06(3)(a)5 and 6 and asked TDEC to clarify whether sites exempted from general/individual permits are also exempted from Recordkeeping and Reporting requirements. It is assumed that all biosolids generators, whether EQ or Class B, must comply with recordkeeping requirements.**

Response 91: Refer to response 90. Keep in mind that EQ Biosolids are exempt under the proposed state rules for the land application of Class B biosolids; however, EQ Biosolids are still regulated under 40 CFR Part 503 and must keep records and report. EQ Biosolids are exempt from the general requirements (503.12) and management practices (503.14).

**Comment 92: One commenter referenced Appendix.06-E(7)(a) Public Hearings and noted that the rules require the Division to hold one or more public hearing(s) on all draft general permits. Is it correct that each generator that applies for coverage under this general permit would be considered a new general permit? If this is correct, unless required by other Tennessee law or regulation, it is suggested that requiring public hearings for each general permit is unwarranted. Biosolids quality data used to support an application for this general permit is straight forward and doesn't lend itself well to public hearing setting. Furthermore, it represents a significant cost for the state and the generators. It is unlikely that the public will provide constructive comments or will identify technical deficiencies that a generator or regulator hasn't already uncovered. We strongly suggest that public hearings NOT be mandatory, and when held, be based on (1) amount of public interest, (2) past compliance history of applicant, and/or (3) special request or circumstances. Or, as in other states, there is one general permit issued for the state, and generators can "register" under that general permit. Only the issuance of the "state-wide" general permit will trigger public notice requirements.**

Response 92: Appendix .06-E are the procedures for issuing General Permits and all of listed requirements relative to public hearings are specific to one general permit, in this case the general permit for the land application of Class B Biosolids. This will be a state-wide general permit. Once the general permit has been issued, generators can certify via a notice of intent (NOI) that they will comply with the general permit. TDEC will review the NOI and if we agree with the applicant, we will issue a notice of coverage (NOC). When a generator applies for coverage under the general permit via the NOI, this is not considered a new general permit. Only the issuance of the state-wide general permit will trigger public notice requirements. A new general permit will have to be issued every 5 years.

**Comment 93: Another commenter referenced Land Application Rule 0400-40-15-.02(5)(f) and noted that the current draft rules state that "Biosolids shall not be applied to any site area with standing surface water or if the annual high groundwater level is known or suspected to reach the surface of the land application site. Biosolids shall not be applied to a site that is below the 100-year flood plain elevation unless the application is approved in writing by the State Biosolids Coordinator".**

**Comment: The prohibition of applying biosolids on soils in areas where high groundwater levels may reach the surface, or in 100-year flood plains is not contained in 40 CFR Part 503 biosolids regulations. 40 CFR Part 503 does prohibit biosolids applications to areas where the potential for reaching surface water and groundwater is high; such as entering a wetland and/or within 33 feet of surface water, as noted below. We believe these protections are adequate to safeguard surface water and groundwater. 40 CFR Part 503 language is noted below.**

***Management Practices § 503.14(b). Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.***

***Management Practices § 503.14(c). Bulk sewage sludge shall not be applied to agricultural land, forest, or a reclamation site that is 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority.***

**We agree that application in standing water or to land that is flooded should be prohibited, but that requirement is addressed adequately in TN Draft Rule 0400-40-15-.02(5)(b) that states "Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered".**

**The requirement that biosolids applications be limited in areas where "annual high groundwater level is known or suspected to reach the surface of the land application site" is too vague. Other states have added standards to their biosolids regulations that do not allow application to soils classified as poorly drained, or require at least 11 inches of soils without evidence of seasonal water. These types of standards would be more precise and measurable than the one provided.**

**Additionally, the standards/criteria for granting approval by the State Biosolids Coordinator for application to flood plain soils are not known. Additional information is needed regarding (1) the standards/criteria to be used and/or (2) the approach regulators plan to use when a request is made for utilizing such a site.**

Response 93: TDEC agrees with the commenter and has made the appropriate changes. Also see comments #30 and #75.

**Comment 94: Another commenter referenced Land Application Rule 0400-40-15-.02(5)(f) and noted it also states "Where biosolids will be land applied on 100-year flood plains, the soils on these landscape positions shall, at a minimum, be well drained, shall be undisturbed (natural), shall not be a wetland, and shall not contain any drains or artificially constructed conduits to Waters of the State".**

**Comment: We suggest that the entire subparagraph (5)(f) be removed from the Draft Rule as there is no similar language in 40 CFR Part 503. The language in 40 CFR Part 503.14(b) and 40 CFR Part 503.14(c) is sufficient.**

**However, if the paragraph does remain, there is no evidence that only well drained soils on flood plains are acceptable. Soils classified by the NRCS as "poorly drained" should be the only soils excluded from biosolids application areas, and only when they exist on a flood plain. As an alternative to the NRCS classification for poorly drained soils, field work could be required that would show that poorly drained soils do not exist where biosolids application will take place. We suggest changing "be well drained" to "not be poorly drained" in the rule.**

**Note that most flood plain soils are very productive and do not pose a risk for pollution, unless active flooding is occurring or is forecast to occur. We are also not aware of a requirement to limit commercial fertilizers or manures to 100-year flood plains, and believe biosolids pose no additional risk.**

Response 94: TDEC agrees with the commenter and has made the appropriate changes to the proposed rules.

**Comment 95: In the instructions for submitting the NOI application, it mentions the form must be signed by an elected official. Many utilities do not have elected officials as part of their District Board/Management does the utility need to have the General Manager sign?**

Response 95: The General Manager is acceptable, as he/she would be considered a principal executive. State rules (http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-05.20110531.pdf) say:

(6) Applications must be submitted in accordance with the following:

(a) For a corporation:

1. By a responsible corporate officer, i.e., a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation;

2. By a manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility to assure long term environmental compliance with environmental laws and regulations; or

3. By a person in a corporate position to which signatory authority has been delegated by a corporate officer.

(b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

(c) For a municipality, state, federal, or other public agency:

1. A principal executive officer (i.e., the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency)

2. Ranking elected official.

**Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

(1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule.

There are no small businesses subject to the proposed biosolids rules.

(2) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record.

The state biosolids rules will not increase costs for either the municipal utilities in Tennessee or the State of Tennessee compared to what is currently required by the self-implementing aspects of 40 CFR Part 503 and state guidelines.

(3) A statement of the probable effect on impacted small businesses and consumers.

Small businesses and consumers will not be impacted by the proposed biosolids rules.

(4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business.

These proposed rules are the less intrusive and less costly alternative method of achieving compliance with the biosolids requirements of 40 CFR Part 503 and the current State Guidelines.

(5) A comparison of the proposed rule with any federal or state counterparts.

These proposed rules mimic 40 CFR Part 503 and only add clarification to requirements contained in those federal rules.

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.

Small businesses are not subject to any part of the proposed rules for biosolids.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

These new rules will have a beneficial impact on local governments.

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Sequence Number: 04-01-13
Rule ID(s): 54606
File Date: 4/1/13
Effective Date: 6/30/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Environment and Conservation |
| **Division:** | Water Resources |
| **Contact Person:** | Robert O'Dette |
| **Address:** | 6th Floor, L & C Annex<br>401 Church Street<br>Nashville, Tennessee |
| **Zip:** | 37243-1534 |
| **Phone:** | (615) 253-5319 |
| **Email:** | Robert.Odette@tn.gov |

**Revision Type (check all that apply):**

___ Amendment
X New
___ Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0400-40-15 | Biosolids Management |
| **Rule Number** | **Rule Title** |
| 0400-40-15-.01 | General Provisions |
| 0400-40-15-.02 | Land Application |
| 0400-40-15-.03 | Reserved |
| 0400-40-15-.04 | Pathogens and Vector Attraction Reduction |
| 0400-40-15-.05 | Reserved |
| 0400-40-15-.06 | Permitting |

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

New Rules

Chapter 0400-40-15
Biosolids Management

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0400-40-15-.03 Reserved
0400-40-15-.04 Pathogens and Vector Attraction Reduction
0400-40-15-.05 Reserved
0400-40-15-.06 Permitting

0400-40-15-.01 General Provisions [40 CFR 503 Subpart A]

(1) Purpose and Applicability [40 CFR 503.1]

(a) Purpose

1. These rules establish standards, which consist of general requirements, contaminant limits, management practices, and operational standards, for the land application of biosolids generated during the treatment of domestic sewage in a wastewater treatment works. Standards are included in these rules for biosolids applied to the land. Also included in these rules are pathogen and alternative vector attraction reduction requirements for biosolids applied to the land.

2. In addition, the standards in these rules include the frequency of monitoring and recordkeeping requirements when biosolids are applied to the land. Also included in these rules are reporting requirements for generators who apply biosolids.

(b) Applicability

These rules apply to any person who applies biosolids to the land, to biosolids applied to the land, and to land where biosolids are applied; provided, however that EQ biosolids are exempt from all requirements of these rules, other than the requirement that the facility that prepares EQ biosolids document in its annual report the information contained in subparagraph (7)(a) of Rule 0400-40-15-.02 documenting that they meet the criteria for EQ biosolids.

(2) Permits and Direct Enforceability [40 CFR 503.3]

(a) Permits. The requirements in these rules may be implemented through a permit issued under T.C.A. § 69-3-101 et seq.

(b) Direct enforceability. No person shall use biosolids through any practice for which requirements are established in these rules except in accordance with such requirements.

(3) Relationship to other regulations [40 CFR 503.4]

Disposal of sewage sludge in a solid waste landfill unit, as defined in Rule 0400-11-01-.01(2), that complies with the requirements in Chapter 0400-11-01 constitutes compliance with these rules. Any person who prepares sewage sludge that is disposed of in a solid waste landfill unit shall ensure that the sewage sludge meets the requirements in Chapter 0400-11-01 concerning the quality of materials disposed of in a solid waste landfill unit.

(4) Additional or more stringent requirements [40 CFR 503.5]

On a case-by-case basis, the Director may impose requirements for the application of biosolids in addition to or more stringent than the requirements in these rules when necessary to protect public health or the environment from any reasonably anticipated adverse effect that may occur due to any characteristic of the biosolids or the site.

(5) Exclusions [40 CFR 503.6]

(a) Treatment processes. These rules do not establish requirements for processes used to treat domestic sewage or for processes used to treat sewage sludge or biosolids prior to final application or disposal, except as provided in paragraphs (3) and (4) of Rule 0400-40-15-.04.

(b) Selection of an application practice. These rules do not require the selection of a biosolids application. The determination of the manner in which biosolids are used is a local determination.

(c) Sludge generated at an industrial facility. These rules do not establish requirements for the use or disposal of sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge or biosolids generated during the treatment of industrial wastewater combined with domestic sewage.

(d) Hazardous sewage sludge or biosolids. These rules do not establish requirements for the land application of biosolids determined to be hazardous in accordance with 40 CFR part 261. Biosolids that are to be land applied shall be tested using EPA Publication SW-846 to determine whether the biosolids leaching potential is greater than the Toxicity Characteristic (TC) levels specified in 40 CFR 261.24. If any of the TC levels specified in 40 CFR 261.24 are exceeded, the biosolids shall not be land applied.

(e) Biosolids or sewage sludge with high PCB concentration. These rules do not establish requirements for the land application of biosolids with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(f) Grit and screenings. These rules do not establish requirements for the use or disposal of grit (e.g., sand, gravel, cinders, or other materials with a high specific gravity) or screenings (e.g., relatively large materials such as rags) generated during preliminary treatment of domestic sewage in a treatment works.

(g) Drinking water treatment sludge. These rules do not establish requirements for the use or disposal of sludge generated during the treatment of either surface water or ground water used for drinking water.

(h) Domestic, commercial and industrial septage. These rules do not establish requirements for the use or disposal of domestic septage, commercial septage, industrial septage, a mixture of domestic septage and commercial septage, or a mixture of domestic septage and industrial septage.

(6) Requirement for a person who prepares biosolids [40 CFR 503.7]

Any person who prepares biosolids shall ensure that the applicable requirements in these rules are met when the biosolids are applied to the land and that biosolids that do not meet the requirements of these rules are not applied to the land.

(7) Sampling and analysis [40 CFR 503.8]

(a) Sampling. Representative samples of biosolids that are applied to the land shall be collected and analyzed.

(b) Methods. Analyses of samples shall be accomplished in accordance with the methods most recently approved by USEPA, a copy of which can be obtained from the Division of Water Resources.

(8) General definitions. [40 CFR 503.9] The following definitions apply to the use of the terms in these rules.

The "Agronomic rate" is the lesser of the whole biosolids application rate (dry weight basis) designed in accordance with subparagraph (4)(d) of Rule 0400-40-15-.02:

(a) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and

(b) To minimize the amount of nitrogen in the biosolids that passes below the root zone of the crop or vegetation grown on the land to the ground water.

"Annual contaminant loading rate" is the maximum amount of a contaminant that can be applied to a unit area of land during any calendar year. The units may be in terms of "pounds per acre," "kilograms per hectare," etc. (i.e., weight per unit area)

"Annual whole biosolids application rate" is the maximum amount of biosolids (dry weight basis) that can be applied to a unit area of land during any calendar year.

"Active sinkhole" is one with fresh exposure, sloughing of soil into the sinkhole throat, wilted or leaning vegetation around the sinkhole, or an open surface hole measuring three feet deep or deeper.

"Agricultural land" is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

"Apply biosolids" or "biosolids applied to the land" means land application of biosolids.

"Base flood" is a flood that has a one percent chance of occurring in any given year (i.e., a flood with a magnitude equaled once in 100 years).

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability to enhance the growth of vegetation consistent with protecting human health and the environment.

"Biosolids" are treated sewage sludge that have contaminant concentrations less than or equal to the contaminant concentrations listed in Table 1 of subparagraph (3)(b) of Rule 0400-40-15-.02, meet any one of the ten vector attraction reduction options listed in part (4)(b)1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of Rule 0400-40-15-.04, and meet either one of the six pathogen reduction alternatives for Class A listed in part (3)(a)3, 4, 5, 6, 7, or 8, or one of the three pathogen reduction alternatives for Class B listed in part (3)(b)2, 3, or 4 of Rule 0400-40-15-.04.

"Bulk biosolids" means biosolids that are not sold or given away in a bag or other container for application to the land (i.e., biosolids that are not put in packages, bags, or other containers for sale but are sold, given away, applied to the land, or disposed of in larger quantities).

"Ceiling concentration" means the maximum concentration of a contaminant in any biosolids sample, beyond which level the biosolids would be classified as sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of 0400-40-15-.02(3)(b).

"Commissioner" means the Commissioner of the Tennessee Department of Environment and Conservation.

"Composting" means the biological degradation of organic material under controlled conditions designed to promote aerobic decomposition. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

"Contaminant" means an organic substance, an inorganic substance, or a combination of organic and inorganic substances that after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, based upon information available to the Commissioner, cause death, disease, behavioral abnormalities,

cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms, depending upon the concentration.

"Contaminant limit" is a numerical value that describes the amount of a contaminant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the amount of a contaminant that can be applied to a unit area of land (e.g., kilograms per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre).

"Cover crop" is a quick growing crop planted between periods of regular crop production to prevent soil erosion and provide humus or nitrogen.

"Cumulative contaminant loading rate" is the maximum amount of a contaminant that can be applied to an area of land from biosolids that exceed the contaminant concentration limits established in Table 3 of 0400-40-15-.02(3)(b).

"CWA" means the Clean Water Act (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92–500, as amended by Public Law 95–217, Public Law 95–576, Public Law 96–483, Public Law 97–117, and Public Law 100–4.

"Department" means the Department of Environment and Conservation for the State of Tennessee.

"Director" means the director of the Division of Water Resources or his or her authorized representative.

"Division" means the Division of Water Resources.

"Domestic septage" is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater nor does it include grease removed from a grease trap at a restaurant.

"Domestic sewage" is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"Dry weight basis" means calculated on the basis of having been dried at 105° Celsius until reaching a constant mass (i.e., essentially 100 percent solids content).

"EPA" means the United States Environmental Protection Agency.

"Exceptional Quality Biosolids" or "EQ biosolids" are biosolids that meet the ceiling concentrations in Table 1 of subparagraph (3)(b) of Rule 0400-40-15-.02 and the contaminant concentrations in Table 3 of subparagraph (3)(b) of Rule 0400-40-15-.02; the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04; and one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04.

"Facility" means a treatment works treating domestic sewage as defined in this chapter, unless the context of the rule requires otherwise. For the purposes of this chapter a facility is considered to be new if it has not been previously approved for the treatment, storage, application, or disposal of biosolids.

"Feed crops" are crops produced primarily for consumption by animals.

"Fiber crops" are crops such as flax and cotton.

"Flood plain" is the nearly level plain that borders a stream and is subject to inundation under flood-stage conditions unless protected artificially. It is usually a constructional landform built of sediment deposited during overflow and lateral migration of the stream.

"Food crops" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

"Forest" is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management.

"General permit" means a permit issued by the Division in accordance with the procedures established in this chapter that authorizes the application of biosolids to the land under which multiple treatment works treating domestic sewage may apply for coverage.

"Geometric mean" means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the $n^{th}$ root of the product of n sample values.

"Ground water" is water below the land surface in the saturated zone.

"Individual permit" means a permit issued by the Division to a single treatment works treating domestic sewage in accordance with this chapter, which authorizes the management of biosolids.

"Industrial wastewater" is wastewater generated in a commercial or industrial process.

"Land application" is the application of biosolids to the land surface by means such as spreading or spraying, the injection of biosolids below the land surface, or the incorporation of biosolids into the soil for the purpose of beneficial use.

"Material derived from biosolids" means biosolids to which any substance has been added.

"Material derived from sewage sludge" is sewage sludge to which any substance has been added.

"Monthly average" is the arithmetic mean of all measurements taken during the month.

"Municipality" means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law or a designated and approved management Agency under section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use, application, or disposal of biosolids and sewage sludge.

"Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of 1 metric ton (1.1 U.S. tons) or less.

"Owner" means any person with ownership interest in a site or facility or who exercises control over a site or facility.

"Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

"Permit" means an authorization, license, or equivalent control document issued by the Division to implement the requirements of this chapter. Unless the context requires differently, the use of the term in this chapter refers to individual permits, general permits, and coverage under general permits.

"Person" is an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

"Person who prepares biosolids" is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

"Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Publicly owned treatment works" or "POTW" means a treatment works treating domestic sewage that is owned by a municipality, public utility, the State of Tennessee, or the federal government.

"Range land" is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

"Reclamation site" is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

"Residential equivalent value" means the number of residential equivalents determined for a facility under chapter.

"Restrict public access" means to minimize access of nonessential personnel to land where biosolids are applied through the use of natural or artificial barriers, signs, remoteness, or other means.

"Runoff" is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.

"Sewage sludge" is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

"Site" means all areas of land, including buffer areas, which are identified in the scope of an approved site specific land application plan. A site is considered to be new or expanded when biosolids are applied to an area not approved in a site specific land application plan or that was not previously disclosed during a required public notice process.

"State" is the State of Tennessee

"State Biosolids Coordinator" is the person designated by the Commissioner to be responsible for the State of Tennessee's biosolids program.

"Stover" is the non-grain, above-ground part of a grain crop, often corn or sorghum.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials and which is constructed primarily of non-earthen materials to provide structural support.

"Toxicity characteristic leaching procedure (TCLP)" is the test method, Method 1311 (1992 or latest version) of Test Methods for Evaluating Solid Wastes (EPA Publication SW-846), Volume IC: Laboratory Manual, Physical/Chemical Methods), used to determine the mobility of both organic and inorganic contaminants present in liquid, solid, and multiphasic wastes.

"Treat" or "treatment of sewage sludge or biosolids" is the preparation of sewage sludge or biosolids for final land application. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge or biosolids. This does not include storage of either sewage sludge or biosolids.

"Treatment works" is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

"Treatment works treating domestic sewage" means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the

storage, treatment, recycling, and reclamation of municipal or domestic sewage, sewage sludge, or biosolids, including land dedicated for the disposal of sewage sludge or biosolids.

"Waters of the State" are any and all waters, public or private, on or beneath the surface of the ground, that are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership that do not combine or effect a junction with natural surface or underground waters.

"Well drained soil" is a soil drainage class characterized by the lack of any evidence of the seasonal high water table in the top 36 inches of the soil profile.

"Wetlands" means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(9) Rule Structure

These rules are organized, numbered, and referenced according to the following outline form:

(1) paragraph

(a) subparagraph

1. part

(i) subpart

(I) item

I. subitem

A. section

(A) subsection

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

0400-40-15-.02 Land Application [40 CFR 503 Subpart B]

(1) Applicability [40 CFR 503.10]

(a) This rule applies to any person who applies biosolids to the land, to biosolids applied to the land, and to the land on which biosolids are applied.

(b) No person shall apply biosolids to the land except in accordance with the requirements in this chapter.

(2) General requirements [40 CFR 503.12]

(a) No person shall apply bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative contaminant loading rates in part (3)(b)2 of this rule has been reached.

(b) The person who prepares bulk biosolids that are applied to agricultural land, forest, a public contact site, or a reclamation site shall provide the person who applies the bulk biosolids written notification of the concentration of total nitrogen (including total kjekdahl nitrogen [TKN], ammonia nitrogen, and nitrate-nitrogen) as N on a dry weight basis in the bulk biosolids.

(c) 1. The person who applies biosolids to the land shall obtain information needed to comply with the requirements in this rule.

2. (i) Before bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule are applied to the land, the person who proposes to apply the bulk biosolids shall contact EPA Region 4 to determine whether bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule have been applied to the site since July 20, 1993.

(ii) If bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule have not been applied to the site since July 20, 1993, the cumulative amount for each contaminant listed in Table 2 of subparagraph (3)(b) of this rule may be applied to the site in accordance with subpart (3)(a)2(i) of this rule.

(iii) If bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule have been applied to the site since July 20, 1993, and the cumulative amount of each contaminant applied to the site in the bulk biosolids since that date is known, the cumulative amount of each contaminant applied to the site shall be used to determine the additional amount of each contaminant that can be applied to the site in accordance with subpart (3)(a)2(i) of this rule.

(iv) If bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule have been applied to the site since July 20, 1993, and the cumulative amount of each contaminant applied to the site in the bulk biosolids since that date is not known, an additional amount of each contaminant shall not be applied to the site in accordance with subpart (3)(a)2(i) of this rule.

(d) When a person who prepares bulk biosolids provides the bulk biosolids to a person who applies the bulk biosolids to the land, the person who prepares the bulk biosolids shall provide the person who applies the biosolids notice and necessary information (NANI) to comply with the requirements in this chapter.

(e) When a person who prepares sewage sludge provides the sewage sludge to another person who prepares the sewage sludge, the person who provides the sewage sludge shall provide the person who receives the sewage sludge notice and necessary information (NANI) to comply with the requirements in this chapter.

(f) The person who applies bulk biosolids to the land shall provide the owner or lease holder of the land on which the bulk biosolids are applied notice and necessary information (NANI) to comply with the requirements in this chapter.

(g) Any person who prepares bulk biosolids that are applied to land in a State other than the State of Tennessee shall provide written notice, prior to the initial application of bulk biosolids to the land application site by the applier, to EPA Region 4. The notice shall include:

1. The location, by either street address or latitude and longitude, of each land application site;

2. The approximate time period bulk biosolids will be applied to the site;

3. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who prepares the bulk biosolids; and

4. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

(h) Any person who applies bulk biosolids subject to the cumulative contaminant loading rates in part (3)(b)2 of this rule to the land shall provide written notice, prior to the initial application of bulk biosolids to a land application site by the applier, to EPA Region 4. The notice shall include:

1. The location, by either street address or latitude and longitude, of the land application site; and

2. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) of the person who will apply the bulk biosolids.

(3) Contaminant limits [40 CFR 503.13]

(a) Biosolids.

1. Bulk biosolids or biosolids sold or given away in a bag or other container shall not be applied to the land if the concentration of any contaminant in the biosolids exceeds the ceiling concentration for the contaminant in Table 1 of subparagraph (b) of this paragraph.

2. If bulk biosolids is applied to agricultural land, forest, a public contact site, or a reclamation site, either:

(i) The cumulative loading rate for each contaminant shall not exceed the cumulative contaminant loading rate for the contaminant in Table 2 of subparagraph (b) of this paragraph; or

(ii) The concentration of each contaminant in the biosolids shall not exceed the monthly average concentration for the contaminant in Table 3 of subparagraph (b) of this paragraph.

3. If bulk biosolids are applied to a lawn or a home garden, the concentration of each contaminant in the biosolids shall not exceed the ceiling concentration for the contaminant in Table 1 or the monthly average concentration in Table 3 of subparagraph (b) of this paragraph.

4. If biosolids are sold or given away in a bag or other container for application to the land, the concentration of each contaminant in the biosolids shall not exceed the ceiling concentration for the contaminant in Table 1 or the monthly average concentration in Table 3 of subparagraph (b) of this paragraph.

(b) Biosolids contaminant concentrations and loading rates.

1. Ceiling Concentrations

Table 1
Ceiling Concentrations

| Contaminant | Ceiling Concentration (milligrams per kilogram)[1,2] |
|---|---|
| Arsenic | 75 |
| Cadmium | 85 |
| Copper | 4300 |
| Lead | 840 |
| Mercury | 57 |
| Molybdenum | 75 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 7500 |

[1]Dry weight basis
[2]These amounts are a maximum level never to be exceeded

2. Cumulative Contaminant Loading Rates.

Table 2
Cumulative Contaminant Loading Rates

| Contaminant | Cumulative Contaminant Loading Rate (kilograms per hectare) |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

3. Contaminant Concentrations

Table 3
Contaminant Concentrations

| Contaminant | Monthly average concentration (milligrams per kilogram)[1] |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

[1]Dry weight basis

(4) Management practices [40 CFR 503.14]

(a) Bulk biosolids shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(b) Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk biosolids enters a wetland or other waters of State of Tennessee, except as provided in a permit issued pursuant to § 402 or 404 of the Clean Water Act.

(c) Bulk biosolids shall not be applied to agricultural land, forest, or a reclamation site unless all of the following setbacks are met:

1. 100 feet or more from surface waters of the State of Tennessee which are positioned down gradient of the application site.

2. 33 feet or more from surface waters of the State of Tennessee which are positioned up gradient for the application site.

3. 100 feet from all wells.

4. 100 feet from all water supply reservoirs.

5. 100 feet from active sinkholes.

(d) Bulk biosolids shall be applied to agricultural land, forest, a public contact site, or a reclamation site at a whole biosolids application rate that is equal to or less than the agronomic rate for the bulk biosolids, unless, in the case of a reclamation site, otherwise specified by EPA Region 4 and the Director. In order for a rate greater than the agronomic rate to be used, EPA Region 4 must approve the rate and that rate or a lesser rate shall be approved by the State Biosolids Coordinator for all land applied biosolids in the State of Tennessee. For the purposes of determining the agronomic rate, the person applying biosolids shall comply with all five of the following parts.

1. Determine crop yields and crop nitrogen (N) requirements based upon a recommendation of the farmer, a written recommendation from the University of Tennessee Extension, historical site yield data, or estimated average yields for the specified crops within the County in which the application site is situated. The average of the actual yields documented from the best three years during a 5-year cycle is typical and is recommended.

2. The following Mineralization Rates shall be used as default values in calculating the agronomic rate:

| | |
|---|---|
| Unstabilized Primary and Secondary Sewage Sludge | 40% |
| Alkaline Stabilized Sewage Sludge | 30% |
| Aerobically Digested Sewage Sludge | 30% |
| Anaerobically Digested Sewage Sludge | 20% |
| Composted Sewage Sludge | 10% |

These default values shall be used unless actual mineralization rates have been established with proper documentation and approved by the State Biosolids Coordinator.

3. Crop nitrogen requirements shall follow Table 1 below:

Table 1 – Crop Nitrogen Requirements

| CROP | EXPECTED YIELD | NITROGEN REQUIREMENT (lbs N per Acre per Year) |
|---|---|---|
| Corn (grain) | 100-125 bu/ac | 120 |
| | 125-150 bu/ac | 150 |
| Corn (silage) | 20 tons/ac | 120-150 |
| Bermuda grass | 5-10 tons/ac | 200 |
| Soybeans(1) | 30 bu/ac | 100 |
| | 40 bu/ac | 150 |
| | 50 bu/ac | 190 |
| Wheat | 40 bu/ac | 60 |
| Summer Annual Grass | 6 tons (1 cutting)* | 60-120 |
| Hybrid Hay | 8 tons (4 cuttings)* | 400(2) |
| Tall Fescue Hay | 3 tons (2 cuttings)* | 120 |
| Orchard Grass Hay | 4 tons (2 cuttings)* | 60-120 |
| Sorghum (grain) | 60 bu/ac | 60 |
| Cotton | 1 bale/ac | 50 |
| | 1.5 bales/ac | 90 |
| Other (3) | (3) | (3) |

*When less than the indicated number of harvests is expected, the total nitrogen rate shall be reduced proportionally.

(1) Soybeans are a legume and can obtain 50% to 60% of their nitrogen needs from atmospheric nitrogen. The acceptable "nitrogen requirement" will vary and shall be approved by the State Biosolids Coordinator.

(2) Highly dependent on field conditions and harvesting schedule.

(3) Any recommendation from the University of Tennessee Extension and/or approved by the State Biosolids Coordinator.

4. Follow procedures for determining plant available nitrogen (PAN) as described in paragraph (12) Appendix .02-A of this rule and apply the whole biosolids application rate that provides no more than the amount of nitrogen required by the crop or crops to be grown unless otherwise specified by the State Biosolids Coordinator.

5. In cases where the biosolids have substantial liming value, the agronomic rate shall be the lesser of the whole biosolids application rate that provides crop nitrogen needs as determined by parts 1 and 2 of this subparagraph or required liming equivalent necessary to raise the soil pH to the value most conductive for productivity of the crop(s) to be grown. Since moderately alkaline soil ranges from 7.9 to 8.4, the upper limit for soil pH is 8.4.

(e) Either a label shall be affixed to the bag or other container containing biosolids that are sold or given away for application to the land or an information sheet shall be provided to the person who receives biosolids sold or given away in another container for application to the land. The label or information sheet shall contain the following information:

1. The name and address of the person who prepared the biosolids that are sold or given away in a bag or other container for application to the land.

2. A statement that application of the biosolids to the land is prohibited except in accordance with the instructions on the label or information sheet.

(5) Operational standards—pathogens and vector attraction reduction [40 CFR 503.15]

(a) Pathogens.

1. The Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 or the Class B pathogen requirements and site restrictions in subparagraph (3)(b) of Rule 0400-40-15-.04 shall be met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site.

2. The Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 shall be met when bulk biosolids are applied to a lawn or a home garden.

3. The Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 shall be met when biosolids are sold or given away in a bag or other container for application to the land.

(b) Vector attraction reduction.

1. One of the vector attraction reduction requirements in parts (4)(b)1 through 10 of Rule 0400-40-15-.04 shall be met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site.

2. One of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 shall be met when bulk biosolids are applied to a lawn or a home garden.

3. One of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 shall be met when biosolids are sold or given away in a bag or other container for application to the land.

(6) Frequency of Monitoring [40 CFR 503.16]

(a) Biosolids.

1. The frequency of monitoring for the contaminants listed in Table 1, Table 2, and Table 3 of subparagraph (3)(b) of this rule; the pathogen density requirements in subparagraph (3)(a) and part (3)(b)2 of Rule 0400-40-15-.04; and the vector attraction reduction requirements in parts (4)(b)1 through 4, 7, and 8 of Rule 0400-40-15-.04 shall be the frequency specified in Table 1 of this subparagraph for the amount of biosolids applied.

Table 1
Frequency of Monitoring—Land Application

| Amount of Biosolids[1] (metric tons per calendar year) | Frequency |
|---|---|
| Greater than zero but less than 290 | Once per year |
| Equal to or greater than 290 but less than 1,500 | Once per quarter (4 times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (6 times per year) |
| Equal to or greater than 15,000 | Once per month (12 times per year) |

[1]Either the amount of bulk biosolids applied to the land or the amount of biosolids prepared for sale or give-away in a bag or other container for application to the land (dry weight basis).

2. After the biosolids have been monitored for two years at the frequency in Table 1 the monitoring frequency for contaminants and/or pathogen densities may be reduced by EPA. If EPA reduces the monitoring for contaminants and/or pathogen densities, the State of Tennessee will accept the revised monitoring frequency as stipulated by EPA.

(b) PCBs shall be monitored at least once every five years unless otherwise specified by the State Biosolids Coordinator.

(c) A Toxicity Characteristic Leaching Procedure (TCLP) using SW-846 Method 1311 in accordance with 40 CFR 261.24 shall be conducted at least once every five years unless otherwise specified by the State Biosolids Coordinator.

(7) Recordkeeping [40 CFR 503.17]

(a) The person who prepares the biosolids shall develop the following information and shall retain the information for five years:

1. The concentration of each contaminant listed in Table 3 of subparagraph (3)(b) of this rule in the biosolids;

2. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

3. A description of how the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 are met; and

4. A description of how one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 is met.

(b) The person who prepares biosolids shall develop the following information and shall retain the information for five years.

1. The concentration of each contaminant listed in Table 3 of subparagraph (3)(b) of this rule in the material;

2. The following certification statement:

"I certify under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

3. A description of how the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 are met; and

4. A description of how one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 is met.

(c) If the contaminant concentrations in part (3)(b)3 of this rule, the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04, and the vector attraction reduction requirements in either part (4)(b)9 or 10 of Rule 0400-40-15-.04 are met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site:

1. The person who prepares the bulk biosolids shall develop the following information and shall retain the information for five years:

(i) The concentration of each contaminant listed in Table 3 of subparagraph (3)(b) of this rule in the bulk biosolids;

(ii) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;" and

(iii) A description of how the pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 are met.

2. The person who applies the bulk biosolids shall develop the following information and shall retain the information for five years:

(i) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in paragraph (4) of Rule 0400-40-15-

.02 and the vector attraction reduction requirement in [insert either part (4)(b)9 or 10 of Rule 0400-40-15-.04] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

(ii) A description of how the management practices in paragraph (4) of this rule are met for each site on which bulk biosolids are applied. This description shall include for each individual field or site on which biosolids were applied the following:

(I) A listing, including usable acres, for each field or site to which biosolids were applied;

(II) A listing of all loads of biosolids, including dry tons, applied to the field or site;

(III) An indication of the crop(s) to be grown after application, including projected yields and nitrogen requirements; and

(IV) Calculation of the dry tons per acre applied, the plant available nitrogen applied per acre, and a determination that the agronomic loading rate for nitrogen was met; and

(iii) A description of how the vector attraction reduction requirements in either part (4)(b)9 or 10 of Rule 0400-40-15-.04 are met for each site on which bulk biosolids are applied.

(d) If the contaminant concentrations in part (3)(b)3 of this rule and the Class B pathogen requirements in subparagraph (3)(b) of Rule 0400-40-15-.04 are met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site:

1. The person who prepares the bulk biosolids shall develop the following information and shall retain the information for five years:

(i) The concentration of each contaminant listed in Table 3 of subparagraph (3)(b) of this rule in the bulk biosolids;

(ii) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in subparagraph (3)(b) of Rule 0400-40-15-.04 and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

(iii) A description of how the Class B pathogen requirements in subparagraph (3)(b) of Rule 0400-40-15-.04 are met; and

(iv) When one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 is met, a description of how the vector attraction reduction requirement is met.

2. The person who applies the bulk biosolids shall develop the following information and shall retain the information for five years:

(i) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in paragraph (4) of Rule 0400-40-15-.02, the site restrictions in part (3)(b)5 of Rule 0400-40-15-.04, and the vector attraction reduction requirement in [insert either part (4)(b)9 or 10 of Rule 0400-40-15-.04 if one of those requirements is met] was prepared for each site on which bulk biosolids are applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

(ii) A description of how the management practices in paragraph (5) of this rule are met for each site on which bulk biosolids are applied. This description shall include, for each individual field or site on which biosolids were applied the following:

(I) A listing, including usable acres, for each field or site to which biosolids were applied;

(II) A listing of all loads of biosolids, including dry tons, applied to the field or site;

(III) An indication of the crop(s) to be grown after application, including projected yields and nitrogen requirements; and

(IV) Calculation of the dry tons per acre applied, the plant available nitrogen applied per acre, and a determination that the agronomic loading rate for nitrogen was met;

(iii) A description of how the site restrictions in part (3)(b)5 of Rule 0400-40-15-.04 are met for each site on which bulk biosolids are applied;

(iv) When the vector attraction reduction requirement in either part (4)(b)9 or 10 of Rule 0400-40-15-.04 is met, a description of how the vector attraction reduction requirement is met; and

(v) The date bulk biosolids are applied to each site.

(e) If the requirements in subpart (3)(a)2(i) of this rule are met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site:

1. The person who prepares the bulk biosolids shall develop the following information and shall retain the information for five years:

(i) The concentration of each contaminant listed in Table 1 of subparagraph (3)(b) of this rule in the bulk biosolids;

(ii) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [insert either subparagraph (3)(a) of Rule 0400-40-15-.04 or subparagraph (3)(b) of Rule 0400-40-15-.04] and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

(iii) A description of how the pathogen requirements in either subparagraph (3)(a) or (b) of Rule 0400-40-15-.04 are met; and

(iv) When one of the vector attraction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 is met, a description of how the vector attraction requirement is met.

2. The person who applies the bulk biosolids shall develop the following information, retain the information in subparts (i) through (vii) of this part indefinitely, and retain the information in subparts (viii) through (xiii) of this part for five years.

(i) The location, by either street address or latitude and longitude, of each site on which bulk biosolids are applied.

(ii) The number of acres in each site on which bulk biosolids are applied.

(iii) The date bulk biosolids are applied to each site.

(iv) The cumulative amount of each contaminant (i.e., kilograms) listed in Table 2 of subparagraph (3)(b) of this rule in the bulk biosolids applied to each site, including the amount in subpart (2)(c)2(iii) of this rule.

(v) The amount of biosolids (i.e., tons) applied to each site.

(vi) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the requirement to obtain information in part (2)(c)2 of Rule 0400-40-15-.02 was prepared for each site on which bulk biosolids were applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(vii) A description of how the requirements to obtain information in part (2)(c)2 of this rule are met.

(viii) The following certification statement:

"I certify, under penalty of law that the information that will be used to determine compliance with the management practices in paragraph (4) of Rule 0400-40-15-.02 was prepared for each site on which bulk biosolids were applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(ix) A description of how the management practices in paragraph (4) of this rule are met for each site on which bulk biosolids are applied. This description shall include, for each individual field or site on which biosolids were applied the following:

(I) A listing, including usable acres, for each field or site to which biosolids were applied;

(II) A listing of all loads of biosolids, including dry tons, applied to the field or site;

(III) An indication of the crop(s) to be grown after application, including projected yields and nitrogen requirements; and

(IV) Calculation of the dry tons per acre applied, the plant available nitrogen applied per acre, and a determination that the agronomic loading rate for nitrogen was met.

(x) The following certification statement when the bulk biosolids meet the Class B pathogen requirements in paragraph (3)(b) of Rule 0400-40-15-.04:

"I certify, under penalty of law, that the information that will be used to determine compliance with the site restrictions in part (3)(b)5 of Rule 0400-40-15-.04 for each site on which Class B biosolids were applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(xi) A description of how the site restrictions in part (3)(b)5 of Rule 0400-40-15-.04 are met for each site on which Class B bulk biosolids are applied.

(xii) The following certification statement when the vector attraction reduction requirement in either part (4)(b)9 or 10 of Rule 0400-40-15-.04 is met:

"I certify, under penalty of law, that the information that will be used to determine compliance with the vector attraction reduction requirement in [insert either part (4)(b)9 of Rule 0400-40-15-.04 or part (4)(b)10 of Rule 0400-40-15-.04] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(xiii) If the vector attraction reduction requirements in either part (4)(b)9 or 10 of Rule 0400-40-15-.04 are met, a description of how the requirements are met.

(f) If the requirements in part (3)(a)4 of this rule are met when biosolids are sold or given away in a bag or other container for application to the land, the person who prepares the biosolids that are sold or given away in a bag or other container shall develop the following information and shall retain the information for five years:

1. The concentration of each contaminant listed in Table 1 and Table 3 of subparagraph (3)(b) of this rule in the biosolids;

2. The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the management practice in subparagraph (4)(e) of Rule 0400-40-15-.02, the Class A pathogen requirement in subparagraph (3)(a) of Rule 0400-40-15-.04, and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment;"

3. A description of how the Class A pathogen requirements in subparagraph (3)(a) of Rule 0400-40-15-.04 are met; and

4. A description of how one of the vector attraction requirements in parts (4)(b)1 through 8 of Rule 0400-40-15-.04 is met.

(8) Reporting [40 CFR 503.18]

(a) All generators and preparers of biosolids shall submit the following information to the State Biosolids Coordinator:

1. The information in paragraph (7) of this rule, except the information in parts (7)(c)2, (d)2 and (e)2 of this rule, for the appropriate requirements on February 19 of each year.

2. The information in subparts (7)(e)2(i) through (vii) of this rule on February 19th of each year when 90 percent or more of any of the cumulative contaminant loading rates in Table 2 of subparagraph (3)(b) of this rule is reached at a land application site.

(b) Annual reports shall be submitted in their entirety as an electronic [computer generated] file in one of the following formats: Microsoft Word (*.doc), Microsoft Excel (*.xls), Microsoft Snapshot (*.snp), or Adobe Portable Document Format (*.pdf). In order to establish the time and date of submission, the annual report should be sent as an attachment to an email to the State Biosolids Coordinator. The State Biosolids Coordinator will issue a waiver to the electronic submittal when it is demonstrated that the municipality does not have this capability.

(c) Per application event or monthly (lesser of these two frequencies) a Farm Operator Report shall be provided to the grower showing sites, fields, year-to-date dry tons applied, amount of nutrients applied, and dates of application. This is not required if the generator is also the applier and/or the grower.

(d) A form shall be included in the annual report submitted to the State Biosolids Coordinator which contains at a minimum:

1. A summary of calendar year annual application activity, to include, for all sites, annual dry tons applied; and

2. For each site, provide:

(i) Summary information:

(I) The applier;

(II) Land owner or operator;

(III) Latitude and longitude;

(IV) County; and

(V) Summary of overall site activity:

I. Approved acres;

II. Applied acres;

III. Total tonnage or volume (wet weight);

IV. Dry tons total; and

(ii) Detailed information for each field:

(I) Field number/name;

(II) Field acres, excluding setbacks;

(III) Crop;

(IV) First application date;

(V) Last application date;

(VI) PAN applied (plant available nitrogen in pounds per acre);

(VII) Application method;

(VIII) Calculated application rate (DT/Ac) to meet crop PAN need;

(IX) Actual dry tons per acre;

(X) Actual per acre tonnage or volume (wet weight);

(XI) Total dry tons; and

(XII) Total tonnage or volume (wet weight)

(9) Biosolids and Sewage Sludge Transportation Equipment – Transported on Public Roadways Only

(a) Liquid biosolids shall be transported in sealed, watertight containers.

(b) Tracking of biosolids or sewage sludge onto public roadways is prohibited.

(c) The Tennessee Department of Environment and Conservation, Division of Water Resources' nearest Environmental Field Office shall be notified by telephone of any spill within 24 hours of occurrence.

(10) Reserved

(11) Reserved

(12) Appendix .02-A – Example Agronomic Rate Calculation

Agronomic Loading Rate Calculation Sheet for Nitrogen

1. Biosolids Analysis:

| CONSTITUENTS | mg/kg (Dry Weight) |
|---|---|
| TKN | 39,500 |
| Ammonia (N) | 7,600 |
| $NO_3 + NO_2$ (N) | 5 |

2. Mineralization Rate (MR) = 20% (Anaerobically Digested Sewage Sludge) – See part (4)(d)2 of this rule.

3. Plant Available Nitrogen (PAN) = $[(MR) \times (TKN - NH_3)] + 0.5 \times (NH_3) + (NO_3 + NO_2)$

(i) PAN = $[(0.2) \times (39{,}500 - 7{,}600)] + 0.5 \times (7{,}600) + (5) = 10{,}185$ mg/kg
PAN (mg/kg) x 0.002 = 20.37 lbs/dry ton

(ii) PAN = 20.37 lbs/dry ton or 5.09 lbs/wet ton (assuming 25% solids)

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

0400-40-15-.03 Reserved

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

Rule 0400-40-15-.04 Pathogens and Vector Attraction Reduction [40 CFR 503 Subpart D]

(1) Scope [40 CFR 503.30]

(a) This rule contains the requirements for biosolids and sewage sludge to be classified either Class A or Class B with respect to pathogens.

(b) This rule contains the site restrictions for land on which Class B biosolids are applied.

(c) This rule contains alternative vector attraction reduction requirements for biosolids that are applied to the land.

(2) Special definitions [40 CFR 503.31]

"Aerobic digestion" is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

"Anaerobic digestion" is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

"Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids or sewage sludge.

"Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

"Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

"Pathogenic organisms" are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

"pH" means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25° Centigrade or measured at another temperature and then converted to an equivalent value at 25° Centigrade.

"Specific oxygen uptake rate" or "SOUR" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids or sewage sludge.

"Total solids" are the materials in biosolids or sewage sludge that remain as residue when they are dried at 103° to 105° Celsius.

"Unstabilized solids" are organic materials in biosolids or sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

"Vector attraction" is the characteristic of biosolids or sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"Volatile solids" is the amount of the total solids in biosolids or sewage sludge lost when they are combusted at 550° Celsius in the presence of excess air.

(3) Pathogens [40 CFR 503.32]

(a) Biosolids—Class A.

1. The requirement in part 2 of this subparagraph and the requirements in either parts 3, 4, 5, 6, 7, or 8 of this subparagraph shall be met for a biosolids to be classified Class A with respect to pathogens.

2. The Class A pathogen requirements in parts 3 through 8 of this subparagraph shall be met either prior to meeting or at the same time the vector attraction reduction

requirements in paragraph (4) of this rule, except the vector attraction reduction requirements in parts (4)(b)6 through 8 of this rule, are met.

3. Class A—Alternative 1

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) The temperature of the biosolids that are applied or disposed shall be maintained at a specific value for a period of time.

(I) When the percent solids of the biosolids are seven percent or higher, the temperature of the biosolids shall be 50° Celsius or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using Equation (1), except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid.

Equation (1)

$$D = \frac{131{,}700{,}000}{10^{0.1400t}}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(II) When the percent solids of the biosolids are seven percent or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature of the biosolids shall be 50° Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using Equation (1).

(III) When the percent solids of the biosolids are less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using Equation (1).

(IV) When the percent solids of the biosolids are less than seven percent; the temperature of the biosolids are 50° Celsius or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using Equation (2).

Equation (2)

$$D = \frac{50{,}070{,}000}{10^{0.1400t}}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

4. Class A—Alternative 2

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) (I) The pH of the biosolids that are applied or disposed shall be raised to above 12 and shall remain above 12 for 72 hours.

(II) The temperature of the biosolids shall be above 52° Celsius for 12 hours or longer during the period that the pH of the biosolids is above 12.

(III) At the end of the 72 hour period during which the pH of the biosolids are above 12, the biosolids shall be air dried to achieve a percent solids in the biosolids greater than 50 percent.

5. Class A—Alternative 3

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) (I) The biosolids shall be analyzed prior to pathogen treatment to determine whether the biosolids contains enteric viruses.

(II) When the density of enteric viruses in the biosolids prior to pathogen treatment is less than one Plaque-Forming Unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses until the next monitoring episode for the biosolids.

(III) When the density of enteric viruses in the biosolids prior to pathogen treatment is equal to or greater than one Plaque-Forming Unit per four grams of total solids (dry weight basis), the biosolids are Class A with respect to enteric viruses when the density of enteric viruses in the biosolids after pathogen treatment is less than one Plaque-Forming Unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meet the enteric virus density requirement are documented.

(IV) After the enteric virus reduction in item III of this subpart is demonstrated for the pathogen treatment process, the biosolids continue to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in item III of this subpart.

(iii) (I) The biosolids shall be analyzed prior to pathogen treatment to determine whether the biosolids contain viable helminth ova.

(II) When the density of viable helminth ova in the biosolids prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova until the next monitoring episode for the biosolids.

(III) When the density of viable helminth ova in the biosolids prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the biosolids are Class A with respect to viable helminth ova when the density of viable helminth ova in the biosolids after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the biosolids that meet the viable helminth ova density requirement are documented.

(IV) After the viable helminth ova reduction in item III of this subpart is demonstrated for the pathogen treatment process, the biosolids continue to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented item III of this subpart.

(iv) The use of Alternative 3 for Class A pathogen reduction requires prior written approval from the State Biosolids Coordinator.

6. Class A—Alternative 4

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) The density of enteric viruses in the biosolids shall be less than one Plaque-Forming Unit per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02, unless otherwise specified by the State Biosolids Coordinator.

(iii) The density of viable helminth ova in the biosolids shall be less than one per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02, unless otherwise specified by the State Biosolids Coordinator.

(iv) The use of Alternative 4 for Class A pathogen reduction requires prior written approval from the State Biosolids Coordinator.

7. Class A—Alternative 5

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids

are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) Biosolids that are applied or disposed shall be treated in one of the Processes to Further Reduce Pathogens described in paragraph (5) of this rule.

8. Class A—Alternative 6

(i) Either the density of fecal coliform in the biosolids shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the biosolids shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the biosolids are applied or disposed; at the time the biosolids are prepared for sale or given away in a bag or other container for application to the land; or at the time the biosolids or material derived from biosolids are prepared to meet the requirements in subparagraph (1)(b) of Rule 0400-40-15-.02.

(ii) Biosolids that are applied or disposed shall be treated in a process that is equivalent to a Process to Further Reduce Pathogens as determined by EPA Region 4.

(b) Biosolids—Class B.

1. (i) The requirements in either part 2, 3, or 4 of this subparagraph shall be met for biosolids to be classified Class B with respect to pathogens.

(ii) The site restrictions in part 5 of this subparagraph shall be met when biosolids that meet the Class B pathogen requirements in part 2, 3, or 4 of this subparagraph are applied to the land.

2. Class B—Alternative 1

(i) Seven representative samples of the biosolids that are applied or disposed shall be collected.

(ii) The geometric mean of the density of fecal coliform in the samples collected in subpart (i) of this part shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

3. Class B—Alternative 2

Biosolids that are applied or disposed shall be treated in one of the Processes to Significantly Reduce Pathogens described in paragraph (5) of this rule.

4. Class B—Alternative 3

Biosolids that are applied or disposed shall be treated in a process that is equivalent to a Process to Significantly Reduce Pathogens, as determined by EPA Region 4.

5. Site restrictions

(i) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

(ii) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.

(iii) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.

(iv) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

(v) Animals shall not be grazed on the land for 30 days after application of biosolids.

(vi) Turf grown on land where biosolids are applied shall not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Biosolids Coordinator.

(vii) Public access to land with a high potential for public exposure shall be restricted for one year after application of biosolids.

(viii) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

(4) Vector attraction reduction [40 CFR 503.33]

(a) 1. One of the vector attraction reduction requirements in parts (b)1 through 10 of this paragraph shall be met when bulk biosolids are applied to agricultural land, forest, a public contact site, or a reclamation site.

2. One of the vector attraction reduction requirements in parts (b)1 through 8 of this paragraph shall be met when bulk biosolids are applied to a lawn or a home garden.

3. One of the vector attraction reduction requirements in parts (b)1 through 8 of this paragraph shall be met when biosolids are sold or given away in a bag or other container for application to the land.

(b) 1. The mass of volatile solids in the biosolids shall be reduced by a minimum of 38 percent (see calculation procedures in "Environmental Regulations and Technology—Control of Pathogens and Vector Attraction in Sewage Sludge," EPA–625/R–92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268).

2. When the 38 percent volatile solids reduction requirement in part 1 of this subparagraph cannot be met for an anaerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37° Celsius. When at the end of the 40 days, the volatile solids in the biosolids at the beginning of that period are reduced by less than 17 percent, vector attraction reduction is achieved.

3. When the 38 percent volatile solids reduction requirement in part 1 of this subparagraph cannot be met for an aerobically digested biosolids, vector attraction reduction can be demonstrated by digesting a portion of the previously digested biosolids that have a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. When at the end of the 30 days, the volatile solids in the biosolids at the beginning of that period are reduced by less than 15 percent, vector attraction reduction is achieved.

4. The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

5. Biosolids shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the biosolids shall be higher than 40° Celsius and the average temperature of the biosolids shall be higher than 45° Celsius.

6. The pH of biosolids shall be raised to 12 or higher by the addition of alkaline material and, without the addition of more alkaline material, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

7. The percent solids of biosolids that do not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.

8. The percent solids of biosolids that contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.

9. (i) Biosolids shall be injected below the surface of the land.

   (ii) No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.

   (iii) When the biosolids that are injected below the surface of the land are Class A with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

10. (i) Biosolids applied to the land surface shall be incorporated into the soil within six hours after application to or placement on the land, unless otherwise specified by the State Biosolids Coordinator.

    (ii) When biosolids that are incorporated into the soil are Class A with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

(5) Pathogen Treatment Processes [Appendix B to Part 503]

(a) Processes To Significantly Reduce Pathogens (PSRP).

1. Aerobic digestion—Sewage sludge or biosolids are agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20° Celsius and 60 days at 15° Celsius.

2. Air drying—Sewage sludge or biosolids are dried on sand beds or on paved or unpaved basins. The sewage sludge or biosolids dry for a minimum of three months. During two of the three months, the ambient average daily temperature is above 0° Celsius.

3. Anaerobic digestion—Sewage sludge or biosolids are treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55° Celsius and 60 days at 20° Celsius.

4. Composting—Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge or biosolids is raised to 40° Celsius or higher and remains at 40° Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55° Celsius. Passively aerated static pile composting is not an acceptable PSRP.

5. Lime stabilization—Sufficient lime is added to the sewage sludge or biosolids to raise the pH of the sewage sludge or biosolids to 12 after two hours of contact.

(b) Processes to Further Reduce Pathogens (PFRP).

1. Composting—Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge or biosolids is maintained at 55° Celsius or higher for three days. Passively aerated static pile composting is not an acceptable PSRP.

   Using the windrow composting method, the temperature of the sewage sludge or biosolids is maintained at 55° or higher for 15 days or longer. During the period when the compost is maintained at 55° or higher, there shall be a minimum of five turnings of the windrow.

2. Heat drying—Sewage sludge or biosolids are dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge or biosolids to 10 percent or lower. Either the temperature of the biosolids particles exceeds 80° Celsius or the wet bulb temperature of the gas in contact with the biosolids as the biosolids leaves the dryer exceeds 80° Celsius.

3. Heat treatment—Liquid sewage sludge or biosolids are heated to a temperature of 180° Celsius or higher for 30 minutes.

4. Thermophilic aerobic digestion—Liquid sewage sludge or biosolids are agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge or biosolids is 10 days at 55 to 60° Celsius.

5. Beta ray irradiation—Sewage sludge or biosolids are irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20° Celsius).

6. Gamma ray irradiation—Sewage sludge or biosolids are irradiated with gamma rays from certain isotopes, such as $^{60}$ Cobalt and $^{137}$ Cesium, at dosages of at least 1.0 megarad at room temperature (ca. 20° Celsius).

7. Pasteurization—The temperature of the sewage sludge or biosolids is maintained at 70° Celsius or higher for 30 minutes or longer.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

0400-40-15-.05 Reserved

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

0400-40-15-.06 Permitting

(1) Applicable facilities – Application required

All treatment works treating domestic sewage that want to land apply Class B biosolids are considered to be applicable facilities and shall apply for a permit for the land application of Class B biosolids or submit a notice of intent certification with regard to a general permit for the land application Class B of biosolids.

(a) Designation as a treatment works treating domestic sewage.

In addition to facilities meeting the definition of a treatment works treating domestic sewage in paragraph (8) of Rule 0400-40-15-.01, the Director may designate any person, site, or facility that treats, uses, transports, stores, or applies biosolids, as a treatment works treating domestic sewage, and require the owner or operator to apply for a permit if any of the following conditions are meet:

1. The Director determines that a permit is necessary to protect human health or the environment from the adverse effect of a contaminant in biosolids;

2. The Director determines that a permit is necessary to protect human health or the environment from poor biosolids management practices;

3. The Director determines that a permit is necessary to ensure compliance with any of the requirements in these rules; or

4. Bulk biosolids or sewage sludge originating from a source or location outside the jurisdiction of the State of Tennessee are being applied to the land or received at any site or facility.

(b) It is a violation of these rules for a facility to fail to submit a permit application or notice of intent to the Division as required by these rules.

(2) General and individual permits

The Division will issue permits for the land application of biosolids.

(a) The Division will issue, modify, revoke and reissue, and terminate a general permit in accordance with the provisions of paragraph (23) Appendix .06-E of this rule.

(b) The Division will accept and consider notices of intent seeking coverage under a general permit and revoke or terminate coverage under a general permit in accordance with the provisions of this rule.

(c) The Division will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this rule.

(3) Requirements to apply for coverage under a general permit or to request an individual permit

(a) After the Division has issued a general permit for the land application of biosolids, all applicable facilities shall apply for coverage under the general permit in accordance with paragraph (4) of this rule unless any of the following apply:

1. The facility has a current individual permit issued in accordance with these rules;

2. The Division requires a facility to apply for an individual permit;

3. On written request of the applicant, the Division has granted permission to apply for an individual permit;

(Note: (i) A facility may request an individual permit if a practice it proposes is not addressed in a general permit issued by the Division.

(ii) A facility may seek coverage under a general permit for any portion of its biosolids management practices that are applicable under the general permit and may also request an individual permit for any portion of its biosolids management practices that are not applicable under the general permit.)

4. The Division may require any facility applying for an individual permit in accordance with part 3 of this subparagraph to limit its practices for the land application of biosolids to those that are authorized in a general permit and to apply for coverage under a general permit; or

5. The facility produces EQ Biosolids and submits documentation in the form of an annual report in accordance with 40 CFR Part 503.18 that the product is EQ Biosolids to the State Biosolids Coordinator on or before February 19th of each calendar year.

(b) Facilities that apply to the Division for coverage under a general permit through the submittal of a notice of intent (NOI) will be self-centered for coverage and will not require a notice of coverage (NOC) from the Division if they meet one of the following criteria:

1. The facility is a certified biosolids management agency under that National Biosolids Partnership's Environmental Management System, in which case the facility shall submit documentation of certification to the State Biosolids Coordinator on or before January 15th of each calendar year; or

2. The facility land applies Class B biosolids to their own property. To land apply Class B biosolids to a site(s) not owned by the facility would require the facility to obtain an NOC from the Division only for the site(s) not owned by the facility.

(4) Timing of permit applications

(a) Existing facilities seeking coverage under the initial general permit.

Existing facilities seeking coverage under a general permit shall submit a notice of intent for coverage within 60 days after issuance of the applicable general permit by the Division. However, on a case-by-case basis the Division may grant an extension up to a maximum of one year after issuance of the applicable general permit. Requests for an extension shall be made in accordance with the following:

1. Requests shall be made in writing to the State Biosolids Coordinator; and

2. Requests shall be made within 60 days after issuance of the applicable general permit.

(b) Existing facilities requesting an individual permit.

Existing facilities that wish to request an individual permit under part (3)(a)3 of this rule shall do so within 60 days of issuance of the applicable general permit by the Division.

(c) Facilities required or approved to apply for an individual permit.

Facilities that have been directed by the Director to apply for an individual permit in accordance with part (3)(a)2 of this rule or approved to apply for an individual permit requested in accordance with part (3)(a)3 of this rule shall submit a permit application within 60 days of receiving notification.

(5) Timing of notices of intent – continuing coverage

(a) All facilities permitted in accordance with this rule shall submit a notice of intent to continue coverage under a general permit or an application for a new individual permit at least 180 days prior to the expiration date of their applicable permit.

(b) When a facility has submitted a timely and sufficient notice of intent or application as required in this paragraph, coverage under an expiring permit remains in effect and enforceable until any of the following occur:

1. The application or notice of intent has been denied and time for any appeal has expired; or

2. A replacement individual or general permit has been issued by the Division and time for any appeal has expired.

(c) Coverage under a permit for permittees who fail to submit a timely and sufficient notice of intent or application shall cease on the expiration date of the permit.

(6) Individual permit application contents

All facilities shall submit a complete and factually correct individual permit application in accordance with the schedule in paragraph (4) of this rule on a form or in a format specified by the Division. The content requirements are listed in paragraph (23) Appendix .06-A of this rule.

(7) Notice of intent contents

Facilities submitting a notice of intent to be covered under an applicable general permit shall do so on a form provided by the Division in the general permit.

(8) Land application plans

(a) Exemptions for exceptional quality biosolids. Land application plans are not required when exceptional quality biosolids are applied to the land.

(b) Land application plans are required when biosolids are applied to the land. Facilities that propose to apply nonexceptional quality biosolids to the land shall do one or both of the following:

1. Submit with their permit application or notice of intent a site specific land application plan for each site where biosolids will be applied during the life of the permit; and/or

2. Submit with their permit application or notice of intent a general land application plan, a letter dated at least 60 days prior to applying biosolids, and a site specific land application plan for each site where biosolids will be applied to the land.

(c) Any site specific land application plans shall be consistent with a facility's general land application plan, if a general land application plan has been submitted.

(d) Site specific land application plan contents.

Each site specific land application plan shall provide information necessary to determine if the site is appropriate for land application of biosolids and a description of how the site will be managed. The minimum content for site specific land application plans is listed in paragraph (23) Appendix .06-C of this rule.

(e) General land application plan contents.

Applicants intending to apply nonexceptional quality biosolids to sites for which a site specific land application plan is not submitted as a part of the permit application shall submit for approval, as a part of their permit application, a general land application plan. The minimum content for general land application plans is listed in paragraph (23) Appendix .06-D of this rule.

(f) As individual sites are identified in accordance with the general land application plan in subparagraph (e) of this paragraph, facilities that seek to apply nonexceptional quality biosolids shall develop and submit site specific land application plans in accordance with subparagraph (d) of this paragraph.

(g) All land application plans are subject to review and final approval by the State Biosolids Coordinator. If a land application plan is found to be insufficient, the State Biosolids Coordinator may either request additional information or may impose additional requirements as a condition of approval in accordance with paragraph (16) of this rule.

(9) Submitting permit applications and notices of intent

Facilities shall submit their permit application and notice of intent to the State Biosolids Coordinator.

(10) Signatories to permit applications and reports

(a) Applications. All permit applications shall be signed as follows:

1. For a municipality, state, federal, or other public agency.

By either a principal executive officer or ranking elected official. For purposes of this rule, a principal executive officer of a federal agency includes either of the following:

(i) The chief executive officer of the agency; or

(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Reports and other information.

All reports and other information required by permits and other information requested by the Division shall be signed by a person described in subparagraph (a) of this paragraph or by a duly authorized representative of that person. A person is a duly authorized representative only if the following conditions are met:

1. The authorization is submitted to the State Biosolids Coordinator in writing by a person described in subparagraph (a) of this paragraph; and

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

(c) Changes to authorization.

If an authorization in accordance with subparagraph (b) of this paragraph is no longer accurate, a new authorization satisfying the requirements of subparagraph (b) of this paragraph shall be submitted to the State Biosolids Coordinator prior to or together with any reports or other information.

(d) Certification.

Any person signing a document in accordance with subparagraph (a) or (b) of this paragraph shall make the following certification, unless a different certification is applicable in accordance with another related requirement of these rules:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(11) Reserved

(12) Recordkeeping required for permit application

Applicants shall keep records of all information used to complete permit applications, and any supplemental information submitted, for a period of five years, or longer if otherwise required by these rules, the conditions of the applicable permit, or other state laws.

(13) Public notice and comment period

Public notices and comment periods shall be in conformance with Rule 1200-04-05-.06 requirements.

(14) Compliance schedules

(a) A permit may specify a schedule leading to compliance with the federal Clean Water Act and these rules. Any compliance schedule in accordance with this paragraph shall require compliance as soon as possible, but not later than any applicable statutory deadline under the CWA or the Tennessee Water Quality Control Act.

(b) Interim dates. If a permit establishes a compliance schedule that exceeds one year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement. The time between interim dates shall not exceed six months.

(c) Reporting. The permit shall require that no later than 14 days after each interim date and the final date of compliance, the permittee shall notify the Division in writing of its compliance or noncompliance with the interim or final requirements.

(15) Fact sheet required for individual permits

(a) The Division shall prepare a fact sheet for every draft individual permit for biosolids application.

1. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

2. The Division shall send this fact sheet to the applicant and, on request, to any other person.

(b) Fact sheet content. The facts sheet shall include all of the following:

1. A brief description of the type of facility or activity that is the subject of the draft permit;

2. Any calculations or other necessary explanation of the derivation of conditions for biosolids application, including a citation to the applicable standards for biosolids application and reasons why they are applicable, or in the case of conditions developed on a case-by-case basis to implement § 405(d)(4) of the CWA, an explanation of and the basis for the conditions; and

3. For permits that include a general land application plan, a brief description of how each of the required elements of the land application plan is addressed in the permit.

(16) Additional or more stringent requirements

(a) On a case-by-case basis, the Division may impose requirements for the land application of biosolids that are in addition to or more stringent than the requirements in these rules if the Division finds that the additional or more stringent requirements are necessary to protect public health or the environment from any adverse effect of a contaminant in the biosolids or to ensure compliance with these rules. Imposition of such requirements will be done through issuance of an individual permit.

(b) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of these rules may be cause to impose additional or more stringent requirements through issuance of an individual permit.

(17) Prohibition

The Division may not issue a permit when the Regional Administrator of EPA has objected in writing in accordance with 40 CFR 123.44.

(18) Duration of permits

(a) Permits are issued for fixed terms up to, but not exceeding, 5 years from the effective date of the permit. Final coverage under a general permit may be issued for a period up to the remaining term of issuance for the permit.

(b) The term of a permit may not be extended by modification beyond 5 years.

(19) Transfer of permit coverage

(a) Except as provided in subparagraph (b) of this paragraph, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, to identify the new permittee and incorporate other requirements as may be necessary to assure compliance with the requirements of these rules.

(b) Automatic transfer.

Coverage under a permit is automatically transferred from the old permittee to a new permittee on the date agreed to if all of the following conditions are met:

1. A written, signed agreement between the old and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Division; and

2. The Division has not notified both permittees of any objection to the transfer, or of the intent to revoke the permit.

(c) No condition or requirement of a permit or these rules may be waived by the transfer of permit coverage from one party to another.

(20) Modification or revocation and reissuance of permits

(a) When the Division receives any information (for example, upon inspection of a facility, receipt of information submitted by the permittee as required in the permit, receipt of a request for modification or revocation and reissuance, or upon a review of the permit file), the Division may determine whether or not one or more of the causes listed in subparagraph (b) or (c) of this paragraph for modification, or revocation and reissuance, or both, exist.

1. If cause for modification, or revocation and reissuance, or both, exists, the Division may modify or revoke and reissue a permit and may request an update application, if necessary.

2. When a permit is modified, only the conditions subject to modification are reopened.

3. If a permit is revoked and reissued, the entire permit is reopened and subject to revision, and the permit may be reissued for a new term.

4. If cause does not exist in accordance with this paragraph, the Division may not modify or revoke and reissue a permit.

(b) Causes for modification. The following are causes for modification, but not revocation and reissuance of permits except when the permittee requests or agrees.

1. Alterations. There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance that justify the application of permit conditions that are different from or absent in the existing permit.

2. Information. The Division has received new information. A permit may be modified during its term for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

3. New regulations. New regulations have been adopted or the standards or regulations on which the permit was based have been changed by adoption of amended standards or regulations or by judicial decision after the permit was issued.

4. Compliance schedules. The Division determines good cause exists for modification of a compliance schedule, such as an act of God, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond an applicable CWA statutory deadline.

5. Land application plans. When required by a permit condition to incorporate a general land application plan for beneficial use of biosolids, to revise a general land application plan, or to add a general land application plan.

(c) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

1. Cause exists for termination in accordance with paragraph (21) of this rule and the Division determines that modification or revocation and reissuance is appropriate; or

2. The Division has received notification of a proposed transfer of the permit.

(21) Causes for termination of permits, denying permit applications, or denying expansion of an existing permit

The following are causes for terminating a permit during its term, or for denying a permit application, or for denying an expansion of an existing permit:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; and/or

(d) A change in any condition that requires either a temporary or a permanent reduction or elimination of any activity controlled by the permit.

(22) Reserved

(23) Appendices

Appendix .06-A Minimum Content for a Permit Application

(1) The activities conducted by the applicant that require it to obtain a permit.

(2) Name, mailing address, and location of the facility for which the application is submitted.

(3) The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.

(4) Whether or not the facility or any associated facilities or land applications sites are located on federal lands.

(5) A map extending 1 mile (1.6 kilometers) beyond the property boundaries of the facility, showing the location and means of access to the facility.

(6) Any biosolids monitoring data the applicant has for the last 2 years.

(7) A description of the applicant's biosolids application practices including, where applicable, the location of any sites where the applicant transfers biosolids for treatment, as well as the name of the applicator or other contractor who applies the biosolids to land if different from the applicant.

(8) Land application plans, as required by paragraph (8) of Rule 0400-40-15-.06.

(9) The amount of biosolids produced and the amount of biosolids applied to the land during the previous year.

(10) Any information required to determine the appropriate standards for permitting in accordance with these rules, and any other information the Division may request and reasonably require to assess biosolids application, to determine whether or not to issue a permit, or to ascertain appropriate permit requirements in accordance with these rules.

Appendix .06-B (Reserved)

Appendix .06-C Minimum Content for a Site Specific Land Application Plan

(1) If biosolids containing contaminants in excess of the values in Table 3 of part (3)(b)3 of Rule 0400-40-15-.02 have ever been applied to the site, then provide the following:

(a) The date(s) when the biosolids were applied;

(b) The amount of biosolids applied;

(c) The concentration of the contaminants in the biosolids; and

(d) The area(s) of the site to which the biosolids were applied.

(2) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a feed crop), and the current distribution of crops on the site.

(3) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates or the method used to determine agronomic rates change, an update of the agronomic rate calculations shall be filed with the Division.

(4) Method(s) of application.

(5) Seasonal biosolids applications.

(6) The name of the county where biosolids will be applied.

(7) A description of how biosolids will be stored at the site that also addresses related off-site storage.

(8) Map(s) for the site(s) shall be submitted. Maps shall be of an appropriate scale to show the detail necessary for evaluation of the proposed application areas and so that a person may reasonably be able to locate the sites and any application units within a site (for example, 1:7920 [8 inches to the mile] for detailed information with an overview map at 1:63,360 [1 inch to the mile]). Minimally, maps shall provide the following information:

(a) A legend;

(b) The location and means of access;

(c) Specific areas of the site where biosolids may be applied (If there is more than one site or more than one application unit within a site, a site or unit ID number should be included);

(d) The number of acres in the site or in any distinct application unit within a site;

(e) Location and extent of any wetlands on the site;

(f) A topographic relief of the application site and surrounding area;

(g) Any seasonal surface water bodies located on the site;

(h) Any perennial surface water bodies located on the site;

(i) The location of any wells located on the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes;

(j) Buffer zones to surface waters, wells, and sink holes;

(k) The location and size of any areas that will be used to store biosolids;

(l) A description of how access to the site will be restricted (e.g., signs posted around the site or other approved method of access restriction);

(m) A copy of any landowner agreement; and

(n) Any additional information requested by the State Biosolids Coordinator that is needed to evaluate the appropriateness of the site for biosolids application.

Appendix .06-D Minimum Content for a General Land Application Plan

(1) Describes the geographical area covered by the plan, including the names of all counties where biosolids may be applied.

(2) Identifies site selection criteria.

(3) Describes how sites will be managed.

(4) Provides for not less than 30 days advance notice to the State Biosolids Coordinator of new or expanded land application sites to allow time for the State Biosolids Coordinator to object prior to the biosolids application.

Appendix .06-E Procedures for Issuing General Permits

(1) General permit coverage

(a) The Division may issue general permits to satisfy any or all of the biosolids management requirements in these rules or other applicable state or federal biosolids management requirements.

(b) The Division may issue general permits to cover categories or subcategories of facilities with appropriate geographic areas.

(c) General permits may be written to cover categories of treatment works treating domestic sewage that meet all of the following requirements:

1. Involve the same or substantially similar types of operations;

2. Engage in the same types of biosolids application practices;

3. Require the same or substantially similar operating conditions or standards for biosolids application;

4. Require the same or substantially similar monitoring; and

5. In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

(2) General permit preparation – preliminary determination

For all general permits, the Director shall make a preliminary determination to develop a general permit.

(a) Interested persons may petition the Director requesting that a category of facilities be considered for the development of a general permit.

(b) The Director shall respond to such a petition within 90 days of receipt.

(3) Fact sheets

(a) The Director shall prepare a fact sheet for every general permit determination. Such fact sheet shall summarize the following:

1. The legal basis of the permitting program;

2. The type of facility or activity which is the subject of the general permit;

3. The geographical area for which the general permit is valid;

4. The criteria for which coverage under a general permit will be approved;

5. If available, a listing or some other means of identifying the facilities proposed to be covered under the general permit;

6. The information required to be submitted as part of the application for coverage under the general permit;

7. The general characteristics of the facilities being authorized under the general permit;

8. Standards and limitations imposed in the general permit;

9. A general description of the conditions in the general permit;

10. Any compliance schedules proposed as part of the general permit;

(b) The Division shall provide copies of general permit fact sheets to any interested person upon request.

(4) Reserved

(5) Public notice

The Division shall provide public notice of all preliminary determinations to develop a general permit, all determinations not to develop a general permit after publishing such a preliminary determination, all draft general permit determinations, and the issuance of a final general permit. All public notices shall be circulated in a manner designated to inform interested and potentially affected persons of the proposed general permit.

(a) Public notice for preliminary determinations. The Division shall provide public notice of all preliminary determinations to develop a general permit as follows:

1. Public notice shall be circulated within the geographical area of the proposed general permit. Such notice may include any or all of the following:

(i) Publishing, as a paid advertisement or legal notice, the Division's preliminary determination in one or more major newspaper(s) throughout the area of proposed coverage; and/or

(ii) Issuance of news releases, focus sheets, or newsletters.

2. The Division shall request comments on whether a general permit is appropriate for the proposed category of facilities or whether individual permits are necessary.

3. The public notice shall provide an opportunity for any interested or potentially affected party to submit information on facilities proposed to be covered under a general permit including:

   (i) Any documented information on the characteristics of the biosolids including quantity, quality, and any land application sites. Information may be from an individual facility or be representative of the category as a whole; and

   (ii) Any other relevant information.

4. The Division shall add the name of any person, upon request, to a general permit specific mailing list to receive information and notices related to the development of the general permit.

(b) In the event that the Division determines not to develop a general permit after publishing a preliminary determination in accordance with subparagraph (a) of this paragraph, the Division shall provide public notice to that effect.

(c) Public notice for draft general permits. The Division shall provide public notice of every draft general permit as follows:

1. The notice shall be circulated throughout the geographical area covered by the general permit. Such circulation may include any or all of the following:

   (i) Posting for a period of 30 days in post offices, public libraries, and public places within the geographical area covered by the general permit.

   (ii) Publishing the notice as a paid advertisement, display advertisement, or legal notice, in one or more major local newspapers of general circulation serving the area covered by the general permit.

   (iii) Issuance of news releases, focus sheets, or newsletters.

2. Notice shall be mailed to any person upon request, including all persons on the general permit specific mailing list established in accordance with (a)4 of this paragraph and all known potential permittees.

3. Reserved

4. Public comment period. The Division shall provide a period of not less than 30 days following the last publication of the public notice, during which time interested persons may submit their written views on a draft general permit determination. All written comments submitted during the comment period shall be retained by the Division and considered in the formulation of its final determination with respect to the draft general permit. The period for comment may be extended at the discretion of the Division.

5. The Division shall make available during the public comment period:

   (i) The draft general permit;

   (ii) The fact sheet on the draft general permit required in accordance with paragraph (3) of this Appendix; and

   (iii) A copy of the proposed application for coverage.

6. The contents of the draft general permit public notice shall, at a minimum, summarize the following:

   (i) The name, address, and phone number of the agency issuing the public notice;

(ii) The type of facilities and activities which are the subject of the general permit;

(iii) The geographical area for which the general permit is valid;

(iv) The criteria for which coverage under the general permit will be approved;

(v) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit;

(vi) The tentative determination to issue a general permit;

(vii) The procedures for the formulation of final determinations, including the 30-day comment period required by part (c)4 of this paragraph and any other means by which interested persons may comment upon those determinations;

(viii) The date, time, and place when the public hearing(s) required in paragraph (7) of this Appendix will be held;

(ix) The address and phone number of locations at which interested persons may obtain further information; and

(x) The date and time after which comments will not be considered by the Division in formulating the final determination on the draft general permit.

(d) Public notice for final general permits.

The Division shall provide public notice of the issuance of a final general permit as follows:

1. The notice of general permit issuance shall be circulated in a manner similar to that used to circulate the notice on the draft general permit in part (c)1 of this paragraph.

2. The notice of general permit issuance shall be provided to all persons on the general permit specific mailing list established in accordance with part (a)4 of this paragraph and all known potential permittees.

3. The public notice of the issuance of a general permit shall contain:

(i) The name, address, and phone number of the agency issuing the public notice;

(ii) The type of facilities and activities which are the subject of the general permit;

(iii) The geographical area for which the general permit is valid;

(iv) The criteria for which coverage under a general permit will be approved;

(v) If available, a listing or some other means of generally identifying the facilities proposed to be covered under the general permit;

(vi) A summary of the application process by which eligible facilities may obtain coverage under the general permit;

(vii) An explanation of any changes to the final general permit, other than editing changes, and the principal reasons for adopting the changes;

(viii) A notice that the terms and conditions of the general permit may be appealed and include the necessary instruction regarding the appeal process; and

(ix) The date after which the general permit will be effective. The effective date of a general permit shall be no sooner than 30 days after the publication of the public notice in accordance with part 1 of this subparagraph.

(6) Notice to other government agencies

The Division shall notify other appropriate government agencies of each draft general permit determination and shall provide such agencies an opportunity to submit their written views and recommendations.

(7) Public hearings

(a) The Division shall hold one or more public hearing(s) on all draft general permits. The public hearing shall be held during the public comment period provided in accordance with part (5)(c)4 of this Appendix.

(b) The date, time, and place will be at the discretion of the Division provided:

1. At least 30 days is provided between the time the public notice is published in accordance with part (5)(c)1 of this Appendix and the time the hearing is held; and

2. The hearing location is within the geographical area covered by the general permit.

(c) The Division shall cause a record to be made of all hearings required by this Appendix. The record may be stenographic, mechanical, or electronic.

(8) Public access to information

(a) The Division shall make identifiable public records related to all general permits available to the public for inspection and copying in accordance with the Division's copying policies.

(b) Reserved

(c) General permit development file.

The Division shall prepare a general permit development file for each issued general permit. The general permit development file shall be available for public inspection subject to the provisions of this Appendix. The general permit development file shall contain:

1. Copies of all public notices required in accordance with paragraph (5) of this Appendix;

2. A copy of the fact sheet required in accordance with paragraph (3) of this Appendix and any other documents not readily available to the public which were used in developing the terms and conditions of the general permit;

3. Reserved

4. Copies of the draft and final general permits and the application for coverage;

5. All written comments received during the public comment period in accordance with part (5)(c)4 of this Appendix on the draft general permit, fact sheet, and application for coverage;

6. The record of public hearings produced in accordance with subparagraph (7)(c) of this Appendix; and

7. The response to comments prepared in accordance with subparagraph (9)(a) of this Appendix.

(d) The Division shall add the name of any person, upon request, to a mailing list to receive notices of Division actions associated with a general permit.

(e) The Division shall provide facilities for the inspection of information relating to general permits and shall ensure that employees honor requests for such inspection promptly without undue requirements or restrictions. The Division shall either:

1. Ensure that a machine or device for the copying of papers and documents is available for a reasonable fee; or

2. Otherwise provide for, or coordinate with, copying facilities or services such that requests for copies of nonconfidential, identifiable public records be honored promptly.

(9) Issuance of general permits

(a) At the close of the public comment period required by part (5)(c)4 of this Appendix, the Division shall prepare a response to all relevant comments received (both written and verbal) and shall briefly describe any changes, other than editing changes, and the principal reasons for making the changes to the draft general permit.

(b) General permits shall be deemed issued upon signing by the Director.

(c) The Division shall provide public notice of the issuance of all final general permits in accordance with subparagraph (5)(d) of this Appendix.

(d) General permits become effective 30 days after the date of publication of the public notice issued in accordance with subparagraph (5)(d) of this Appendix, unless a later date is specified by the Division.

(10) Appeals

(a) The terms and conditions of a general permit, as they apply to the appropriate class of facilities, are subject to appeal within 30 days of issuance of the general permit.

(b) The terms and conditions of a general permit, as they apply to an individual facility, are appealable within 30 days of the effective date of coverage of that facility. This appeal is limited to the general permit's applicability or non applicability to that individual facility.

(c) The appeal of general permit coverage of an individual facility does not affect any other facilities covered under the general permit. If the terms and conditions of a general permit are found to be inapplicable to any individual facility, the matter shall be remanded to the Director for consideration of issuance of an individual permit or permits.

(11) Modification, revocation and reissuance, and termination of general permits

A general permit may be modified, revoked and reissued, or terminated, during its term for cause including, but not limited to, the following:

(a) A change occurs in the technology or practices for control or abatement of contaminants applicable to the category of facilities covered under the general permit.

(b) New biosolids or sewage sludge guidelines or standards are promulgated pursuance to the Tennessee Water Quality Control Act, §§ T.C.A 69-3-101 et seq., for the category of facilities covered under the general permit.

(c) Information is obtained which indicates that cumulative effects on the environment from facilities covered under the general permit are unacceptable.

(12) Notice for determinations to modify or revoke

In the event that the Division has determined to modify or revoke, in whole or in part, a general permit in accordance with paragraph (11) of this Appendix, the Division shall notify, in writing, all facilities covered under the general permit. The notification shall include:

(a) The reason(s) why the general permit is being revoked or modified;

(b) The process for appealing the determination;

(c) An application form and a time limit for submitting the application; and

(d) Any other information determined to be relevant by the Division.

Authority: T.C.A. §§ 69-3-101 et seq. and 4-5-201 et seq.

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| James W. Cameron III | X | | | | |
| Jill E. Davis | X | | | | |
| Mayor Kevin Davis | X | | | | |
| Derek Gernt | X | | | | |
| John Guoynes | X | | | | |
| C. Monty Halcomb | X | | | | |
| Chuck Head | X | | | | |
| Charlie R. Johnson | X | | | | |
| Judy Manners | | X | | | |
| John McClurkan | X | | | | |
| Frank McGinley | X | | | | |
| D. Anthony Robinson | X | | | | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Tennessee Board of Water Quality, Oil and Gas on 12/18/2012, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 05/23/12

Rulemaking Hearing(s) Conducted on: (add more dates). 07/23/12, 07/24/12, 07/30/12, and 07/31/12

CAROL L. GRICE
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY, TENN.

Date: December 18, 2012

Signature: James W. Cameron III

Name of Officer: James W. Cameron III

Title of Officer: Chairman

Subscribed and sworn to before me on: December 18, 2012

Notary Public Signature: Carol L. Grice

My commission expires on: June 21, 2016

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All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

R E Cooper

Robert E. Cooper, Jr.
Attorney General and Reporter

3-28-13
Date

**Department of State Use Only**

Filed with the Department of State on: 4/1/13

Effective on: 6/30/13

Tre Hargett
Secretary of State

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## G.O.C. STAFF RULE ABSTRACT

| | |
|---|---|
| DEPARTMENT: | Environment and Conservation |
| DIVISION: | Water Pollution Control |
| SUBJECT: | Abandoned Mine Lands Reclamation Program |
| STATUTORY AUTHORITY: | Tennessee Code Annotated, Section 59-8-324 et seq. |
| EFFECTIVE DATES: | July 8, 2013 through June 30, 2014 |
| FISCAL IMPACT: | Minimal |
| STAFF RULE ABSTRACT: | These rule changes move the regulations for the Abandoned Mine Lands Reclamation Program from Chapter 0400-01-24 to Chapter 0400-44-01 and update regulatory language. The most significant change is to expand the sites in the state that are potentially eligible for federal and/or state funding to include sites affected by mining after 1977 if certain conditions are met. The number of sites reclaimed each year is based upon the program's budget and not on how many sites are eligible for reclamation. Nearly 100% of reclamation funds come from the U.S. Department of Interior's Office of Surface Mining. However, on occasion, a project may be funded by the Tennessee Surface Mine Reclamation Fund. The Department uses the funds to hire reclamation contractors to do the necessary reclamation work. |

**Public Hearing Comments**

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

There were no comments received during the comment period.

**Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

(1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule.

Chapter 0400-44-01 Abandoned Mine Lands Reclamation Program regulations governs how the Department identifies, selects and reclaims abandoned coal mines. Since these amendments regulate the Department's abandoned mine lands reclamation program no small businesses are impacted or subject to these rules.

(2) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record.

There is no addition cost as a result of these amendments.

(3) A statement of the probable effect on impacted small businesses and consumers.

These amendments do not impact small businesses or consumers.

(4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business.

Small businesses are not impacted by these amendments.

(5) A comparison of the proposed rule with any federal or state counterparts.

Other states have similar programs.

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.

An exemption for small businesses is not possible for this type of rulemaking.

**Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

The Department does not anticipate an impact on local governments.

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**For Department of State Use Only**

Sequence Number: 04-08-13
Rule ID(s): 5474-5475
File Date: 4/9/13
Effective Date: 7/8/13

# Rulemaking Hearing Rule(s) Filing Form

*Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing. T.C.A. § 4-5-205*

| | |
|---|---|
| **Agency/Board/Commission:** | Environment and Conversation |
| **Division:** | Water Pollution Control |
| **Contact Person:** | Tim Eagle |
| **Address:** | Knoxville Environmental Field Office<br>3711 Middlebrook Pike<br>Knoxville, Tennessee |
| **Zip:** | 37921-6538 |
| **Phone:** | (865) 594-5609 |
| **Email:** | Tim.Eagle@tn.gov |

**Revision Type (check all that apply):**

___ Amendment
X New
X Repeal

**Rule(s) Revised** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only **ONE** Rule Number/Rule Title per row)

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0400-01-24 | Abandoned Mine Lands Reclamation Program |
| **Rule Number** | **Rule Title** |
| 0400-01-24-.01 | Scope |
| 0400-01-24-.02 | Objective |
| 0400-01-24-.03 | Responsibilities |
| 0400-01-24-.04 | Definitions |
| 0400-01-24-.05 | Project Development Procedures |
| 0400-01-24-.06 | Lien Determination, Filing, Satisfaction |
| 0400-01-24-.07 | Right of Entry |
| 0400-01-24-.08 | Lands Eligible for Acquisition |
| 0400-01-24-.09 | Methods and Procedures for Acquisition and Disposition of Acquired Land |
| 0400-01-24-.10 | Cost of Acquisition/Condemnation |
| 0400-01-24-.11 | Development of Project Specifications |
| 0400-01-24-.12 | Procurement of Reclamation Services |
| 0400-01-24-.13 | Contractor Default |
| 0400-01-24-.14 | Public Participation |

| **Chapter Number** | **Chapter Title** |
|---|---|
| 0400-44-01 | Abandoned Mine Lands Reclamation Program |
| **Rule Number** | **Rule Title** |
| 0400-44-01-.01 | Scope |
| 0400-44-01-.02 | Goals and Objectives |
| 0400-44-01-.03 | Responsibilities |

| | |
|---|---|
| 0400-44-01-.04 | Definitions |
| 0400-44-01-.05 | Project Development Procedures |
| 0400-44-01-.06 | Lien Determination, Filing, Satisfaction |
| 0400-44-01-.07 | Right of Entry |
| 0400-44-01-.08 | Lands Eligible for Acquisition |
| 0400-44-01-.09 | Methods and Procedures for Acquisition and Disposition of Acquired Land |
| 0400-44-01-.10 | Cost of Acquisition/Condemnation |
| 0400-44-01-.11 | Development of Project Specifications |
| 0400-44-01-.12 | Procurement of Reclamation Services |
| 0400-44-01-.13 | Contractor Default |
| 0400-44-01-.14 | Public Participation |

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

Repeals

Chapter 0400-01-24 Abandoned Mine Lands Reclamation Program is repealed.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

New Rules

0400-44-01
Abandoned Mine Lands Reclamation Program

Table of Contents

0400-44-01-.01 Scope
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0400-44-01-.06 Lien, Determination, Filing, Satisfaction
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0400-44-01-.12 Procurement of Reclamation Services
0400-44-01-.13 Contractor Default
0400-44-01-.14 Public Participation

~~0400-1-24-.01~~ 0400-44-01-.01 Scope.

This regulation describes the Federal Abandoned Lands Reclamation Program and governs the procedures for reclaiming lands and waters affected by past mining practices using the Federal Abandoned Mine Reclamation Fund.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.02~~ 0400-44-01-.02 Goals and Objectives.

(1) The primary objective of the Abandoned Lands Reclamation Program is the protection of public health, safety, general welfare and property from the adverse effects of past mining practices.

(2) Socio-Economic Objectives include:

(a) the utilization, whenever possible, of the services of local contractors for reclamation work.

(b) the improvement of the local forest and agricultural economy by putting abandoned mine land back into production.

(c) the preservation of historical, cultural, and archaeological resources that have been affected or threatened by past mining practices by applying reclamation treatment that is compatible with these resources.

(3) Recreation Objectives include:

(a) the restoration of recreational areas adversely affected by past mining to as near their undisturbed condition as possible.

(b) the coordination of reclamation activities and project areas with those of other state and federal agencies concerned with recreational areas affected by abandoned mine lands.

(4) Flora and Fauna Objectives include:

(a) the restoration or enhancement of the adversely affected habitats of plants and animals to a condition equal to or greater than their premining condition, with particular attention to the habitats of endangered or threatened species of plants and animals.

(b) the coordination of abandoned mine land reclamation activities with the Tennessee Wildlife Resources Agency.

(c) the avoidance to the fullest extent practicable of any significant adverse impacts to fish or wildlife species or their habitats as a result of reclamation activities.

(5) A major objective of the AML Program will be to control toxic runoff that is a result of past mining practices.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.03~~ 0400-44-01-.03 Responsibilities.

The Division shall:

(1) Identify all abandoned mine land problem areas in the Tennessee coalfields.

(2) Conduct a site investigation on those problem areas that are eligible for further development.

(3) Rank and select reclamation projects.

(4) Conduct a site evaluation including a proposal of reclamation alternatives.

(5) Prepare an environmental assessment for each project site.

(6) Select a preferred reclamation alternative.

(7) Make a lien determination on the project site as required by T.C.A. ~~Section~~ § 59-8-325.

(8) Obtain a right of entry for reclamation.

(9) Apply for the administrative and construction grants to carry out the proposed projects.

(10) Procure reclamation contractors upon receipt of grant.

(11) Monitor all reclamation activities.

(12) Prepare a final report on all projects.

(13) Maintain project sites until a stable condition is achieved.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.04~~ 0400-44-01-.04 Definitions.

~~For the purposes of these rules, the following definitions shall apply in addition to those contained under rule 0400-1-1-.03.~~ When used in this Chapter the following terms have the meanings given below:

(1) "Adverse effects" means those effects of coal mining practices which are harmful to human health, safety, general welfare or the environment.

(2) "Extreme danger" means a condition that could reasonably be expected to cause substantial physical harm to persons, property, or the environment and to which persons or improvements on real property are currently exposed.

(3) "Public facilities" means publicly owned utilities, roads, recreation and conservation facilities or any other such publicly owned facilities which provide a service or commodity to the general public.

(4) "Publicly owned land" means any land which is financed by public funds and managed for the benefit or use of the general public.

(5) "Research and demonstration project" means any projects relating to the development of surface mining reclamation and water quality control program methods and techniques.

(6) "Restoration" means the act of putting something into a prior condition or as near that prior condition as possible.

(7) "Eligible lands and waters" means lands and waters eligible for reclamation under this program (whether on private, state or federal property) are defined as follows:

(a) Lands and water are eligible for reclamation activities if:

1. (i) They were mined or affected by mining operations which occurred prior to August 3,1977, and were left or abandoned in either an unreclaimed or inadequately reclaimed condition; and

~~2.~~(ii) There is no continuing responsibility for reclamation by the operator, permittee, or agent of the permittee under statutes of the State or Federal Government. Bond forfeiture will render lands or water ineligible to the extent that the amount collected under the forfeiture is sufficient to pay the total cost of the necessary reclamation. In cases where the amount collected under the forfeited bond is insufficient to pay the total cost of reclamation, the additional funding necessary may be sought under the provisions of 30 CFR 886 and 888; or

2. Notwithstanding part 1 of this subparagraph, coal lands and waters in Tennessee damaged and abandoned after August 3, 1977, by coal mining processes are also eligible if the Commissioner of the Department of Environment and Conservation finds in writing that:

(i) The mining occurred and the site was left in an unreclaimed or inadequately reclaimed condition between:

(I) August 4, 1977 and August 10, 1982, and that any funds for reclamation or abatement that are available pursuant to a bond or other form of guarantee or from any other source are not sufficient to provide for adequate reclamation or abatement at the site; or

(II) August 4, 1977 and November 5, 1990, and that the surety of the mining operator became insolvent during such period and that, as of November 5, 1990, funds immediately available from proceedings relating to such insolvency or from any financial guarantee or other source are not sufficient to provide for adequate reclamation or abatement at the site.

(b) Lands and water which were mined or affected by mining for minerals and materials other than coal shall be eligible for reclamation activities under a State or Indian Reclamation Program if the Director finds in writing that-

1. The conditions of subparagraph (a) of this ~~section~~ paragraph have been met;

2. The reclamation has been requested by the Governor; and

~~3. All reclamation with respect to abandoned coal mine land and water has been accomplished within the State or Indian lands in which they are located or the reclamation is necessary for the protection of the public health and safety; and~~

~~4.~~3. Moneys allocated to the State or Indian tribe under ~~872.1 l~~ 872.12(b)(2) and (3) are available for the work. (30 CFR ~~874.12~~ 872.13)

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.05~~ 0400-44-01-.05 Project Development Procedures.

This regulation outlines in chronological order the entire process of reclamation project development from initial site identification through selection of preferred alternative.

(1) Adversely affected areas are located and identified in the following ways:

(a) From ~~Section 12 of~~ The Tennessee Reclamation Plan For Lands and Waters Affected By Past Mining.

(b) From problem and site specific information gathered through field investigations conducted under the Abandoned Lands National Inventory (Tennessee).

(c) From information supplied by other federal, state and local agencies.

(d) From individuals who may be adversely affected by past mining operations.

(e) From information supplied by field inspection and technical personnel within the Division of Surface Mining.

(2) Upon identification of a possible adversely affected area, an on site visit by Division personnel will be initiated to determine eligibility of a potential project including identification of landowners and problem awareness by local residents.

(3) Investigative Report

(a) If it is determined at the time of the initial site visit and evaluation that a particular problem area is eligible for further development, an Investigative Report is initiated which contains such background information as project area location; mining history; existing adverse impacts; proposed correction alternatives; and a discussion of the possible impacts of the proposed corrective actions.

(b) This Investigative Report should also contain a letter from a Department of Environment and Conservation attorney rendering an opinion as to the eligibility of a particular project for reclamation activities.

(c) A complete identification will also be made of principal and adjacent landowners (plat map of project area), including interviews with identified landowners and other adjacent residents in order to solicit overall problem awareness and participation.

(4) Upon completion of detailed site evaluations, Potential Project Investigative Reports are submitted to the Office of Surface Mining (O.S.M.), Abandoned Lands Section for further evaluation. ~~If, at this stage, approval is granted by O.S.M. and the State, the project proceeds to the "A-95" review through the State Clearinghouse.~~

(5) The purpose of this ~~sub-section~~ paragraph is to establish the policies and procedures to be utilized in the ranking and selection of potential reclamation projects which have been identified and evaluated initially on a site by site basis. Those procedures include:

(a) Grouping according to the priorities listed in 30 CFR 874.13, once a number of potential projects

have been initially identified and evaluated.

(b) Project evaluation and scoring within a given priority group using the Project Evaluation Matrix (~~Section 4, Subsection III,~~ Ranking and Selection Section of the Tennessee Reclamation Plan for Lands and Waters Affected by Past Mining).

(c) Determination of project preference based on the score derived from the Project Evaluation Matrix.

(6) A detailed "pre-engineering" design plan will be developed, either in-house by Division Personnel or by contract. This plan will include a collection of technical data on such parameters as soils, hydrology, ground water conditions, flora and fauna, geology, threatened or endangered species, and enough additional information as is reasonably necessary to determine what reclamation alternatives would be feasible to correct the problems related to an individual project.

(7) An environmental assessment shall be conducted after a pre-engineering plan has been developed for a project.

(a) Each environmental assessment shall include the following information:

1. Summary,

2. Purpose of and need for the action,

3. Alternatives for solving the problem,

4. Description of the affected environment,

5. Environmental consequences,

6. Extent of consultation and coordination with others.

(8) When all phases of project investigation, evaluation and prioritization have been completed, and a preferred alternative has been selected through evaluation and public input, a final decision document will be prepared. This document will identify the preferred alternative and the rationale behind its selection, which will include at a minimum the following:

(a) impact discussions from the environmental assessment versus suggested alternatives,

(b) all public concerns and the State's response,

c) cost considerations,

(d) possible engineering and construction problems,

(e) all expected benefits resulting from the selected alternative versus those alternatives not selected,

(f) the possible adverse impacts which may be encountered during construction under the selected alternative.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.06~~ 0400-44-01-.06 Lien Determination, Filing, Satisfaction.

Tennessee lien policy in respect to the Abandoned Mine Program provides that no windfall profits should inure to the benefit of private landowners as a result of reclamation work on their land. To that effect, the following provisions shall apply:

(1) Applicability of Lien.

(a) If ~~the property information data indicates that~~ the surface owner or owners ~~acquired title prior to May 2, 1977, and they~~ did not consent to, participate in, or exercise control over the mining operation which necessitated the reclamation, then a lien is not appropriate.

(b) If ~~the property information discloses that~~ the landowner ~~acquired title after May 2, 1977, or if the owners~~ consented to, participated in, or exercised control over the mining, then a lien should be considered.

(2) Amount of Lien

Liens shall be based on the results of property value increases, as determined by Before and After Appraisals, prepared by qualified contract appraisers and reviewed by qualified review appraisers. Appraisals for liens should be notarized.

(3) Preparation and Filing of Lien

If a lien is to be filed, the State shall file within six months after completion of the reclamation work which includes a compilation of all cost data on the project as well as notarized copies of the appraisals. The amount reported by the appraisals as the increase in value shall constitute the lien to be recorded. This package along with the prepared legal document that constitutes a lien will be submitted to the Attorney General's office for review within three months after completion of reclamation work. The lien should be filed in the Office of the Court Clerk having the responsibility for recording judgments against land in the jurisdiction where the land lies.

(a) Within 60 days of lien date filing the owner may petition for a determination of market value attributable to the reclamation. Any aggrieved party may appeal in the manner provided by local law.

(b) Preparation and filing of liens (releases, renewals, extensions, etc.) shall be made by a Department of Environment and Conservation attorney with the concurrence of the State Attorney General.

(4) Satisfaction of Liens.

(a) Liens shall be satisfied at the time of transfer of ownership or earlier at the election of the owner. Liens shall be renewed and extended as required.

(b) Satisfaction of liens can be in the form of total payment or can be in installments. If payments in satisfaction of lien cover only a portion of the lien amount, the lien shall remain in full force and effect on the land records until satisfaction in full is made.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.07~~ 0400-44-01-.07 Rights of Entry.

(1) Entry for Studies or Exploration

The State or its agents, employees, or contractors shall have the right to enter upon any property for the purpose of conducting studies or exploratory work to determine the existence of the adverse effects of past mining and the feasibility of projects for restoration, reclamation, abatement, control or prevention of such adverse effects. Such entry shall be construed as an exercise of the police power for the protection of public health, safety and general welfare, and shall not be construed as an act of condemnation of property nor trespass thereon.

(2) Entry for Reclamation

When the State's project assessment includes a finding that lands or waters have been adversely affected by past coal mining practices and the effects constitute a danger to public health, safety or ~~14~~ general welfare, the State may elect to proceed with reclamation. The State shall then attempt to obtain a

voluntary lien or non-lien consent, as applicable, from the affected landowners.

(a) The State of Tennessee, its agents, employees, or contractors may enter upon land to perform reclamation activities, if the consent of the owner cannot be obtained or the owners of the land are not readily available, and the following requirements are met:

1. Land or water resources have been adversely affected by past coal mining practices; and

2. The adverse effects are such that it would be in the public interest to take action to restore, reclaim, abate, control, or prevent such adverse affects.

(b) The State shall give notice of its intent to enter for purposes of conducting reclamation at least 30 days before entering upon the property as follows:

1. Notice shall be in writing and shall be mailed, return receipt requested to the owner, if known, with a copy of the Finding of Fact.

2. If the owner is unknown, or if the current mailing address is unknown, notice shall be posted in one or more places on the property and advertised once in a local newspaper.

3. The posted notice and newspaper advertisement shall include a statement specifying where the Findings of Fact may be inspected or obtained.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.08~~ 0400-44-01-.08 Lands Eligible for Acquisition.

The State of Tennessee may acquire any property which is adversely affected by past coal mining practices if the Commissioner of the Department of Environment and Conservation determines that acquisition of such land is necessary to successful reclamation and;

(1) That the acquired land will serve recreation, conservation or reclamation purposes; or

(2) That permanent facilities such as a treatment plant or relocated stream channel will be constructed on the land for the restoration, reclamation, abatement, control or prevention of the adverse effects of past mining practices; or

(3) That acquisition of coal refuse disposal sites and all coal refuse thereon will serve the purposes of this part or that public ownership is desirable to meet emergency situations and prevent recurrences of the adverse effects of coal mining practices; or

(4) That the state may acquire property or accept property transferred by the Secretary of the Department of Interior if either is an integral and necessary element of an economically feasible plan for the project to construct or rehabilitate housing for persons disabled as the result of employment in the mines or work incidental thereto, persons displaced by acquisition of land, or persons dislocated as the result of adverse effects of coal mining practices which constitute an emergency, or persons dislocated as the result of natural disasters or catastrophic failures from any cause; or

(5) That land or interests in land needed to fill voids, seal abandoned tunnels, shafts and entryways, or reclaim surface impacts of underground or surface mines may be acquired by the state by purchase, donation, or transfer if found that such interests in the land are necessary for reclamation work planned or the post reclamation use of the land.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.09~~ 0400-44-01-.09 Methods and Procedures for Acquisition ~~for Acquisition~~ and Disposition of Acquired Land.

(1) The State of Tennessee may acquire land for the previously mentioned reasons by either acquisition, donation or transfer. When all reasonable effort to purchase land or interests in land from a willing seller

fail, such rights may be acquired by condemnation.

(2) Procedures for all methods of acquisition will generally follow those established by ~~Facilities Management, Land Acquisition Section,~~ the Tennessee Department of Environment and Conservation as listed below:

(a) Complete information regarding survey and legal description is submitted to ~~Land Acquisition Working Sub-Committee of~~ the State Building Commission. ~~Then the Working Sub-Committee presents request with its recommendations to Land Acquisition Sub-Committee of Building Commission. After Sub-Committee approval request may be then placed on Building Commission Agenda for their approval.~~ After Building Commission approval, invitations for bids on title work are issued, and then awarded on lowest bid consistent with the title company's ability to perform as required. After title commitment is obtained, appoint and execute agreements with appraisers. Next, appraisal review with documented establishment of fair market value. Commence option contract negotiations at fair market value. Present signed option to Building Commission for approval unless prior approval has been obtained. Prepare warranty deed and closing statement.

(b) Donations, as necessary for reclamation activities, to the State of Tennessee should be consistent with objectives and requirements of the Abandoned Mined Lands Program.

(3) Where land acquired is considered suitable for industrial, commercial, residential or recreational development, the State, when authorized by O.S.M., may sell such land by public sale under a system of competitive bidding, at not less than the market value.

(a) The State shall publish a notice which describes the proposed disposition of the land in a newspaper of general circulation within the area where the land is located for a minimum of four successive weeks. The notice shall provide for at least 30 days of public comment and it shall state where copies of plans for disposition of the land may be obtained or reviewed and the address to which comments or plans should be submitted. The notice shall also state that a public hearing will be held if requested by any person.

(b) The State shall hold a public hearing if requested as a result of a public notice and the State may determine that a hearing is appropriate even if a request has not been received.

(c) Hearings shall be scheduled to conform with 30 CFR 879.15.

(d) Following hearings the State shall make a written finding that the disposal of reclaimed lands is appropriate, considering all comments received, and that the disposal is consistent with State and Federal rules and laws which apply.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.10~~ 0400-44-01-.10 Cost of Acquisition/Condemnation.

(1) Source of Funds

The purchase price, in the case of a negotiated acquisition, or the damages as finally determined in the case of acquisition by condemnation, and the necessary expenses incidental thereto, shall be paid from the Tennessee Surface Mine Reclamation Fund, the Federal Abandoned Mine Reclamation Fund with the approval of the Secretary of Interior, or from appropriations made by the General Assembly for such purpose.

(2) Determination of Price

The State shall acquire title by direct purchase through negotiations based on an independent fee appraisal of the property. The purchase price paid shall be consistent with the fair market value of the interests acquired as adversely affected by past coal mining practices when applicable. In the case of acquisition by condemnation, the purchase price shall also be based on an independent fee appraisal to determine fair market value as well as the necessary expenses incidental thereto.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.11~~ 0400-44-01-.11 Development of Reclamation Plan Specifications.

This ~~regulation~~ rule outlines the procedures on development and procurement of reclamation specifications for those projects that involve comprehensive reclamation practices.

(1) Upon selection of a preferred reclamation alternative for a given project an outline of required specifications shall be constructed. Items for consideration include:

(a) An existing site map.

(b) Earthwork specifications.

1. Mobilization.

2. Construction Staking.

3. Clearing and Grubbing.

4. Backfill.

5. Sediment Structures.

6. Grading.

7. Diversion Ditches.

8. Special Conditions.

(c) Water treatment and disposal specifications.

(d) Revegetation specifications.

(e) Bid schedule.

(f) A proposed grade map.

(g) Any other special conditions.

(2) Upon completion of the specification outline, the specifications will be constructed, either by in-house state personnel, other government agency personnel, consultants, or a combination of the above.

(3) The specifications will then be utilized in the procurement of reclamation contractors and in the actual reclamation process.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.12~~ 0400-44-01-.12 Procurement of Reclamation Services.

Once reclamation specifications have been completed for a project, a reclamation contractor will be procured by one of the following methods.

(1) Requisitioning Process

When services to be procured are appropriate for bidding and are subject to uniform and impersonal criteria for bid evaluation, the Department of General Services, Purchasing Division, All procure those services through the normal requisitioning process. All requisitioning processes will comply with T.C.A. ~~Section~~ § 4-330.

(2) Request for Proposal

This procedure shall be followed where justification does not exist for the use of either verbal competitive negotiation or sole source negotiation. It involves the written solicitation of proposals from potential vendors. All requests for proposals will comply with the Rules of the Department of Finance and Administration ~~Section 0620-3-3-.04~~ Rule 0620-03-03-.03.

(3) Verbal Competitive Negotiation-This procedure involves the verbal negotiation of the terms of a contract, and it shall be performed in a manner which maximizes free and open competition among vendors. All verbal competitive negotiation procedures will comply with the Rules of the Tennessee Department of Finance and Administration ~~Section 0620-3-3-.04~~ Rule 0620-03-03-.03.

(4) Sole Source Negotiation-This procedure involves the verbal negotiation of a contract with a single vendor. It shall be performed in a manner which results in the most economical arrangement for the State. All sole source negotiation procedures will comply with the Rule of the Tennessee department of Finance and Administration ~~Section 0620-03-03-.04~~ Rule 0620-03-03-.03.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.13~~ 0400-44-01-.13 Contractor Default.

(1) If a contractor fails in a timely and proper manner his obligations under a contract with the ~~Division of Surface Mining~~ Tennessee Department of Environment and Conservation, or if the contractor violates any of the terms of a contract, the Commissioner shall have the right to immediately terminate this contract and withhold payments in excess of fair compensation for work completed.

(2) The contractor shall not be relieved of liability to the State for damages sustained by any breach of this contract by the contractor.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

~~0400-1-24-.14~~ 0400-44-01-.14 Public Participation.

Public participation, including input from individual citizens and landowners, professional and social organizations, civic groups, local officials, and other state and federal agencies shall be included in each phase of project development.

(1) Public input shall play an important role in the identification of specific problem areas.

(2) During the initial site evaluation phase, sufficient public input will be gathered to determine the public awareness of the problem and to answer the following questions:

(a) Does an extreme danger to the public exist?

(b) Are there adverse effects on the public?

(c) Are there impacts to public or private property?

(3) During the intensive site evaluation phase, more detailed input shall be solicited from landowners and local residents along with evidence of project support by the community.

(4) Public input acquired during the intensive site evaluation phase will be utilized in the project ranking and selection process referred to in ~~Regulation 0400-1-24-.05~~ Rule 0400-44-01-.05.

(5) The environmental assessment will incorporate public input into the development of the various reclamation alternatives.

(6) In depth public input will be solicited in the selection of the preferred reclamation alternative. This shall be accomplished by;

(a) placing a public notice in the newspaper of greatest general circulation in the proposed project area,

(b) conducting a public meeting should a particular proposed project exhibit extensive adverse impacts to a large number of people or a community; or if the project presents conflicts (post reclamation land use, ongoing programs, etc.); or high costs.

(7) In the event a particular project is larger and more complex than most, with high public interest, the Commissioner may determine it necessary to extend public participation through project engineering design and construction.

(8) Land acquired and authorized for disposition may be sold by public sale under a system of competitive bidding. Disposition shall necessitate;

(a) placing a public notice in the newspaper of greatest general circulation in the area where the land is located,

(b) conducting a public hearing if requested as a result of a public notice or if determined that hearing is appropriate even though a request has not been received.

(9) Public participation will also be included in determining post-reclamation benefits and in developing a maintenance plan when necessary.

Authority: T.C.A. §§ 59-8-324 et seq. and 4-5-201 et seq.

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

| Board Member | Aye | No | Abstain | Absent | Signature (if required) |
|---|---|---|---|---|---|
| James W. Cameron III | X | | | | |
| Jill E. Davis | X | | | | |
| Mayor Kevin Davis | X | | | | |
| Derek Gernt | X | | | | |
| John Guoynes | X | | | | |
| C. Monty Halcomb | | | | X | |
| Chuck Head | X | | | | |
| Charlie R. Johnson | X | | | | |
| Judy Manners | | | | X | |
| John McClurkan | X | | | | |
| Frank McGinley | | | | X | |
| D. Anthony Robinson | | | | X | |

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Tennessee Board of Water Quality, Oil and Gas on 11/20/2012, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Department of State on: 06/08/12

Rulemaking Hearing(s) Conducted on: (add more dates). 08/21/12

Date: November 20, 2012

Signature: James W. Cameron III

Name of Officer: James W. Cameron III

Title of Officer: Chairman

CAROL L. GRICE
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY, TENN.

Subscribed and sworn to before me on: November 20, 2012

Notary Public Signature: Carol L. Grice

My commission expires on: June 21, 2016

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All rulemaking hearing rules provided for herein have been examined by the Attorney General and Reporter of the State of Tennessee and are approved as to legality pursuant to the provisions of the Administrative Procedures Act, Tennessee Code Annotated, Title 4, Chapter 5.

R E Cooper Jr

Robert E. Cooper, Jr.
Attorney General and Reporter

3-28-13
Date

**Department of State Use Only**

Filed with the Department of State on: 4/9/13

Effective on: 7/8/13

Tre Hargett
Secretary of State

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