# Department of State Division of Publications

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## For Department of State Use Only

Sequence Number: 02-11-24

Rule ID(s): \_\_10034-10039

File Date: <u>2/21/2024</u> Effective Date: <u>5/21/2024</u>

# Proposed Rule(s) Filing Form

Proposed rules are submitted pursuant to Tenn. Code Ann. §§ 4-5-202, 4-5-207, and 4-5-229 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 ninety (90) days of 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 ten (10) persons who will be affected by the amendments, or submitted by a municipality which will be affected by the amendments, or an association of ten (10) or more members, or any standing committee of the General Assembly. The agency shall forward such petition to the Secretary of State.

Pursuant to Tenn. Code Ann. § 4-5-229, any new fee or fee increase promulgated by state agency rule shall take effect on July 1, following the expiration of the ninety (90) day period as provided in § 4-5-207. This section shall not apply to rules that implement new fees or fee increases that are promulgated as emergency rules pursuant to § 4-5-208(a) and to subsequent rules that make permanent such emergency rules, as amended during the rulemaking process. In addition, this section shall not apply to state agencies that did not, during the preceding two (2) fiscal years, collect fees in an amount sufficient to pay the cost of operating the board, commission or entity in accordance with § 4-29-121(b).

Agency/Board/Commission:
Division:
Office of General Counsel
Wayne Gregory
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 2nd Floor
Nashville, Tennessee
Zip: 37214
Phone:
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#### Revision Type (check all that apply):

Amendment

New

X Repeal

**Rule(s)** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please make sure that **ALL** new rule and repealed rule numbers are listed in the chart below. Please enter only **ONE** Rule Number/Rule Title per row.)

<b>Chapter Number</b>	Chapter Title	
0400-02-07	Execution	
Rule Number	Rule Title	
0400-02-0701	Execution	

<b>Chapter Number</b>	Chapter Title
0400-42-02	Requirements for Surface Mining Permits
Rule Number	Rule Title
0400-42-0207	Water Quality Control Discharge Permit
0400-42-0208	Permit Required Before Sale of Coal

<b>Chapter Number</b>	Chapter Title
0400-42-06	Blasting
Rule Number	Rule Title
0400-42-0601	Relevant Publication and Public Laws
0400-42-0602	Blasting Regulations
0400-42-0603	Records

Chapter Number	Chapter Title
0400-42-07	Coal
Rule Number	Rule Title
0400-42-0701	Introduction
0400-42-0702	Access Roads
0400-42-0703	Backfilling and Grading
0400-42-0704	Vegetation

<b>Chapter Number</b>	Chapter Title
0400-46-02	State Grants
Rule Number	Rule Title
0400-46-0201	Purpose and Policy
0400-46-0202	Definitions
0400-46-0203	Basic State Grants
0400-46-0204	Supplemental State Grants
0400-46-0205	SRF Assistance Grant
0400-46-0206	Priority for the Obligation of Available Funds
0400-46-0207	Eligibility
0400-46-0208	Grant Application
0400-46-0209	Related Grant Application Requirements
0400-46-0210	Grant Agreement
0400-46-0211	Grant Administration and Grant Conditions

<b>Chapter Number</b>	Chapter Title
0400-46-04	State Loans
Rule Number	Rule Title
0400-46-0401	Purpose and Policy
0400-46-0402	Definitions
0400-46-0403	Determination of Eligibility
0400-46-0404	Project Closeout

Place substance of rules and other info here. Please be sure to include a detailed explanation of the changes being made to the listed rule(s). Statutory authority must be given for each rule change. For information on formatting rules go to

https://sos.tn.gov/products/division-publications/rulemaking-guidelines.

Chapter 0400-02-07 Execution

Repeal

Chapter 0400-02-07 Execution is repealed.

Authority: T.C.A. §§ 11-1-101 et seq. and 4-5-201 et seq.

Chapter 0400-42-02
Requirements for Surface Mining Permits

Repeals

Rule 0400-42-02-.07 Water Quality Control Discharge Permit is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

Rule 0400-42-02-.08 Permit Required Before Sale of Coal is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

Chapter 0400-42-06 Blasting

Repeal

Chapter 0400-42-06 Blasting is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

Chapter 0400-42-07 Coal

Repeal

Chapter 0400-42-07 Coal is repealed.

Authority: T.C.A. §§ 11-01-101 et seq. and 4-5-201 et seq.

Chapter 0400-46-02 State Grants

Repeal

Chapter 0400-46-02 State Grants is repealed.

Authority: T.C.A. §§ 68-221-801 et seq., 68-221-1001 et seq., and 4-5-201 et seq.

# Chapter 0400-46-04 State Loans

# Repeal

Chapter 0400-46-04 State Loans is repealed.

Authority: T.C.A. §§ 68-221-201 et seq. and 4-5-201 et seq.

I certify that this is an accurate and complete copy of proposed rules, lawfully promulgated and adopted by the Commissioner on 12/11/2023, 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 ninety (90) days of the filing of the proposed rule with the Secretary of State.

Date: (December 11, 2023) Signature: Name of Officer: David W. Salyers, P.E. Title of Officer: Commissioner Agency/Board/Commission: Commissioner of the Department of Environment and Conservation Rule Chapter Number(s): 0400-02-07, 0400-42-02, 0400-42-06, 0400-42-07, 0400-46-02, and 0400-46-04 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. Jonathan Skrmetti Attorney General and Reporter Date **Department of State Use Only** 

Filed with the Department of State on: 2/21/2024

> 5/21/2024 Effective on:

> > Tre Hargett Secretary of State

RECEIVED

Feb 21 2024, 2:06 pm

Secretary of State Division of Publications

## **Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process, all agencies shall conduct a review of whether a proposed rule or rule affects small business.

- (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.
  - No small businesses will be impacted by the repeal of these rules. Each rule was identified through the retrospective rule review process as being out-of-date or redundant, and none are currently applied in practice.
- (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 are no reporting, recordkeeping, or other administrative costs resulting from this rulemaking.
- (3) A statement of the probable effect on impacted small businesses and consumers.
  - No small businesses or consumers will be impacted by this rulemaking.
- (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.
  - This rulemaking is the least burdensome, intrusive, or costly way to achieve the stated purpose.
- (5) A comparison of the proposed rule with any federal or state counterparts.
  - The proposed repeal of Chapter 0400-42-07 is consistent with other states that do not have primacy for surface coal mining. The federal government and some other states may retain out-of-date funding rules, but they are not implemented. Otherwise, these rules do not have clear federal or state counterparts.
- (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.
  - No small businesses will be impacted by this rulemaking.

## **Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228, "On any rule and regulation proposed to be promulgated, the proposing agency shall state in a simple declarative sentence, without additional comments on the merits or the policy of the rule or regulation, whether the rule or regulation may have a projected financial impact on local governments. The statement shall describe the financial impact in terms of increase in expenditures or decrease in revenues."

This rulemaking will not result in an increase in expenditures or a decrease in revenues for local governments.

## Additional Information Required by Joint Government Operations Committee

All agencies, upon filing a rule, must also submit the following pursuant to T.C.A. § 4-5-226(i)(1).

(A) A brief summary of the rule and a description of all relevant changes in previous regulations effectuated by such rule;

The Department of Environment and Conservation is repealing rules that were identified through the retrospective rule review as out-of-date or redundant, as follows:

- Rule 0400-02-07-.01. This provision is not legally required and is outdated.
- Rule 0400-42-02-.07 is redundant with T.C.A. § 59-8-205(a)(1), T.C.A. § 69-3-108(b), and Chapter 0400-40-05 for obtaining an NPDES permit.
- Rule 0400-42-02-.08 applies to a dealer, broker, or other purchaser of coal and there is no need for these
  entities to review a coal miner's permit before making a purchase of coal or to make purchase records
  available for inspection by the Commissioner.
- Chapter 0400-42-06. Blasting is regulated by the Department of Commerce and Insurance, not by the Department of Environment and Conservation, so this chapter is redundant.
- Chapter 0400-42-07. The enabling statute, the Coal Surface Mining Law of 1987, T.C.A. §§ 59-8-401 to
  -421, has been repealed. The repeal of Chapter 0400-42-07 will not affect the ability of industry to operate
  in Tennessee because it is regulated directly by the federal government. Moreover, as currently
  promulgated, Chapter 0400-42-07 would not be sufficient for the state to obtain primacy because it does
  not comply with current federal requirements.
- Chapters 0400-46-02 and 0400-46-04. These were promulgated in support of federal programs that no longer exist and are not entirely consistent with current federal and state funding priorities.
- (B) A citation to and brief description of any federal law or regulation or any state law or regulation mandating promulgation of such rule or establishing guidelines relevant thereto;

The Coal Surface Mining Law of 1987, T.C.A. §§ 59-8-401 to -421, has been repealed. Accordingly, Chapter 0400-42-07 has no statutory authorization and is no longer needed. Otherwise, there are no laws mandating the proposed repeal.

(C) Identification of persons, organizations, corporations or governmental entities most directly affected by this rule, and whether those persons, organizations, corporations or governmental entities urge adoption or rejection of this rule;

No persons are affected by the repeal of these provisions because they are not currently applied in practice or are redundant to other laws.

(D) Identification of any opinions of the attorney general and reporter or any judicial ruling that directly relates to the rule or the necessity to promulgate the rule;

The Department is not aware of any opinions of the attorney general and reporter or any judicial ruling that directly relates to this rule.

(E) An estimate of the probable increase or decrease in state and local government revenues and expenditures, if any, resulting from the promulgation of this rule, and assumptions and reasoning upon which the estimate is based. An agency shall not state that the fiscal impact is minimal if the fiscal impact is more than two percent (2%) of the agency's annual budget or five hundred thousand dollars (\$500,000), whichever is less;

There is no increase or decrease in state and local government revenues and expenditures resulting from this rulemaking.

(F) Identification of the appropriate agency representative or representatives, possessing substantial knowledge and understanding of the rule;

Stephanie Durman Office of General Counsel William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 2<sup>nd</sup> Floor Nashville, Tennessee 37243 Stephanie.Durman@tn.gov

(G) Identification of the appropriate agency representative or representatives who will explain the rule at a scheduled meeting of the committees;

Alli Williamson Legislative Liaison Office of General Counsel

(H) Office address, telephone number, and email address of the agency representative or representatives who will explain the rule at a scheduled meeting of the committees; and

Office of General Counsel
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 2nd Floor
Nashville, Tennessee 37243
(615) 253-5339
Alli.F.Williamson@tn.gov

(I) Any additional information relevant to the rule proposed for continuation that the committee requests.

(1) A description of the action proposed, the purpose of the action, the legal authority for the action and the plan for implementing the action.

The Department of Environment and Conservation is repealing rules that were identified through the retrospective rule review as out-of-date or redundant.

(2) A determination that the action is the least-cost method for achieving the stated purpose.

This rulemaking is the least-cost method for achieving the stated purpose.

(3) A comparison of the cost-benefit relation of the action to nonaction.

This rulemaking enables the Department to eliminate obsolete rules.

(4) A determination that the action represents the most efficient allocation of public and private resources.

This rulemaking is an efficient allocation of public and private resources.

(5) A determination of the effect of the action on competition.

This rulemaking will not impact competition.

(6) A determination of the effect of the action on the cost of living in the geographical area in which the action would occur.

This rulemaking will not impact the cost of living in any geographic area.

(7) A determination of the effect of the action on employment in the geographical area in which the action would occur.

This rulemaking will not impact employment in any geographic area.

(8) The source of revenue to be used for the action.

This rulemaking is being accomplished with existing revenue.

(9)	A conclusion as to the economic impact upon all persons substantially affected by the action, including
	an analysis containing a description as to which persons will bear the costs of the action and which
	persons will benefit directly and indirectly from the action.

This rulemaking will not have an economic impact on any person.

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Agency/Board/Commission:	Environment and Conservation
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Email:	Wayne.Gregory@tn.gov

# Revision Type (check all that apply):

Amendment

New

X Repeal

**Rule(s)** (**ALL** chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please make sure that **ALL** new rule and repealed rule numbers are listed in the chart below. Please enter only **ONE** Rule Number/Rule Title per row.)

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0400-42-0601	Relevant Publication and Public Laws

0400-42-0602	Blasting Regulations
0400-42-0603	Records

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https://sos.tn.gov/products/division-publications/rulemaking-guidelines.

Chapter 0400-02-07 Execution

Repeal

Chapter 0400-02-07 Execution is repealed.

Authority: T.C.A. §§ 11-1-101 et seq. and 4-5-201 et seq.

**Table of Contents** 

0400-02-07-.01 Execution

0400-02-07-.01 Execution. By order of Commissioner of Conservation, Nashville, Tennessee, the rules contained in Chapter 0400-02-01 through 0400-02-07 shall be in force and effect on May 1, 1968.

# Chapter 0400-42-02 Requirements for Surface Mining Permits

## Repeals

Rule 0400-42-02-.07 Water Quality Control Discharge Permit is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

0400-42-02-.07 Water Quality Control Discharge Permit

- (1) T.C.A. §§ 69-3-101 et seq. requires a permit for any activity which results in a liquid discharge to the waters of the State OR which alters, or may alter, the physical, chemical, biological, radiological, or bacteriological quality or characteristics of any waters of the State.
- (2) T.C.A. 59-8-205(a)(1)(G) requires that an operator obtain a discharge permit from the Division of Water Resources, Tennessee Department of Environment and Conservation, before applying for a surface mining permit. The application for a surface mining permit must include a copy of the operator's discharge permit or a letter from the Division of Water Resources stating that no discharge will take place, and, therefore, no permit is required.

Rule 0400-42-02-.08 Permit Required Before Sale of Coal is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

0400-42-02-.08 Permit Required Before Sale of Coal

- (1) No dealer, broker, or other purchaser may purchase coal from an operator without first being shown that operator's valid surface mining permit.
- (2) Each such dealer, broker, or other purchaser must maintain a record of each purchase of coal, including date of purchase, number of tons purchased, name of operator, and the operator's permit number. Said records shall be retained for a period of two (2) years from date of purchase, and shall be open to inspection by the Commissioner or his designated representative.

## Chapter 0400-42-06 Blasting

## Repeal

Chapter 0400-42-06 Blasting is repealed.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq.

#### **Table of Contents**

0400-42-06-.01 Relevant Publication and Public Laws 0400-42-06-.02 Blasting Regulations 0400-42-06-.03 Records

0400-42-06-.01 Relevant Publications and Public Laws.

The use of blasting agents relevant in the production of certain minerals regulated by the Tennessee Surface Mining Law, T.C.A. §§ 59-8-201 through 59-8-228 shall be in accordance with the specifications set forth by the U.S, Department of Labor, Mine Safety and Health Administration in 30 CFR, Subpart E — Explosives, §§ 57.6000 et seq. Further, Surface Mine Operators shall comply with T.C.A. §§ 68-105-101 et seq., administered by the Commissioner of Commerce and Insurance. Blasting definitions shall be in accordance with the above references.

0400-42-06-.02 Blasting Regulations.

- (1) Blasting Time. Blasting shall be limited to the hours between sunrise and sunset. Blasting on Sunday is prohibited.
- (2) Blasting Warning. When blasting is to occur within 1000 feet of an occupied dwelling or outbuildings, the operator or his authorized representative shall notify all persons involved that a blast is to be detonated, stating the approximate time. A one hour notification must be given prior to and immediately after blasting.
- (3) Approaches to Blast Area. All approaches to the blast area shall be guarded against unauthorized entry prior to and after blasting.
- (4) Blasting Prohibited.
  - (a) Blasting may be prohibited where conditions in spoil slopes, due to wetting of the mass, are such that landslides may be initiated by blasting.
  - (b) The Director of Water Resources or his authorized representative may prohibit blasting in specific areas where it is deemed necessary for public safety.
- (5) Control of Blasting. The amount of charge, length of stemming and number of delays shall be so as to prevent damage to adjoining properties, to minimize contamination of the atmosphere, to minimize effects to the quality of water of streams, and to minimize disturbance of wildlife within the area.

#### 0400-42-06-.03 Records.

- (1) A record of each blast shall be kept.
- (2) All records, reports, shall be retained at least two years and shall be available for inspection and shall contain the following minimum data:
  - (a) Name of Company or Contractor.

- (b) Location, date, and time of blast.
- (c) Name, signature of blaster in charge.
- (d) Number of holes, burden, spacing, and length of stemming.
- (e) Diameter and depth of holes.
- (f) Types of explosives used (trade name and strength).
- (g) Total amount of charge used.
- (h) Maximum amount of charges per delay period of eight (8) milli-seconds or greater.
- (i) Weather conditions.
- (j) The person taking the seismograph reading shall accurately indicate exact location of seismograph if used, and shall show the distance of seismograph from blast.
- (k) Seismograph records, where required:
  - 1. Name of person and firm analyzing the seismograph record.

Chapter 0400-42-07 Coal

Repeal

Chapter 0400-42-07 Coal is repealed.

Authority: T.C.A. §§ 11-01-101 et seq. and 4-5-201 et seq.

**Table of Contents** 

0400-42-07-.01 Introduction

0400-42-07-.02 Access Roads

0400-42-07-.03 Backfilling and Grading

0400-42-07-.04 Vegetation

0400-42-07-.01 Introduction

In addition to fulfilling all the requirements of T.C.A. §§ 59-8-201 through 59-8-226 and all requirements in Chapters 0400-42-01 through 0400-42-06, the following special provisions contained in this Chapter are to be adhered to by all operators of surface coal mines.

0400-42-07-.02 Access Roads

(1) Definition

"Haulageway or access road" shall mean any road constructed, improved or used by the operator (except public roads) which ends at the pit or bench and which is located within the permitted area. A bench may serve as a haulageway, but a haulageway cannot serve as a bench.

#### (2) Location

(a) The location of the proposed haulageway shall be identified on the site by visible markings at the time the reclamation and mining plan is pre-inspected and prior to commencement of construction.

(b) No road shall be constructed in a stream or drainage channel proper or so close to its bank that material will spill into the channel during construction, use, or maintenance.

#### (3) Grading

- (a) Maximum Grades -- New access roads shall be located and constructed so that:
  - 1. No sustained grade shall exceed 10%.
  - 2. The maximum grade shall not exceed 15% for 300 feet.
  - There shall not be more than 300 feet of maximum grade for each 1,000 feet of road constructed.
  - 4. The surface shall be insloped toward the ditch line at the minimum rate of ½ inch per foot of surface width.
  - 5. The grade on switchback curves must be reduced to less than the approach grade and shall not be greater than 10%.
  - 6. The grade on temporary roads on or between benches, which will be destroyed within three (3) months by the mining or reclamation process shall not exceed 20%.
- (b) Cut Slopes -- Cut slopes shall not be more than 45 degrees, or 1.0 horizontal to 1.0 vertical, except in stable rock.

#### (4) Drainage

(a) Stream or Drainage Crossings

Drainage structures shall be required in order to cross a stream or drainage channel. They shall be such so as not to affect the normal flow of the stream. Consideration will be given to the time of year the stream is crossed and the length of time the stream channel is used, but in no event, and under no condition, will the normal flow of the stream be affected or the sediment load of the stream be significantly increased during construction and/or use.

#### (b) Ditches

A ditch shall be provided on both sides of a through-cut and on the inside shoulder of a cut-fill section, with ditch relief cross-drains being spaced according to grade. Water shall be intercepted before reaching a switchback or large fill and led off. Water on a fill or switchback shall be released below, not over, the fill.

#### (c) Culverts

Ditch relief culverts shall be installed as needed to insure adequate drainage as determined by the Commissioner.

1. The suggested spacing of culverts is as follows:

Road Grade	Spacing of Culverts
in Percent	in Feet
2-5	300 800
6-10	<del>200 300</del>
11-15	100 200

In determining culvert spacing, consideration shall be given to the area drained, and its slope, shape, cover and runoff characteristics.

- 2. The inlet end shall be protected by a headwall of suitable material and the outlet end shall have an apron of suitable material provided for the outflow to spill on. No water shall be allowed to flow across loose spoil. Ditches in these areas shall be lined with rock.
- 3. The culvert shall be covered by compact fill to a depth of one foot or half the culvert diameter, whichever is greater.
- 4. Culvert openings installed on access roads should not be less than one hundred (100) square inches in area, but, in any event, all culvert openings shall be adequate to carry normal runoff and shall receive necessary maintenance to function properly at all times.

## (d) Removal of Drainage Structures

No bridges, culverts, stream crossings, etc., necessary to provide access to the operation, may be removed until reclamation is completed and approved by the Commissioner. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.

#### (5) Construction and Maintenance

## (a) Surfacing

Access roads must be surfaced with an approved, non-erodible material, but shall not be surfaced with coal refuse or any acid-producing or toxic material. Approved materials include crushed stone, gravel, "red dog," crushed slag, and chert.

## (b) Seeding of Slopes

All fill and cut slopes which will be left after mining shall be seeded immediately after the construction of the road in order to control erosion in accordance with paragraph (4) of Rule 0400-42-07-.04.

## (c) Surface Drainage

No berm produced during construction, grading, or maintenance of the road shall be left on the ditch side.

## (6) Abandonment of Access Road

- (a) When an access road is to be abandoned and shall no longer be used as a road by the operator, the landowners, or the State or National Forest Services, vegetative cover and surface drainage to minimize erosion shall be provided. Regardless of the future use of the road, adequate surface drainage shall be provided. "Abandoned" means that the operator has ceased to use the road and has not turned the road over to another party for his use. When the road is abandoned and proper vegetative cover is provided, the bond on the road shall be released. If the road is not to be abandoned, but turned over to another party for his use, and adequate surface drainage and surfacing have been provided, the bond on the road shall be released.
- (b) When the access road is to be abandoned, culverts shall be removed and replaced by water bars of the earth or rock type, open-top log culverts, or similar structures. They shall be installed according to the following table of maximum spacings:

Grade (Percent)	Maximum Spacing (Feet)
2	<del>250</del>
_5	
10	<del>80</del>
<del>15</del>	<del>60</del>

## (7) Special Circumstances

Should the Division determine that modifications to this Chapter are necessary because of topography or particular watershed situations, the Commissioner may, in his discretion, make such modifications.

#### 0400-42-07-.03 Backfilling and Grading

#### (1) General Provisions

## (a) Application

The following provisions shall apply to all coal mining operations, in addition to other specific provisions applying to particular types of mining.

# (b) Handling of Toxic Materials

All toxic or acid-producing materials shall be properly handled and segregated within the pit. After removal of the coal, the faces of coal seams, the bottom of the pit, and all toxic materials, waste coal, metal, lumber, and other mining refuse shall be covered with spoil to a compacted depth of at least four (4) feet. However, the coal seam may, instead, be covered by a permanent water impoundment if the impoundment is part of the mining and reclamation plan approved by the Commissioner. This work is to be completed as soon as possible, but not later than the time specified in this regulation.

## (c) Breakthrough to Underground

Any breakthrough to an underground mine must be reported. If any water drains from the underground mine, the Division of Water Resources and the Surface Mining Section in the Knoxville Office of the Division or the Inspector shall be notified as soon as possible, but at least within twenty-four (24) hours, and temporary corrective measures started immediately. Plans for permanent control of drainage must be submitted to the Knoxville Office within five (5) days, and the work shall be completed within thirty (30) days of approval. If no water drains from the breakthrough, the Knoxville Office shall be notified in writing within five (5) days. If the operator is in doubt as to whether the underground mine is wet or dry, the breakthrough shall be reported as soon as possible, but at least within twenty-four (24) hours.

## (d) Protection of Streams

No mining, placement of spoil, or associated activity will be permitted within one hundred (100) feet horizontal distance of any stream, except that roads may be constructed within one hundred (100) feet of a stream where such roads are part of the approved mining and reclamation plan and in special circumstances, such as where head-of-hollow fill plans have been approved by the Commissioner.

# (e) Water Control

- 1. The water flow from the mine area and haul roads shall be controlled to minimize soil erosion, damage to other lands, and pollution of streams or other waters. This may include construction of checks, impoundments, silt-trap dams, and water bars in conjunction with other control measures as required. All sediment control structures shall be constructed according to criteria contained in the Erosion and Sediment Control Handbook published by the Department.
- 2. The Tennessee Water Quality Control Act of 1977, T.C.A. §§ 69-3-101 et seq., requires that all runoff or pumped discharges must be covered by a discharge permit from the Division of Water Resources if the quality of the water is or may be altered in any way. All discharges or runoff must meet the water quality standards promulgated by the Department.

## (f) Special Conditions

When special unusual conditions at the site make the application of these regulations unwise, unnecessary, or impossible, deviations may be allowed with written approval of the Commissioner as long as the effects do not violate the intent of the Law.

#### (2) Contour Mining

## (a) Application

These regulations shall apply in areas where the slope of the original ground covering the coal seam or lying below the coal seam exceeds 15 degrees.

# (b) Spoil Handling- Landslides

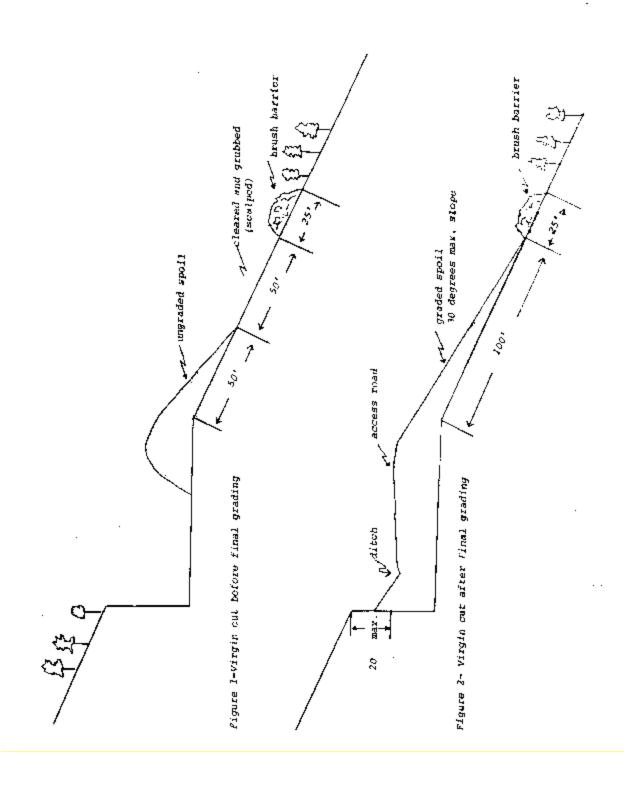
- 1. The mining plan shall be devised and the mining operation conducted so as to minimize erosion and prevent all landslides. A landslide is defined as any uncontrolled earth movement which carries spoil outside the approved limits.
- If a landslide occurs, all mining at the affected mine shall cease immediately and shall not resume until written permission is obtained from the Commissioner. Permission to resume mining shall not be granted until:
  - (i) the slide is stabilized and graded or the material is recovered and replaced on the bench or other designated area, and
  - (ii) the mining plan has been re examined and amended, if necessary in the opinion of the Commissioner to prevent further slides.

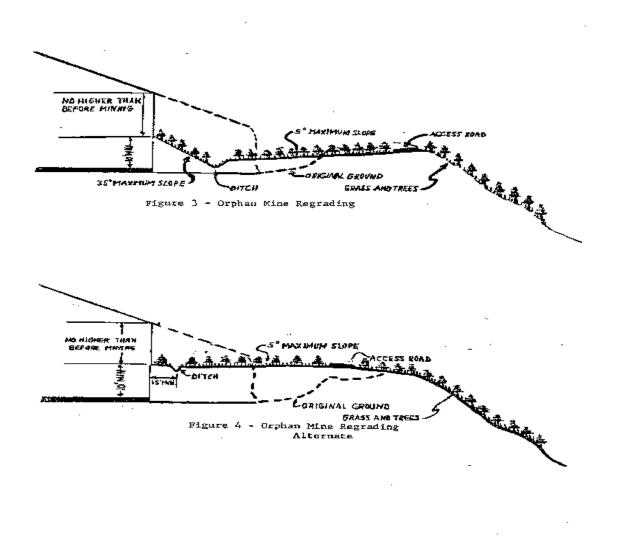
#### (c) Fill Bench Limitation

- 1. (i) If the natural slope of the land for a distance of one-hundred (100) feet downslope from the coal seam outcrop is greater than 28 degrees from the horizontal, no spoil shall be placed downslope from the outcrop, temporarily or permanently. Therefore, no fill bench is permitted on slopes over 28 degrees, and no exception can be granted.
  - (ii) The slope below the coal seam means the average or mean slope of the ground between the cropline and one-hundred (100) feet downslope. Before surface disturbance, the slope will be determined by making readings on the ground at intervals no greater than one-hundred (100) feet along the cropline.
  - (iii) Where the slope of the land below the coal seam is less than 28 degrees, the upgraded spoil must be placed in such a way that the spoil toe will not extend more than fifty (50) feet downslope from the cropline, measured along the ground perpendicular to the contour line. This shall be the "ungraded spoil limit line", which is the maximum distance downslope that spoil may be placed during the initial mining phase, that is prior to final grading.
- If any spoil crosses the spoil limit line, all mining shall cease immediately and shall not be resumed until proposed corrective actions are completed to the satisfaction of the inspector.
- 3. Prior to placing any spoil downslope from the cropline, where the slope is less than 28 degrees, tree vegetation must be cleared and grubbed (scalped) No tree vegetation shall be left to project from any spoil. This tree vegetation must be windrowed to produce a brush barrier. The brush barrier must be constructed so that the major limbs and tree trunks shall lay approximately parallel with the contour. The total disturbed area from the cropline to

the downslope side of the windrowed brush barrier must not exceed one-hundred twenty-five (125) feet measured downslope from the cropline perpendicular to the contour line. The clearing and grubbing (scalping) shall not extend more than 500 feet along the cropline ahead of the active pit. In the case of multiple seam mining, this shall mean ahead of the active pit of the lowest seam. See Figure 1-Virgin cut before final grading.

4. When the approved mining and reclamation plan calls for the use of mining methods such as, but not limited to, the modified -block cut, head-of-hollow fill, or offsite storage, deviations from the above limits shall be allowed for the purpose of temporary or permanent storage of spoil on a limited, designated area downslope from the cropline if the operator submits a plan which will prevent landslides and minimize erosion and it is approved by the Commissioner.





5. When the approved mining and reclamation plan calls for the use of mining methods such as, but not limited to, the modified block cut, head-of-hollow fill, or off-site storage, deviations from the above limits shall be allowed for the purpose of temporary or permanent storage of spoil on a limited, designated area downslope from the cropline if the operator submits a plan which will prevent landslides and minimize erosion and it is approved by the Commissioner.

#### (d) Final Grading

- The upgraded spoil shall be graded against the highwall and downward to roll gently over the outslope to blend smoothly with the surrounding land. During the final grading process, part of the ungraded spoil may be graded to a maximum distance of one hundred (100) feet downslope from the cropline, measured along a perpendicular to the contour. The final graded outslope shall not be steeper than thirty (30) degrees from the horizontal, or that slope steepness which is accessable with earth grading equipment, whichever is less.
  - (ii) Spoil shall be placed against the highwall to eliminate or reduce its final height. A minimum terrace width of fifteen (15) feet shall be constructed to provide for an

access road. A ditch shall be graded along the inside edge of the access road to conduct surface drainage from the fill bench to designated drainways. Such ditch shall be constructed to eliminate depressions in which water could accumulate pools. To insure proper drainage, the minimum grade of the ditch bottom shall be 1%. At least four (4) feet of compacted spoil shall be placed over the floor of the pit at all points including the bottom of all drainage ditches. The graded spoil from the terrace ditch to the highwall shall not be steeper than 30 degrees. No more than 20 feet of highwall may be left at points where no highwall existed before current mining. See Figure 2-Virgin cut after final grading.

- 2. When the mining operation is a second or subsequent cut on an orphan or otherwise previously mined area, the total elimination of the highwall shall not be required. All overburden not necessary to cover the floor of the pit shall be placed against the highwall so that the remaining highwall is no higher than that existing prior to the current mining. The entire bench area, including spoil piles from previous operations which have not naturally revegetated to current coverage standards, shall be graded to slope toward the highwall at a slope not to exceed 5 degrees. At least four (4) feet of compacted spoil shall be placed over the floor of the pit. A ditch shall be placed along the bench at the toe of the sloping spoil, as shown in Figure 3. Other configurations meeting the highwall and slope limitations, such as that in Figure 4, shall also be allowed.
- 3. No slope, except stable rock highwall as provided for in part 2 of this subparagraph, shall exceed thirty (30) degrees. All rock and boulders rolling off the permitted area shall be removed to some approved locations within the permitted area, or the permitted area shall be enlarged to include the area where they are left. Large rocks shall be buried or placed in constructed drainways as lining or in an approved manner as water-retarding structures.

## (e) Natural Drainways

Natural drainways, where water flows occasionally in a well-defined channel, but less often than six months per year, shall be identified prior to mining and skipped. No mining will be allowed within twenty-five (25) feet of the centerline of a natural drain which crosses the contour. Fill or spoil placement and construction of access roads across natural drainways shall be conducted so as not to affect the normal flow of the drainway or materially increase the sediment load in the drainway. This may be accomplished by conveying the water in an adequate enclosed watertight conduit beneath the access road, or by spanning the natural drainway with a bridge, The conduit will be placed on the original drainway bed and will extend to a point ten (10) feet beyond the toe of the overburden or access road embankment.

## (f) Multiple Seam Mining

When two or more seams are to be mined under any given permit, when the seams are not on the same highwall, the mining and reclamation plans will be treated as special cases and judged on their own merits. The following general guidelines shall be followed:

- Mining Sequence-The lower seam shall be mined in advance of the seam above.
- 2. Overburden-Overburden from the seam being mined shall not extend beyond the solid bench of the seam below.
- 3. No ungraded spoil shall be allowed to extend, more than fifty (50) feet downslope from a cropline of any seam. If the distance between the cropline of the upper seam and the top of highwall of the next lower seam is greater than one-hundred (100) feet, spoil shall not be pushed across the intervening area to reach the lower bench, but must be hauled to the lower bench.
- 4. All requirements which apply to a single-seam mining shall apply to multiple seam mining unless the mining and reclamation plan proposes an acceptable variation and is approved in writing by the Commissioner.

# (g) Highwall Access

At least one access to the lands above the highwall, suitable for passage by a four-wheel drive vehicle, shall be provided every mile along the bench, at locations approved by the inspector.

#### (h) Keeping Operation Current

- 1. All coal shall be picked up within thirty (30) days following removal of the overburden. (For the purpose of this provision, overburden shall be considered removed when less than four (4) feet remains above the coal.)
- 2. If the operation includes only stripping (no augering), the grading and backfilling shall follow the coal removal by not more than fifteen (15) days, but in no instance shall an area be left ungraded more than 1,500 feet behind the removal of the coal.
- 3. If the operation includes stripping and augering, the augering shall follow the stripping by not more than sixty (60) days or 2,500 feet, and the grading and backfilling shall follow the augering by not more than fifteen (15) days, but in no instance shall an area be left ungraded more than 1,500 feet behind the augering.
- 4. If the operation includes only augering, the grading and backfilling shall follow the augering by not more than fifteen (15) days, but in no instance shall an area be left ungraded more than 1,500 feet behind the augering.
- 5. All backfilling and necessary grading and drainage work on a given area shall be completed within one hundred eighty (180) days after the initiation of sod disturbance on that area.
- 6. Modifications of these requirements may be made by the Commissioner if heavy rains or wet conditions make backfilling and/or grading impractical.

#### (i) Augering

- 1. Augering is prohibited where the coal seam rises away from the outcrop at a slope greater than 1/2 degree, except where the coal seam is below drainage.
- 2. "Below drainage" is defined as being below the established water table, or below the elevation of all streams or other water bodies in the vicinity of the permitted area.
- Auger holes shall be plugged by forcing spoil into the openings by machine immediately after angering.
- 4. The exposed face of the coal seam at the highwall shall be covered with backbone material and compacted to at least ten (10) feet above the top of the auger holes. Backfiring and grading shall follow the augering by not more than fifteen (15) days or 1,500 feet along the bench.
- 5. Restored areas shall be graded so there will be no depressions to accumulate water and to facilitate rapid runoff of surface drainage from the auger area.
- 6. A twenty-five (25) foot barrier of coal shall be left between any underground mine and the completed auger hole. Test listings may be necessary to determine the solid depth of outcrop so as not to penetrate the underground mine.
- 7. Any breakthrough to an underground mine must be reported. If any water drains from the underground mine, the Knoxville office or the inspector shall be notified as soon as possible, but at least within twenty four (24) hours, and temporary corrective measures started immediately. Plans for permanent control of drainage must be submitted to the Knoxville office within five (5) days, and the work shall be completed within thirty (30) days of approval. If no water drains from the breakthrough, the Knoxville office shall be notified in writing within five (5) days. If the operator is in doubt as to whether the underground mine is wet or dry, the breakthrough should be reported as soon as possible, but at least within twenty-four (24) hours.

#### (i) Head-of-Hollow Fills

- Head-of-hollow fills shall be allowed for off-site permanent storage of excess spoil material
  only if the operator submits an acceptable engineered plan which is approved in writing by
  the Commissioner.
- 2. Construction of such fills shall not violate the terms of a water quality discharge permit.
- 3. Unless excepted by the Commissioner, plans for head-of-hollow fills shall provide for:
  - (i) A five-foot (5) thick drainage blanket of large rocks or boulders, extending from the toe of the fill up the hollow to the upper surface of the fill.
  - (ii) Spoil placement in horizontal layers above the drainage blanket, compacted to a maximum thickness of six (6) feet per layer.
  - (iii) Filling of the hollow from one side completely to the other, and from the downstream face to the head.
  - (iv) No slope of more than 30 degrees on the downstream face, with the sloping sections interspersed by terraces draining to the side for every twenty-five (25) foot difference in elevation.
  - (v) Crowning of the final upper surface so that no water drains over the downstream face.
  - (vi) Adequate surface drainage so that water will flow around the fill and not over it, with water carried in graded ditches. Ditches on slopes over 5 degrees shall be rock-lined or rock-filled.

#### (3) Area Mining

#### (a) Application

These regulations shall apply in areas where the slope of the original ground covering the coal seam is 15 degrees or less.

## (b) Site Preparation

Topsoil and other soil suitable for supporting vegetation shall be separated and removed to an approved storage area for stockpiling during the mining operation. Following mining and initial grading, the topsoil and other soil suitable for supporting vegetation shall be replaced over the area affected.

### (c) Final Grading

- 1. Complete backfilling to approximately the original contour or rolling topography shall be required, beginning at or beyond the top of the highwall and sloped to the toe of the spoil bank at a maximum angle not to exceed the approximate contour of the land with no depressions to accumulate water, and all highwalls and spoil piles shall be eliminated.
- 2. Lands shall be deemed to have been completely backfilled and graded to their approximate original contour when the contour of the land conforms approximately to the contour of the original ground, but the final surface of the restored area need not necessarily have the exact elevations of the original ground surface. However, where a flat surface or a surface with less slope than the original ground surface is desired, such surface shall be deemed to comply with backfilling and grading to the approximate original contour. In addition, when a very flat surface is mined, the land may be restored to gently rolling terrain to enhance drainage.

## (d) Blending With Adjacent Lands

Spoil abutting onto unstripped land shall be graded so as to blend into the adjoining stripped lands. In order to prevent excessive disturbance of the adjoining unstripped lands through the placing of spoil onto already vegetated areas, spoil will be considered as blending into the unstripped lands if the angle between the spoil and the unstripped lands is twelve (12) degrees or less, except that the slope created shall not be greater than twenty five (25) degrees.

## (e) Water Diversion Ditches

Water diversion ditches or terraces shall be constructed in the final grading to control water runoff and erosion on long uninterrupted slopes and to remove surface water runoff to a safe outlet. For the purpose of this regulation, a diversion ditch shall be a channel constructed on a continuous grade of one to two percent (1%-2%) across the slope, with a supporting ridge on the lower side and the entire ditch seeded to an adaptable grass or grass-legume mixture. The depth and width of the diversion ditch may vary depending on the length and degree of slope.

## (f) Water Impoundments

- 1. Water impoundments, as an alternative to backfilling the final pit, are encouraged and will be allowed if they are part of the approved mining and reclamation plan and if they meet the following minimum criteria:
  - (i) Adequate sources of water must be available to maintain the water level at least four (4) feet above the top of the coal seam at all times.
  - (ii) Proper measures must be taken to prevent undesirable seepage.
  - (iii) Adequate spillways or other measures necessary to control overflow must be provided.
  - (iv) Adequate means of access to the water impoundment must be left or provided.
  - (v) The highwall or low wall must be reduced to a slope fifteen (15) degrees or less, sloping to the water's edge.
- 2. All impoundments must be designed in conformance with the criteria included in the Erosion and Sediment Control Handbook published by the Department.

## (g) Keeping Operation Current

The grading and backfilling shall not be more than two (2) spoil ridges behind the pit being worked, the spoil from this pit being considered the first ridge. All backfilling and grading shall be completed within ninety (90) days after the completion of an operation or a prolonged suspension of work in the area and within one hundred eighty (180) days of initial disturbance. Modifications to these requirements may be made by the Commissioner in connection with the backfilling of the final pit.

### 0400-42-07-.04 Vegetation

#### (1) Objective in Revegetation

The objective of revegetation is to provide a self-regenerating cover on the disturbed area as soon as possible and to minimize erosion.

#### (2) General Rules Governing Seeding or Planting

#### (a) Seasonal Feasibility

Immediately after grading, appropriate vegetation shall be planted and seeded in the proper season in accordance with accepted agricultural and reforestation practices.

## (b) Plant Selection

- 1. Plants that give a quick, permanent, protective cover shall be used. Select plants to use after evaluating both their potential for stabilization and their use in terms of forest products, wildlife habitat, and agricultural benefits.
- 2. Adapted plant species and mixtures are listed in subparagraphs (5)(j) through (m) of this rule.

## (c) Direct Seeding

- 1. Direct seeding of trees and shrubs is encouraged on all disturbed areas to supplement planted trees.
- Some Species Adapted to Direct Seeding:
  - (i) Black (Sweet) Birch
  - (ii) Virginia Pine
  - (iii) Pitch Pine
  - (iv) Red Maple
  - (v) European Black Alder
  - (vi) Autumn Olive
- Species that can be direct seeded are not limited to the list in part 2 of this subparagraph.

#### (3) Contour Mining

## (a) Application

These regulations shall apply in areas where the slope of the original ground covering the coal seam or lying below the coal seam exceeds 15 degrees.

#### (b) Area to be Revegetated

The entire disturbed area shall be fertilized and vegetated with adapted legumes and/or perennial grasses, and adapted trees and/or adapted shrubs, except as hereinafter provided. Adapted species and mixtures are listed in subparagraphs (5)(j) through (m) of this rule.

## (c) Access Roads

Roadbeds shall be seeded to adapted legumes and perennial grasses only, no trees being required. This vegetative requirement for roads may be modified if, in the opinion of the Commissioner, the roadway will not contribute offsite damage to the public or adjacent property owners.

# (d) Shrubs for Wildlife

Shrubs for wildlife may be planted to include border plantings, clump plantings, intervening strips, or area planting.

#### (4) Area Mining

## (a) Application

These provisions shall apply where regrading to original contour as defined in subparagraph (3)(c) of Rule 0400-42-07-.03 is used.

#### (b) Area to be Revegetated

The entire disturbed area shall be fertilized and vegetated with adapted legumes and/or perennial grasses, and adapted trees and/or adapted shrubs, except as hereinafter provided. If future use of

area will be agricultural grassland or crops, trees and/or shrubs may be omitted. Adapted species and mixtures are listed in subparagraphs (5)(j) through (m) of this rule.

### (c) Shrubs for Wildlife

Shrubs for wildlife may be planted to include border plantings, clump plantings, intervening strips, or area plantings.

#### (5) Mixture and Seed Requirements

## (a) Seed Inoculation

All legume seed, except black locust, shall be inoculated.

## (b) Scarifying

All black locust and sericea lespedeza seed will be scarified, except when used in fall and winter seeding.

## (c) Preparation of Soil

Preparation of the seed bed by harrowing, discing, or other approved methods, prior to seeding is required, except on slopes greater than fifteen (IS) degrees.

## (d) Seeding Dates and Rates

Dates of seeding and rates of seed used shall be in accord with the requirements of the adapted species selected and elevation of the site.

## (e) Livestock Grazing

Protection of seeded area from grazing by livestock is required during the first two growing seasons.

#### (f) Fertilizer

Fertilizer shall be applied at a minimum rate of 100 pounds each of Nitrogen (N), Phosphate ( $P_2O_5$ ) and Potash ( $K_2O$ ) per acre. Agricultural lime shall be applied at a minimum of eight thousand (8,000) pounds per acre.

## (g) Mulch

- 1. All disturbed areas shall be mulched. The approved mulch and rates are:
  - (i) Dry Wheat Straw or Hay at a rate of four thousand (4,000) pounds, approximately 80 bales per acre.
  - (ii) Wood Fiber Mulch at a rate of one thousand five hundred (1,500) pounds per acre, but not in the months of November. December, January and February.
  - (iii) Dry Wheat Straw and hay must be anchored by asphalt emulsion or by discing the straw or hay on contour.

## (h) Planting

#### 1. Tree species

Planting of a single species, or of two or more species, in pure blocks or strips at least thirty (30) feet wide, over the entire area, or of a single species in a block or a contour strip is required

(i) Preferred tree species are:

Virginia pine
Shortleaf pine (on light (sandy) soils only)
Black locust

(ii) Other species that may be used are:

European black alder Red maple Loblolly pine (below 1,000 ft. elevation) Pitch pine White pine

- Tree seedlings shall be planted at a 6'x 7'spacing.
- Seedlings should be planted between November 1 and May 1.
- (i) Wildlife Planting
  - 1. Plantings for wildlife food and cover shall consist of one or more of the following:
    - (i) Shrub Lespedeza:

      Lespedeza bicolor

      Lespedeza japonica
    - ii) Bush Honeysuckle:

      Amur Lonicera maackii (Fall fruiting)

      Tatarian Lonicera tataric (Summer fruiting)

Autumn Olive - Elaeagnus umbellata (Fail fruiting)

- 2. The following type of plantings may be made:
  - (i) Intervening contour strips and borders. Contour strips or borders of wildlife food and cover may be substituted for the appropriate number of trees to provide space for planting one or more of the following shrub species:
    - (I) Bush honeysuckle 1 to 3 rows 6' x 6' spacing Feb. 1 to April 15
    - (II) Autumn olive 1 to 3 rows 6'x 6' spacing Feb. 1 to April 15
    - (III) Shrub lespedeza plants 5 rows 2'x 2'spacing Feb. 1 to April 15
    - (IV) Shrub lespedeza seeded 12 to 15 feet width 20 lbs./ac. scarified seed March 1 to June 15.
  - (ii) Clumps Clump plantings numbering not more than 2 per acre may be substituted for trees to provide space for one or more of the following shrub species:
    - (I) Bush honeysuckle 25 plants 6' x 6' spacing Feb. 1 to April 15
    - (II) Autumn olive 25 plants 6'x 6'spacing Feb. 1 to April 15
    - (III) Shrub lespedeza plants 700 plants 2' x 2' spacing Feb. 1 to April 15
    - (IV) Shrub lespedeza 1 lb. scarified seed 50'x 50' area March 1 to June 15.
  - (iii) Rocky and Stony Areas
    - (I) Shrub lespedeza may be substituted for tree species using the following mixture for rocky and stony sites where planting of tree seedlings is not possible:

(II) Plant the mixture from Dec. 1 to April 15.

<u>SPECIES</u>	AMOUNT PER ACRE
Tall fescue	20 pounds
Shrub lespedeza (scarified seed)	10 pounds

(j) Legumes, Perennial Grasses, and Annual Grains. One of the following mixtures shall be sown on the entire disturbed area, unless an alternative mixture is proposed in the Revegetation Plan and approved by the Commissioner.

4.	Mixture One: February April	Per Acre
	(i) Sericea Lespedeza (scarified)	25 pounds
	(ii) Ky-31 Tall Fescue	25 pounds
	(iii) Weeping Lovegrass,	10 pounds
	(iv) Kobe or Korean Lespedeza	10 pounds
	(v) Bicolor Lespedeza	5 pounds
	(vi) Millett or Sudangrass	10 pounds
2.	Mixture Two: May-July	
	(i) Sericea Lespedeza (scarified)	35 pounds
	(ii) Ky-31 Tall Fescue	25 pounds
	(iii) Weeping Lovegrass	10 pounds
	(iv) Bicolor Lespedeza	5 pounds
	(v) Millett or Sudangrass	
3.	Mixture Three: August-October	
	(i) Sericea Lespedeza (Unscarified)	45 pounds
	(ii) Ky-31 Tall Fescue	9-5 pounds
	(iii) Weeping Lovegrass	
	(iv) Bicolor Lespedeza	
	(v) Balboa or English Rye	
4.—	Mixture Four: November-January	
	(i) Sericea Lespedeza (unscarified)	20 pounds
	(ii) Ky-31 Tall Fescue	40 pounds
	(iii) Weeping Lovegrass*	5 pounds
	) (,	_'

## (k) Evaluation of Vegetation Survival

Balboa or English Rye

Inspection and evaluation of vegetation for cover and survival shall be made as soon as it is possible to determine if a satisfactory stand has been established. In no instance shall this vegetative cover check be made until twelve (12) months following the planting of trees or shrubs. A revegetation evaluation report shall be prepared and filed by the inspector.

5 pounds

15 pounds

# (I) Standards for Perennials

Standards for legumes and perennial grasses shall require at least an eighty percent (80%) ground cover. Bare areas shall not exceed one-fourth (1/4) acre (100 feet by 100 feet) in size, nor total more than twenty percent (20%) of the area seeded unless such areas are too stony to support vegetation.

(m) Standards for Woody Plants with Perennials

Standards for woody plants with legumes and perennial grasses overseeded shall require an eighty percent (80%) establishment of ground cover of legumes and perennial grasses and six hundred (600) trees or woody plants per acre distributed more or less uniformly over the area. No fifty foot by fifty foot (50' x 50') area shall contain fewer than seventeen (17) surviving trees or woody plants.

#### (n) Performance Bond Release

After the vegetative cover has been inspected and approved, the operator shall submit his final report to the Commissioner and request release of the remaining portion of the performance bond still in force. No revegetation performance bonds will be released until the approved revegetation plan has been carried out unless the Commissioner determines that further efforts toward revegetation are impractical. No revegetation plans will be considered to have been carried out until satisfactory coverage and survival have been obtained.

## Chapter 0400-46-02 State Grants

#### Repeal

Chapter 0400-46-02 State Grants is repealed.

Authority: T.C.A. §§ 68-221-801 et seq., 68-221-1001 et seq., and 4-5-201 et seq.

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0400-46-02-.01 Purpose and Policy. The primary purpose of these rules is to provide financial assistance to municipalities to plan, design and construct wastewater treatment works. Such assistance shall be provided in order to meet the requirements of state laws to protect public health and water quality throughout the State of Tennessee. It is further intended that such assistance be coordinated with other state and federal programs of loans or grants for the construction of wastewater treatment works.

0400-46-02-.02 Definitions. Unless the context requires otherwise as used in this chapter the following words and terms mean:

- (1) Act. The Wastewater Treatment Works Construction Grant Act of 1984, (as amended) T.C.A. §§ 68-221-801 et seq.
- (2) Ad valorem tax. A tax based upon the value of real property.
- (3) Ability to pay index (ATPI). An economic index developed by the Center for Business and Economic Research, the University of Tennessee, as certified by the Department.
- (4) Allowable costs. Fair and reasonable amount paid for eligible treatment works planning, design and construction.
- (5) Allowance. The portion of a grant for preliminary engineering or construction engineering.
- (6) Alternative technology. Proven wastewater treatment processes and techniques which provide for the reclaiming and reuse of water, productively recycle wastewater constituents or otherwise eliminate the discharge of pollutants, or recover energy. Specifically, alternative technology includes land application of effluent and sludge; aquifer recharge; aquaculture; direct reuse (non-potable); horticulture; revegetation of disturbed lands; containment ponds; sludge composting and drying prior to land application; self sustaining

incineration; methane recovery; co-disposal of sludge and solid waste and individual and onsite systems. Alternative technology also includes a wastewater collection system other than conventional system for a community with population of less than 3,500 persons, according to the 1980 federal census, or any subsequent decennial federal census. This includes, but is not limited to, small diameter pressure, gravity and vacuum sewers carrying partially or fully treated wastewater and which demonstrate a significant savings in the life cycle cost of the project when compared to an appropriate conventional technology.

- (7) Architectural or engineering (A/E). Consultation, investigations, reports, or services for projects within the scope of the practice of architecture or professional engineering as defined by the laws of the State of Tennessee. This includes, but is not limited to, preliminary engineering and construction engineering.
- (8) Basic State grant. Award of funds under the Act calculated at 55 percent (plus any additional Innovative and/or Alternative determination), but not to exceed 75 percent of the sum of the total Step 3 allowable costs and the allowance.
- (9) Building. The erection, acquisition, alteration, remodeling, improvement or extension of treatment works.
- (10) Building completion. The date when all but minor components of a project have been built, all equipment is operational and the project is capable of functioning as designed.
- (11) Clean Water Act. The Clean Water Act, 33 U.S.C. 1251 et seq., as amended.
- (12) Collector sewer. The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewaters directly from facilities which convey wastewater from individual systems, or from private property, and which include service connections designed for connection with those facilities including:
  - (a) Crossover sewers connecting more than one property on one side of a major street, road, or highway to a lateral sewer on the other side when more cost effective than parallel sewers, and;
  - (b) Except as provided in subparagraph (c) of this paragraph, pumping units and pressurized lines serving individual structures or groups of structures when such units are cost effective and are owned and maintained by the recipient; and
  - (c) This definition excludes other facilities which convey wastewater from individual structures, from private property to the public lateral sewer, or its equivalent and also excludes facilities associated with SAWS.
- (13) Combined sewer. A sewer that is designed as a sanitary sewer and a storm sewer.
- (14) Commissioner. The Commissioner of the Tennessee Department of Environment and Conservation or his duly authorized representatives.
- (15) Construction. The erection, acquisition, alteration, reconstruction, improvement, or extension of wastewater treatment works, including preliminary planning to determine the economic and engineering feasibility of wastewater treatment works, the engineering, architectural, legal, fiscal and economic investigations and studies, surveys, designs, plans, procedures and other similar action necessary in the building of wastewater treatment works, and the inspection supervision of the construction of wastewater treatment works.
- (16) Construction engineering. The services provided by A/E during the building of a project, and start-up services.
- (17) Department. The Tennessee Department of Environment and Conservation.
- (18) Design allowance. The portion of a grant for the design, based on construction costs of a project which are allowable preliminary engineering costs.
- (19) Easement. The right which one person has to use the land of another for a specific purpose.
- (20) Eligible. Qualified to receive a basic State grant or EPA grant.

- (21) EPA. The United States Environmental Protection Agency.
- (22) EPA grant. The award of funds under the provisions of Title II of the Clean Water Act.
- (23) Excessive infiltration/inflow. The quantities of infiltration/inflow which can be economically eliminated from a sewer system as determined in a cost-effective analysis that compares the costs for correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow.
- (24) Flow. Wastewater, as a volume or a rate, which is processed by a wastewater treatment works. The following apply:
  - (a) 24-hour flow: The total amount of wastewater that is processed by a wastewater treatment works in a 24-hour period.
  - (b) Design flow: The wastewater flow that is used in the design of individual components of wastewater treatment works and to which suitable peaking factors have been applied.
  - (c) Peak flow: The largest amount of wastewater that is processed by the wastewater treatment works in 24-hour period.
  - (d) Domestic flow: The portion of the 24-hour flow that consists primarily of sanitary wastes and that originates from residential-type sources.
  - (e) Commercial flow: That part of the 24-hour flow, sanitary as well as process, that originates from commercial sources as restaurants, motels, institutions, offices, airports, laundries, etc.
  - (f) Industrial flow: That part of the 24-hour flow, sanitary as well as process, which originates from an industry.
  - (g) Infiltration: Water other than wastewater than enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
  - (h) Inflow: Water other than wastewater that enters a sewer system, including sewer service connections, from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.
- (25) Individual systems. Privately owned alternative wastewater treatment works, including but not limited to dual waterless/gray water systems, serving one or more principal residences, or small commercial establishments. Normally, these are onsite systems with localized treatment and disposal of wastewater, but may be systems utilizing small diameter gravity, pressure or vacuum sewers conveying treated or partially treated wastewater. The systems can also include small diameter gravity sewers carrying raw wastewater to cluster systems.
- (26) Industrial user. Any non-governmental, non-residential user of a publicly owned treatment works which is identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented, under one of the following divisions:

Division A. Agriculture, Forestry, and Fishing

Division B. Mining

Division D. Manufacturing

Division E. Transportation, Communications, Electric, Gas and Sanitary Services

Division I. Services

(27) Infiltration/Inflow correction. Techniques which eliminate excessive infiltration/inflow. This definition refers to excessive infiltration/inflow reduction techniques that do not involve extensive excavation and/or replacement. Techniques considered to be infiltration/inflow correction include but are not limited to the following:

- (a) Pressure testing and sealing procedures;
- (b) Excavation and replacement where documented and severe infiltration/inflow problems can be corrected. Specific examples are replacing or repairing manhole covers, repairing crushed pipe within an area of temporary or permanent ground water and replacement or repair of a sewer segment beneath a waterway.
- (c) Sliplining.
- (28) Innovative technology. Developed wastewater treatment processes and techniques which have not been fully proven under the circumstances of their contemplated use and which represent a significant advancement over the state of the art in terms of significant reduction in life cycle cost of the project when compared to an appropriate conventional technology.
- (29) Interceptor sewer. A sewer which is designed for one or more of the following purposes:
  - (a) to intercept wastewater from a final point in a collector sewer and convey such wastes directly to a treatment facility or another interceptor:
  - (b) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant;
  - (c) To transport wastewater from one or more municipal collector sewers to another municipality or to a regional plant for treatment; or
  - (d) To intercept an existing major discharge of a raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.
- (30) Major rehabilitation. Techniques which involve the removal of the existing pipes or manholes from the ground and replacing them with new ones. This definition is considered applicable for this chapter under one or more of the following conditions:
  - (a) In locations where pipes or manholes have lost their structural integrity, such as pipes or manholes which are collapsed, crushed, broken or badly deteriorated and cracked;
  - (b) In cases where pipe size enlargement, change in grade and/or line realignment are needed in addition to pipe deficiency corrections; or
  - (c) In cases where the causes of damages to the existing pipes or manholes, including but not limited to corrosion, soil movement, and increasing traffic load, have been identified and it is desirable to prevent the recurrence of these damages by replacing the existing structures with new ones having better quality and greater strength.
- (31) Municipality. Any utility district existing on July 1, 1984, county, incorporated town or city, or metropolitan government which has authority to administer a wastewater treatment works, or any combination of two (2) or more of the foregoing, acting jointly to construct a wastewater treatment works.
- (32) Non-excessive infiltration. The quantity of flow which is less than 120 gallons per capita per day, domestic base flow plus infiltration, or the quantity of infiltration which cannot be economically and effectively eliminated from a sewer system as determined in a cost-effective analysis.
- (33) Non-excessive inflow. The rainfall induced peak inflow rate which does not result in chronic operational problems related to hydraulic overloading of the treatment works during storm events. These problems may include but are not limited to surcharging, backups, bypasses, and overflows.
- (34) Operation and maintenance. Activities required to assure the dependable and economical function of treatment works.

- (a) Operation is the control of the unit processes and equipment which make up the treatment works.

  This include financial and personnel management records, laboratory control, process control, safety and emergency operation planning.
- (b) Maintenance is the preservation of functional integrity and efficiency of equipment and structures.

  This includes preventive maintenance, corrective maintenance and replacement of equipment.
- (35) Planning/design. Facilities planning consists of those necessary plans and studies which directly relate to wastewater facilities or treatment works needed to comply with the requirements of Rules 0400-46-02-.08 and 0400-46-06-.06. Design consists of those necessary drawings, plans and specifications which directly relate to wastewater facilities or treatment works needed to comply with the approved facilities plan.
- (36) Preliminary engineering The preparation of facilities plans, preparation of engineering plans, writing specifications, value engineering, and related similar activities.
- (37) Principal residence. The habitation of a family or household for at least 51 percent of the year. Second homes, vacation or recreation residences are not included in this definition.
- (38) Priority ranking list. A list generated through the State Priority Ranking System rules pursuant to T.C.A. § 68-221-804 by which the Department ranks in descending order of priority all applicants for state and federal grants for construction of wastewater treatment works.
- (39) Project. The activities or tasks the Commissioner identifies in the contract agreement for which the recipient may expend, obligate or commit funds.
- (40) Project schedule. A timetable specifying the dates of key project events including but not limited to, the following: submittal of plans and specifications, advertising for bidding, notice to proceed, and building completion.
- (41) Replacement. Obtaining and installing equipment, accessories, or appurtenances which are necessary during the design or useful life, whichever is longer, of the treatment works to maintain the capacity and performance for which such works were designed and constructed.
- (42) Reserve capacity. Capacity to treat, store, transport or dispose of more wastewater than the demand on the system at the time of construction.
- (43) Sanitary sewer. A conduit intended to carry liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions together with minor quantities of ground, storm and surface waters that are not admitted intentionally.
- (44) Small alternative wastewater system (SAWS). Projects using the following types of alternative technology in small communities: on-site treatment systems, non-conventional collection systems, and any one of the twenty-one systems described in the EPA Publication FRD-10 (1980).
- (45) Small community. Any municipality with a population of 3,500 persons or less, in accordance with 1980 federal census or any subsequent federal decennial census.
- (46) State. State of Tennessee.
- (47) State revolving fund (SRF) assistance grant. A grant made to a municipality in addition to an SRF loan for the financing of the building of wastewater treatment works.
- (48) State revolving fund (SRF) Loan. Loan program as established in the Wastewater Facilities Act of 1987.
- (49) Step 1. Planning phase of a treatment works including related services and supplies which result in a 201 Facilities Plan.
- (50) Step 2. Design phase of a treatment works including related services and supplies.
- (51) Step 3. Building phase of a treatment works including related services and supplies.

- (52) Storm sewer. A sewer designed to carry only storm waters, surface runoff, street wash wasters and drainage.
- (53) Supplemental State grant. A grant made to a municipality in addition to the basic State grant under the provisions of this chapter or in addition to an EPA grant both made to municipalities for the financing of the construction of wastewater treatment works.
- (54) Useful life. The period during which a wastewater treatment works operates. This is not design life which is the period during which a wastewater treatment works is planned and designed to operate.
  - (a) For purposes of analyzing cost-effectiveness, the components of a wastewater treatment works shall have a useful life as follows:
    - Land-permanent;
    - 2. Wastewater conveyance structures including but not limited to collection systems, outfall pipes, interceptors, force mains, and tunnels 50 years;
    - Other structures, including but not limited to plant building, concrete process tankage, basins, and lift station structures - 50 years;
    - Process equipment 20 years; and
    - Auxiliary equipment 15 years.
  - (b) Other useful life periods will be acceptable when sufficient justification can be provided to the Commissioner. Where a system or a component is for interim service, the anticipated useful life shall be reduced to the period of interim service.
- (55) User. A single municipal, domestic, commercial or industrial connection to a wastewater treatment works.
- (56) User charge. A charge levied on users of a treatment works, or that portion of the ad valorem taxes paid by a user, for the user's proportionate share of the cost of debt retirement, operation and maintenance, and replacement of such works.
- (57) Utility district. A publicly owned utility district existing on July 1, 1984, or if created after that date, comprising at least five hundred (500) customer connections.
- (58) Value engineering. A specialized cost control technique which uses a systematic and creative approach to identify and to focus on unnecessarily high costs in a project in order to arrive at a cost savings without sacrificing the reliability or efficiency of the project.
- (59) Wastewater treatment works. Any facility whose purpose is to store, treat, neutralize, stabilize, recycle, reclaim or dispose of municipal wastewater, including treatment or disposal plant, interceptors, outfall, and outlet sewers, pumping stations, equipment and furnishings thereof and their appurtenances which are necessary to accomplish the foregoing purposes; also included in this definition are collection systems which are to be built, repaired or extended for the purpose of ameliorating or correcting a pollution problem existing at the time of the application for the grant; providing, that collection systems, or parts thereof, otherwise are excluded from this definition and are not eligible for grants under the Act and this chapter.

## 0400-46-02-.03 Basic State Grants

- (1) General Provisions.
  - (a) The basic State grant share for each project shall be based on the sum of the total Step 3 allowable costs and the allowance established in the grant agreement. Except as provided elsewhere in this rule, the basic State grant share shall be 55 percent of allowable costs for grant assistance awarded after July 1, 1984.
  - (b) The basic State grant share for eligible treatment or unit processes and techniques that the Commissioner determines meet the definition of innovative or alternative technology shall be 20

percent greater than the basic State grant share under subparagraph (a) of this paragraph, but in no event shall the total basic State grant be greater than 75 percent. This increased basic State grant share depends on the availability of funds from the reserve except where the municipality is eligible for a supplemental State grant.

- (c) Municipalities receiving an EPA grant shall not be eligible for a basic State grant but may be eligible for a supplemental State grant.
- (d) The municipality is responsible for using competitive bidding for all construction contracts where practicable. This is accomplished by placing an advertisement for bids in a regional newspaper. The advertisement should run at least four (4) weeks prior to the bid date. The advertisement should be placed in the "Legal" classification of the newspaper and run for three (3) consecutive days, excluding holidays and weekends.
- (e) Basic and supplemental State grants shall be increased or decreased immediately after the building contract has been executed by the municipality where the initial contract cost is more or less than the amount of the original grant. State grant increases shall depend upon the availability of funds for the purpose and shall not be made prior to the execution of the building contract by the municipality and the contractor.
- (2) Preliminary Engineering (PE) Grant.
  - (a) Where a municipality builds a wastewater treatment works using its own finances, the Commissioner may award a grant for preliminary engineering. Such grants shall be at the rate of 80% of the calculated design allowance based on construction costs of the project and shall be paid at the time of initiation of building of the project and such time shall be on or after July 1, 1984.
  - (b) Any municipality receiving a grant under the provisions of this rule and subsequently receiving funds for preliminary engineering from other state or federal sources shall refund such grant to the State. Municipalities previously receiving such grants shall not be eligible for preliminary engineering grant allowances. If the municipality has received an advance of allowance from the EPA, the PE grant award will be reduced by the amount of that advance.
  - (c) Allowances for a PE grant will be calculated as follows:
    - 1. The design allowance will be determined in accordance with Tables 1 and 2 of this rule;
    - 2. Table 2 is to be used only in the event that the recipient received a Step 1 grant from the federal government;
    - 3. The amount of the allowance is computed by applying the resultant allowance percentage to the initial allowable building costs per bid documents;
    - 4. The amount of the allowance will be computed only once for each project, and will not be adjusted for subsequent construction cost increases or decreases; and
    - 5. The recipient shall be reimbursed for preliminary engineering upon receipt of signed pay requests.

# TABLE I Allowance for Facilities Planning and Design

Building Cost	Allowance as a percentage
	of building cost*
\$100,000 or less	
120,000	
150,000	
175,000	
200,000	
250.000	

12.0764 11.8438 11.4649 11.1644 10.9165 10.7062 10.5240
11.4649 11.1644 10.9165 10.7062 10.5240 10.3637
10.9165 10.7062 10.5240 10.3637
10.7062 10.5240 10.3637
10.3637
40.0000
10.0920
9.7692
<del> 9.5523</del>
9.3682
<del>9.0686</del>
<del>8.8309</del>
<del>8.6348</del>
8.4684
<del>8.1975</del>
<del> 7.9827</del>
<del>7.805</del> 4
<del>7.6550</del>
<del> 7.5248</del>
<del> 7.4101</del>
<del> 7.2159</del>
6.9851
<del> 6.8300</del>
6.6984
6.4841
6.3142
<del>6.1739</del>
<del> 6.0550</del>

# TABLE 2 Allowance for Design only

Building cost	Allowance as a percentage
	of building cost*
\$100,000 or less	9 5693
120,000	0 2000
150.000	<del> 8.1570</del>
175.000	<del></del>
200,000	<del></del>
250,000	<del>7.7668</del>
300,000	<del></del>
350,000	<del></del>
400,000	<del>7.2419</del>
500,000	<del>7.0485</del>
600,000	6.8943
700,000	6.7666
800,000	6.6578
900,000	
1,000,000	6.4300
1.200.000	
1,500,000	6.1690
<del>1,750,000</del>	C 0547
2,000,000	E 0574
2,500,000	<u>5.7983</u>
3,000,000	5 6714
0,000,000	0.07 17

3,500,000 5.56	<del>364</del>
4.000.000 5.47	<del>769</del>
5,000,000 5.33	
6,000,000 5.21	140
7,000,000 5.11	174
8,000,000 5.03	352
9,000,000 4.96	
10,000,000 4.90	
12,000,000 4.78	335
15,000,000 4.66	355
17,600,000	
<del>20,000,000 4.50</del>	254
25,000,000 4.38	
30,000,000 4.28	
35,000,000	
	<del>131</del>
40,000,000 4.12	+2+
50,000,000	<del>) 14</del>

\*Use Straight line interpolation between values

# (3) Allowances.

- (a) Allowances for Planning and Design will be provided under the following conditions:
  - Step 3 grant agreements will include an allowance for facilities planning and design of the project;
  - The estimated and final design allowance will be determined in accordance with Tables 1 and 2 of this rule:
  - Table 2 is to be used only in the event that the recipient received a Step 1 grant from the federal government;
  - 4. The amount of the allowance is computed by applying the resultant allowance percentage to the initial allowable building cost multiplied by the appropriate eligible grant percentage. Specifically, the initial allowable building cost is the allowable cost of the following:
    - (i) The initial award amount of all prime subagreements for building the project;
    - (ii) The initial amounts approved for force account work performed in lieu of awarding a subagreement for building the project; and
    - (iii) The purchase price of eligible real property; and
    - (iv) The purchase price of eligible equipment.
  - 5. The estimated allowance is to be based on the estimate of the initial allowable building cost:
  - 6. The final allowance will be determined one time only for each project, based on the initial allowable building cost, and will not be adjusted for subsequent cost increases or decreases;
  - 7. For any Step 3 project, the recipient may request payment of 50 percent of the State grant share of the estimated allowance immediately after notification of grant award. Final payment of the state grant share of the allowance may be requested in the first payment after the recipient has awarded all prime subagreements for building the project, received the Commissioner's approval for force account work, and completed the acquisition of all eligible real property:
  - B. The allowance does not include architect or engineering services provided during the building of the project, e.g., reviewing bids, checking shop drawings, reviewing change

orders, making periodic visits to job sites, etc. Architect or engineering services during the building of the project are allowable costs provided in subparagraph (b) of this paragraph; and

- If the municipality has received an advance of allowance from EPA, the design allowance will be reduced by the amount of that advance.
- (b) The allowance for Step 3 A/E services shall be calculated under the following conditions:
  - 1. The estimated and final allowance for construction engineering will be determined in accordance with Table 3 of this rule.
  - 2. The amount of the allowance is computed by applying the resultant allowance percentage to the initial allowable building costs multiplied by the appropriate eligible grant percentage. The allowable building costs are defined in part (a)4 of this paragraph.
  - 3. The estimated allowance is to be based on the estimate of the initial allowable building cost.
  - The final allowance will be determined one time only for each project, based on the initial allowable building cost, and will not be adjusted for subsequent cost increases or decreases.
  - 5. The recipient shall be reimbursed for A/E Services by monthly invoice.

TABLE 3
Allowance for Construction Engineering

Building Cost	Allowance as a percentage
	of building cost*
\$100,000 or less	<del>8.0500%</del>
	<del>\$8,050.00</del>
200,000	<del>7.5929%</del>
·	<del>\$15,186.00</del>
300,000	<del></del>
<u> </u>	<del>\$22,046.00</del>
400,000	7.1849%
	<del>\$28,729.00</del>
500,000	7.0627%
,	<del>*************************************</del>
1,000,000	6.7083%
,, , , , , , , , , , , , , , , , , , , ,	<del>\$67,083.00</del>
2,000,000	6.3878%
, ,	<del>\$127,757.00</del>
2,500,000	6.2911%
_,	\$157,277.00
3,000,000	6.2142%
	\$186,425.00
3,500,000	6.1506%
	\$215.271.00
4,000,000	6.0966%
	<del>\$243,863.00</del>
4,500,000	6.0497%
,,	<del>\$272,237.00</del>
5,000,000	6.0084%
	\$300,419.00
10,000,000	5.7500%
	<del>\$575,000.00</del>
15,000,000	5.6089%
	\$841,335.00

- (4) Innovative and Alternative (I/A) Technologies.
  - (a) Projects or portions of projects using unit processes or techniques which the Commissioner determines to be innovative or alternative technology in accordance with this rule may receive an additional 20% grant on the eligible I/A portions as determined by the Commissioner.
  - (b) A project will be determined to have an alternative technology if it is listed under the definition of alternative technology in Rule 0400-46-02-.02.
  - (c) A project will be determined to have an innovative technology if present worth cost of the eligible portions of the treatment works excluding conventional sewer lines is at least 15% less than that for the most cost effective alternative which does not incorporate innovative wastewater treatment processes and techniques; i.e., is no more than 85% of the present worth of the most cost-effective non-innovative alternative.
  - (d) In the present worth cost comparisons in subparagraph (c) of this paragraph, the following apply:
    - 1. The non-innovative alternative must be clearly identified. Where an upgrading or expansion of an existing treatment works is encountered, only the portions associated with the increased capacity or level of treatment shall be considered in the cost analysis;
    - 2. The cost-effectiveness of the non-innovative alternative will be judged against the best available state-of-the-art cost information;
    - 3. The basis of the comparison is the present worth cost of the proposed innovative technology versus the lowest present worth cost of the non-innovative systems considered;
    - 4. The cost comparison between the proposed innovative and non-innovative alternatives must be made on a completed treatment works basis, grant eligible portions excluding conventional sewer lines, even though the proposed potentially innovative portion is a subsystem or component;
    - 5. In the comparative analysis, both systems must provide equivalent levels of pollutant control. Equivalency of the following factors shall be considered:
      - (i) Design minimum effluent quality standards;
      - (ii) System reliability with respect to effluent quality and residual disposal;
      - (iii) Residual treatment and disposal;
      - (iv) Level of toxic material control; and
      - (v) Environmental benefit
    - 6. For cases where innovative sub-system components are analyzed or aggregated in the total plant cost comparison, only the cost of the innovative components and the appurtenant non-innovative equipment uniquely necessary for the proper functioning of the candidate innovative technology shall be included as a part of the component cost; and
    - 7. A component is uniquely necessary if it would have to be modified or replaced to correct a failure of the innovative system.
  - (e) In the total system cost comparison, the present worth cost of the proposed design with innovative components must be a minimum of 15% less than that of the most cost effective non-innovative alternatives to qualify as innovative technology.

#### (1) General Provisions.

- (a) Municipalities receiving basic State grants on or after July 1, 1984, may be eligible for supplemental State grants. Municipalities receiving EPA grants for projects on or after April 18, 1985, may be eligible for supplemental State grants.
- (b) The amount of the supplemental State grant shall be based on the same allowable costs as the basic State grant or EPA grant. In no case shall the basic State grant plus the supplemental State grant or the EPA grant plus the supplemental State grant exceed 90% of the allowable costs of the project. All supplemental state grant awards shall not exceed \$500,000.
- (c) Supplemental State grants shall be increased or decreased immediately after the building contract has been executed by the municipality where the initial contract cost is more or less than the amount of the original grant. Supplemental State grant increases shall depend upon the availability of funds for the purpose and shall not be made prior to the execution of the building contract by the municipality and the contractor.
- (2) Supplemental State Grant Amount Determination.

The Ability to Pay Indices (ATPI) is to be used in determining the amount of the supplemental State grants along with the corresponding percentage as stated below. The ATPI, as certified by the Department, is listed both by counties and towns. To be eligible for a supplemental State grant a municipality must have an ATPI of 97.63 or less.

The ranges of ATPI's and their corresponding percentage are shown below:

ATPI Range	Supplemental Grant Percentage
97.63 to 95.00	<del>5</del>
94.99 to 93.00	<del>10</del>
92.99 to 90.00	<del>15</del>
89.99 to 85.00	<del>20</del>
84.99 to 82.00	<del>25</del>
81.99 to 77.00	<del>30</del>
Below 77.00	<del>35</del>

0400-46-02-.05 State Revolving Fund (SRF) Assistance Grant.

#### (1) General Provisions.

- (a) Municipalities (except utility districts created after July 1, 1984) receiving State Revolving Fund construction loans pursuant to T.C.A. § 68-221-1001 et seq., on or after January 1, 1989, may be eligible for an SRF Assistance grant provided the municipality has not received any other form of state assistance pursuant to T.C.A. § 68-221-801 et seq.
- (b) The SRF Assistance grant may be awarded to those small communities which have a population of 3500 or less and an ATPI of 110 or less.
- (c) Grants made under this rule may only be awarded after a community has received an SRF construction loan. The grant recipient must adhere to all grant conditions and terms of the loan agreement. Additionally, failure to obtain Department approval for plans and specifications within six months or to initiate construction of the project within twelve months of grant award shall constitute ground for termination of the grant.
- (d) The priority for obligating funds pursuant to this chapter shall be based upon the date of loan approval for the project, provided the recipient has applied for such assistance.
- (e) Grants to be awarded under this rule are contingent upon the availability of funds for that purpose.

### (2) Grant Amount.

- (a) The amount of the SRF Assistance grant may be based on reasonable estimated building costs.

  The final amount of the grant will be determined once based on actual building costs and will not be adjusted for subsequent cost increases or decreases.
- (b) The amount of an SRF Assistance grant shall be 20% of the eligible building cost funded by the SRF loan which is the sum of the initial award amounts for all building contracts less the Reserve Capacity Cost Ratio (RCCR) except as provided in subparagraph (c) of this paragraph.
- (c) In no case shall the amount of the SRF Assistance grant exceed 20% of the eligible SRF loan building cost of \$500,000, whichever is less. Any municipality receiving a grant under the provisions of this rule and subsequently receiving other forms of federal assistance may have the grant reduced to an amount based on 20% of the eligible building cost funded by the SRF loan.
- (d) The SRF Assistance grant shall be based on building cost alone and will include provisions for reimbursement of other project uses.

0400-46-02-.06 Priority for the Obligation of Available Funds.

# (1) General.

The State will award financial assistance to municipalities for the construction of wastewater treatment works under the provisions of T.C.A. §§ 68-221-801 et seq., only for projects on the Priority Ranking List.

(2) Delayed Supplemental State Grants.

When State funds are insufficient to make supplemental State grants in any year, such supplemental State grants may be made from appropriations in later years with the oldest funded projects having first priority.

(3) Partial Grants Prohibited.

When there are insufficient funds to make a grant for a project on the priority list, a partial grant shall not be made and a project shall not be bypassed because of insufficient funds for the purpose of funding a project for which available funds would be adequate. The partial funding of a grant amendment is also prohibited.

(4) Priorities for the Obligation of State Funds.

The priority for the obligation of State funds appropriated for the purpose of implementing the provisions of T.C.A. § 68-221-801, et seq. and T.C.A. § 68-221-1001, et seq., shall be in accordance with the following:

- (a) The first priority shall be to provide the required 20% match for the State Revolving Fund's capitalization grant received annually from the EPA.
- (b) On any given date after obligations under the first priority have been met, the balance of available funds may be obligated under a second priority, which is to provide small low income communities with SRF Assistance grants.
- (c) When the second priority for funds has been met, the balance of available funds may be obligated under a third priority which is to provide increases as necessary for existing state grants.
- (d) When the third priority for funds has been met, any balance of available funds will be provided to subsidize the low interest rates of approved SRF loan projects.
- (e) When the fourth priority for funds has been met, the balance of available funds may be obligated under a fifth priority which is for the purpose of making supplemental State grants to EPA grants as provided in Rule 0400-46-02-.04. Obligations under the fourth priority shall have been met when supplemental State grants have been made for all EPA projects which will be funded in a given Federal fiscal year or the amount required for supplemental State grant has been determined by the preparation of EPA grant offers, but such grants have not been accepted by municipalities. Within this priority the funding shall be based on the priority ranking of the EPA grant projects which is determined by the priority ranking list.

(f) When the fifth priority for funds has been met, any balance of available funds may be used for basic State grants under the provisions of this chapter or basic State grants plus supplemental State grants may be used.

# 0400-46-02-.07 Eligibility

- (1) Municipalities may receive assistance under the Act for the construction of wastewater treatment works.
- (2) Grants shall be made only for those wastewater treatment works projects that qualify for funding based on the Department's priority ranking list.
- (3) Basic State grants cannot be used to fund any project for which a federal EPA grant was awarded.
- (4) No portion of a grant may be used to acquire land or pay any costs associated with the acquisition of land; provided, however, that expenditures for land that will be an integral part of the treatment process or that will be used for the ultimate disposal of residues resulting from such treatment may be eligible for grant participation.
- (5) No grant under the Act shall be made to provide reserve capacity except in eligible interceptors and collection systems for communities with population less than 3,500 according to the 1980 Federal Census or any subsequent federal decennial census.
- (6) Treatment units and appurtenances that are necessary to meet the requirements of the Commissioner shall be eligible for grant participation.
- (7) Any work done prior to the date of basic State grant award shall be ineligible unless approved in writing by the Commissioner prior to initiation of such work.
- (8) Replacement costs requiring additional grant funds will not be made available for failed, inoperative or otherwise inadequate wastewater treatment works which were considered and funded as Innovative or Alternative technology.
- (9) Any contractor or A/E debarred by either the State or the Federal government cannot participate in a project which involves state funds governed by this rule.
- (10) Participation in the purchase of land shall be limited to the cost determined by a Certified Appraiser. Where the cost exceeds \$100,000 a second appraisal is required and final eligibility shall be determined by the Commissioner.
- (11) A municipality may use its own manpower and/or equipment to build all or part of the project. The method by which this is to be accomplished must be approved by the Commissioner. When the project costs exceed \$25,000, prior approval by the Commissioner shall be obtained.
- (12) Upon award of the building contract under a basic State grant and at the time of increasing or decreasing the grant amount as the result of such award, a contingency item may be included in the grant amount not to exceed 5% of the building cost.

# 0400-46-02-.08 Grant Applications

- (1) Applicants for all grant assistance must submit applications on forms provided by the Commissioner.
- (2) The Commissioner shall review grant applications to ensure that they are completed and shall inform the application in writing of the determination.
- (3) A complete basic State grant application for the building of the treatment works will consist of at least the following:
  - (a) An approved facilities plan;
  - (b) Certification of adequate public participation;

- (c) Final construction drawings and specifications;
- (d) Project schedule; and
- (e) If Step 3 assistance includes acquisition of eligible real property, a plat which shows the legal description of the property to be acquired, a preliminary layout of the distribution and drainage system, and an explanation of the intended method of acquiring the real property.

0400-46-02-.09 Related Grant Application Requirements.

These requirements exclude SRF Assistance grants. The SRF Assistance grant application requirements shall be in accordance with the loan application procedures under Rule 0400-46-06-.06.

- (1) Facilities Planning.
  - (a) General. Facilities planning consists of those necessary plans and studies which directly relate to treatment works needed to protect water quality and public health. Facilities planning will investigate the need for proposed facilities. Through a systematic evaluation of alternatives that are feasible in light of the unique demographic, topographic, hydrologic and institutional characteristics of the area, it will demonstrate that, except for innovative and alternative technology, the selected alternative is cost effective i.e., is the most economical means of meeting the applicable effluent, water quality and public health requirements over the design life of the facility while recognizing environmental and other non-monetary considerations. For sewered communities with a population of 10,000 or less, consideration must be given to appropriate low cost technologies such as facultative ponds, trickling filters, oxidation ditches, land disposal or overland-flow land treatment; and for the unsewered portions of communities of 10,000 or less, consideration must be given to onsite systems. The facilities plan will also demonstrate that the selected alternative is implementable from legal, institutional, financial and management standpoints.
  - (b) Facilities Plan contents. A completed facilities plan must include:
    - A description of both the proposed treatment works and the completed waste treatment system of which it is a part;
    - 2. A cost-effective analysis of the feasible conventional, innovative and alternative wastewater treatment works, processes and techniques capable of meeting the applicable effluent, water quality and public health requirements over the design life of the facility while recognizing environmental and other non-monetary considerations. The planning period for the cost-effective analysis shall be 20 years. The monetary costs to be considered must include the present worth or equivalent annual value of all capital costs and operation and maintenance costs. The discount rate established by EPA for the construction grants program shall be used in the cost-effective analysis. A cost effective analysis must include:
      - (i) The description of the relationship between the capacity of alternatives and the needs to be served, including capacity for future growth expected after the treatment works become operational. This includes letters of intent from significant users and industries intending to increase their flows or relocated in the area, documenting capacity needs and characteristics for existing or projected flows;
      - (ii) An evaluation of improved effluent quality attainable by upgrading the operation and maintenance and efficiency of existing facilities as an alternative or supplement to building new facilities;
      - (iii) An evaluation of the alternative methods for the reuse or ultimate disposal of treated wastewater and sludge material resulting from the treatment process;
      - (iv) A consideration of systems with revenue generating applications;
      - (v) An evaluation of opportunity to reduce the use of energy or to recover energy; and

- (iv) Cost information on total capital costs, and annual operation and maintenance costs, as well as estimated annual or monthly costs to residential and industrial users.
- 3. Demonstration of the non-existence or possible existence of excessive infiltration/inflow in the sewer system:
- 4. An analysis of the potential open space and recreation opportunities associated with the project;
- 5. An evaluation of the environmental impacts of alternatives;
- An evaluation of the water supply implications of the project;
- 7. A concise description of the selected alternative with an appropriate level of detail, and at least the following;
  - (i) Relevant design parameters;
  - (ii) Estimated capital building and operation and maintenance costs, and a description of the manner in which local costs will be financed;
  - (iii) Estimated cost of future expansion and long-term needs for reconstruction of facilities following their design life;
  - (iv) Cost impacts on wastewater system users; and
  - (v) Institutional and management arrangements necessary for successful implementation.
- 8. The facilities plan shall be submitted to the Commissioner for review. Potential grant applicants must confer with Department reviewers in the initial stages of the facilities planning process.

#### (2) Sewer Use Ordinance

- (a) The applicant's sewer use ordinance shall prohibit any new connections from inflow sources into the treatment works and shall require that new sewers and connections to the treatment works are properly designed and constructed. The ordinance shall also require that all wastewater introduced into the treatment works not contain toxins or other pollutants in amounts of concentrations that endanger public safety and physical integrity of the treatment works or preclude the selection of the most cost-effective alternative for wastewater treatment sludge disposal.
- (b) After July 1, 1984, no Step 3 grant pursuant to the Act shall be made unless the following pretreatment requirements have been satisfied:
  - 1. A sewer use ordinance in accordance with the format prescribed 40 CFR Part 403 must have been submitted and approved by the Commissioner and adopted by the recipient; and
  - 2. The applicant must document to the satisfaction of the Commissioner that pretreatment facilities have been constructed or that legally binding commitments exist between the applicant and any discharger(s) to the recipient's proposed wastewater treatment facilities which ensure that pretreatment will be provided on or before the date of completion of the proposed wastewater treatment facilities. For the purpose of this paragraph pretreatment shall be defined as that level of treatment required by each discharger to the recipient's sewerage system which is necessary to meet the Publicly Owned Treatment Work (POTW) protection criteria for POTW unit operations including the collection system.

# (3) User Charge System

- (a) General. Unless a grant is solely for the acquisition of eligible land, the applicant for a basic State grant or a supplemental State grant must obtain the Commissioner's approval for its user charge system. If the applicant has a user charge system in effect at the time of the application, the applicant shall demonstrate that it meets the provisions of this paragraph or amend it as required by these provisions.
- (b) Scope of the user charge. The user charge system shall provide that each user which discharges pollutants that cause an increase in the cost of managing the effluent or sludge from the facility shall pay for such increased cost. The user charge system must be designed to produce adequate revenues to provide for the following expenditures:
  - Operation and maintenance expenses;
  - Debt retirement; and
  - 3. Depreciation of the wastewater treatment works over its useful life, unless the generally accepted accounting principles do not require such.
- (c) Actual use. A recipient's user charge system shall be based on actual use, or estimated use, of wastewater treatment services. Each user or user class must pay its proportionate share of the costs described in the subparagraph (b) of this paragraph incurred in the recipient's service area, based on the user's proportionate contribution to the total wastewater loading from all users or user classes.
- (d) Notification. Each user charge system must provide that each user be notified, at least annually, in conjunction with a regular bill or other means acceptable to the Commissioner, of the rate and that portion of the user charge that is attributable to wastewater treatment services.
- (e) Financial Management System. Each user charge system must include a financial management system that will accurately account for revenues generated by the system and expenditures for the items in subparagraph (b) of this paragraph. This financial management system shall be based on an adequate budget identifying the basis for determining the annual operation and maintenance expenses, debt retirement, depreciation of the wastewater treatment works, and reserve account contributions.
- (f) Charges for operation and maintenance for infiltration/inflow. The user charge system shall provide that the costs of operation and maintenance for all flow not directly attributable to users, be distributed among all users based upon either of the following:
  - In the same manner that it distributes the costs for their actual use; or
  - Under a system which uses one of any combination of the following factors on a reasonable basis:
    - (i) Flow volume of users;
    - (ii) Land area of the user, and ad valorem; or
    - (iii) Number of hookups or discharges of the users.
- (g) Use of revenue. After completion of a project, revenue from the project including but not limited to, sale of a treatment-related-by-products; lease of the land; or sale of crops grown on the land purchased under the grant agreement, shall proportionately reduce all user charges.
- (h) Adoption of system. The user charge system must be legislatively enacted by the recipient. If the project will serve two or more municipalities, the recipient shall submit the executed intermunicipal agreements, contracts or other legally binding instruments necessary for the financing, building and operation of the proposed treatment works. At a minimum they must include the basis upon which cost are allocated, the formula by which costs are allocated and the manner in which the cost

allocation system will be administered. The Department may waive this requirement provided the applicant can demonstrate:

- 1. That such an agreement is already in place; or
- Evidence of historic service relationships for water supply, wastewater or the other services among the affected communities regardless of the existence of formal agreements; and
- 3. That the financial strength of the supplier agency is adequate to continue the project even if one or more of the proposed customer agencies fail to participate.
- (i) Inconsistent agreements. The user charge system shall take precedence over any terms or conditions of agreements or contracts which are inconsistent with the requirements of these provisions.
- (j) Previous debt. The reserve account required under this rule shall be not be used toward offsetting debts incurred prior to the funding of the project.
- (k) Approval of user charge system. Plans and specifications for the project will not be approved until the recipient has developed an approvable user charge system. If the project is for Step 3 grant assistance, unless it is solely for acquisition of eligible land, the recipient must obtain the Commissioner's approval of its user charge system. If the recipient has a user charge system in effect, the recipient shall demonstrate to the Commissioner's satisfaction that it meets the requirements of this provision.
- (4) Easements. The recipient must own easements and/or land, or have taken condemnation proceedings needed to construct the project before plans and specifications will be approved by the Commissioner.
- (5) Plans and Specifications. All plans and specifications must be in accordance with the Facilities Plan/Engineering Report as approved by the Department, and should be consistent with the State Design Criteria for Sewage Works.

#### 0400-46-02-.10 Grant Agreement

- (1) The grant agreement will be a legally binding contract between the State and the recipient. The agreement will contain general conditions and may, if necessary, contain special conditions.
- (2) The general conditions will be requirements of law, regulations and policies of the State of Tennessee relative to the Act as defined under this chapter.
- (3) The special conditions of the grant agreement will relate to specific provisions unique for an individual project to include, but not limited to, time schedules, and performance requirements.

# 0400-46-02-.11 Grants Administration and Grant Conditions

- (1) Project By-Pass. The Commissioner may by-pass the funding of projects on the fundable portion of the priority list as follows:
  - (a) The potential recipient submits to the Commissioner a written statement endorsing the by-pass; or
  - (b) The potential recipient fails to submit information within the time frame required by certified, written notice from the Commissioner.
- (2) Grant Amendments. Grant amendments may be made in circumstances that include, but are not limited to the following:
  - (a) Grant amendments may be made to basic State grants to cover the difference between the original construction cost estimate and the contract price.
  - (b) Grant amendments may be made to cover the provisions of paragraph (6) of this rule.

- (c) Grant amendments may be made to basic State grants to cover increased eligible cost for Step 3 engineering services or engineering services during initiation of operation.
- (d) Grant amendments may be made to supplemental grants to reflect changes in eligible cost.

#### (3) Inspections.

- (a) The recipient shall provide continuous inspections during building by qualified inspectors in sufficient numbers to insure the project complies with approved plans and specifications.
- (b) The Commissioner will conduct interim building inspections to determine compliance with approved plans and specifications and grant agreement, as appropriate.
- (c) The interim inspection reports may be used for determining the amount of the Step 3 grant payment.
- (d) The recipient shall notify the Commissioner in writing when the building of the project is complete so that operation and maintenance and final inspections can be made by the Commissioner.

#### (4) Operation and Maintenance.

- (a) The recipient must assure economical and effective operation and maintenance, including replacement, of the treatment works.
- (b) The Commissioner shall not pay more than 90 percent of the Basic State grant share of any project unless the recipient has furnished and the Commissioner has approved an operation and maintenance manual.

# (5) Grant Payments.

- (a) Documentation. The Commissioner shall pay the State grant share of the appropriate allowance, preliminary and/or construction engineering and/or the allowable project costs incurred and as certified and documented in accordance with Tennessee Outlay Report and Request for Reimbursement for Construction Programs Form as provided by the Commissioner.
- (b) Failure to comply with Plans and Specifications. Payments shall be limited to eligible work that complies with plans and specifications approved by the Commissioner.
- (c) Adjustment. The Commissioner may at any time review and audit requests for payment and make adjustments for, but not limited to, mathematical errors, items not built or purchased, unacceptable construction, and construction not in accordance with plans and specifications.
- (d) Refunds, Rebates and Credits. The State grant share of any refunds, rebates, credits, or other amounts, including any interest, that accrue to, or are received by the recipient of the project, and that are properly allocable to costs for which the recipient has been paid under a grant, must be credited to the State. Examples include rebates for prompt payment and sales tax refunds. Reasonable expenses incurred by the recipient securing such refunds, rebates, credits, or other amounts shall be allowable under the grant when approved by the Commissioner.
- (e) Release. By its acceptance of final payment, the recipient releases and discharges the State, its officers, agents, and employees from all liabilities, obligations, and claims arising out of the project work or under the grant, subject only to exceptions previously specified in writing between the Commissioner and the recipient.
- (f) Closure, The grant shall be closed at the end of the performance evaluation period per paragraph (7) of this rule as determined by the Commissioner and final audit by the Comptroller of the Treasury. No additional grant payments shall be made after the grant is closed. The findings of the audit shall be used in determining the final grant amount by the Commissioner.
- (g) Files and Records. All files and records pertaining to the project shall be maintained by the recipient throughout the project and made accessible to the Commissioner and the Comptroller. These files and records must be retained by the recipient for at least three (3) years after project closure.

- (6) Change Orders.
  - (a) Change in the Step 3 project work, except as provided in subparagraph (b) of this paragraph that are consistent with objectives of the project and that are within the scope of the grant agreement, do not require the execution of a formal grant amendment before the recipient's implementation of the change. However, the Commissioner will determine the eligibility and reasonableness of cost for all change orders funded with a basic grant, or a grant increase.
  - (b) The recipient must receive from the Commissioner a grant amendment before implementing changes which:
    - Alter the type of wastewater treatment provided by the project; or
    - 2. Significantly delay or accelerate the project schedule.
- (7) Project Performance.
  - (a) The recipient shall notify the Commissioner in writing of the actual date and initiation of operation.
  - (b) The recipient shall hire an individual or firm with proven expertise in wastewater treatment plant operation and maintenance to provide the following services during the start-up period following the initiation of operation:
    - Direct the operation of the project and revise the operation and maintenance manual as necessary to accommodate actual operating experience;
    - 2. Train or provide for training of operating personnel and prepare curricula and training material for operating personnel; and
    - 3. Advise the recipient whether the project is meeting the project performance standard.
  - (c) Immediately after the start-up period, the recipient shall certify to the Commissioner whether the project meets the project performance standards. If the Commissioner or the recipient concludes that the project performance standards are not met, the recipient shall submit the following:
    - A corrective action report which includes an analysis of the cause of the project's failure to
      meet the performance standards and an estimate of the nature, scope and cost of the
      corrective action necessary to bring the project into compliance;
    - 2. The schedule for undertaking in a timely manner the corrective action necessary to bring the project into compliance; and
    - 3. The schedule date for certifying to the Commissioner that the project is meeting the project performance standards.
  - (d) The recipient shall take corrective action necessary to bring a project into compliance with the project performance standards at its own expense.
  - (e) Reservation of Rights.
    - Nothing in this rule prohibits the recipient from requiring more assurances, guarantees, or indemnity or other contractual requirements from any party performing project work; and
    - 2. Nothing in this rule affects the Department's right to take remedial action, including but not limited to administrative enforcement action and actions for breach of contract against a recipient that fails to carry out its obligations under this chapter.
- (8) Effect of Approval or Certification of Documents. Review or approval of facilities plans, design drawings and specifications or other documents by or for the Commissioner does not relieve the recipient of its

responsibility to properly plan, design, build and effectively operate and maintain the treatment works as required by law, regulations, permits, and good management practices.

(9) Value Engineering. During the design of the project, the Commissioner will determine when and to what degree value engineering will be conducted. Those value engineering determinations recommended by the Commissioner shall be implemented and eligibility shall be limited to a project scope that includes those value engineering determinations.

If any provision of this regulation or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect the provisions or applications of the regulation which can be given effect without the invalid provision, and to that end the provisions of this regulation declared to be severable.

Chapter 0400-46-04 State Loans

Repeal

Chapter 0400-46-04 State Loans is repealed.

Authority: T.C.A. §§ 68-221-201 et seq. and 4-5-201 et seq.

**Table of Contents** 

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0400-46-04-.01 Purpose.

The primary purpose of the "Construction of Sewage Treatment Works Act" (T.C.A. § 68-221-201 et seq.) is to provide repayable loans to local units of government to stimulate the construction and improvement of needed sewage treatment systems in order to provide the citizens of Tennessee an effective pollution abatement program for the State's rivers, lakes, streams, and groundwater. In making these loans available, the State is in no way attempting to assume the responsibilities of local governmental units to provide adequate sewerage services for the people. As the funds are sufficient to meet only a part of the total need, the State in making loans places emphasis on compliance with the Clean Water Act, 33 USC § 1251 et seq., as amended. Emphasis is placed on the following:

- (1) The provision of loans for municipalities without sewage treatment works;
- (2) The availability of grants and loans from other sources;
- (3) The creation of efficient wastewater treatment systems; and
- (4) The willingness and ability of local government units to meet their responsibilities through sound fiscal policies, planning, and efficient operation and management.

0400-46-04-.02 Definitions.

# As used in this chapter:

- (1) Commissioner. The Commissioner of the Tennessee Department of Environment and Conservation, his duly authorized representatives, and in the event of his absence or of a vacancy in the office of Commissioner, the deputy Commissioner.
- (2) Construction. The erection, building, acquisition, alteration, reconstruction, improvement or extension of sewage treatment works, preliminary planning to determine the economic and engineering feasibility of sewage treatment works, the engineering, architectural, legal, fiscal and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary

in the construction of sewage treatment works, and the inspection and supervision of the construction of sewage treatment works.

- (3) Department. The Tennessee Department of Environment and Conservation.
- (4) Eligible Project. A project for construction of sewage treatment works which:
  - (a) In the judgment of the Commissioner is either eligible for pollution abatement assistance or required to be undertaken by a federal or state agency, whether or not federal or state funds are then available:
  - (b) Conforms with applicable rules and regulations of the Department; and
  - (c) In the judgment of the Commissioner, is necessary for the accomplishment of the State's policy of water quality as established by the Tennessee Board of Water Quality, Oil and Gas pursuant to T.C.A. § 69-3-105.
- (5) Loan. State funds extended to a municipality to be repaid by said municipality excluding any federal or state pollution abatement assistance.
- (6) Municipality. Any county, town, city, or special district empowered to provide municipal sewage collection and treatment services, or any combination of two (2) or more of the foregoing acting jointly in connection with an eligible project.
- (7) Sewage Treatment Works. Any facility for the purpose of collecting, transporting, or treating municipal sewage.
- (8) User. The owner, tenant or occupant of any lot or parcel of land connected to a sanitary sewer, or for which a sanitary sewer line is available if a municipality levies a sewer charge on the basis of such availability.

#### 0400-46-04-.03 Determination of Eligibility.

- (1) Applicants.
  - (a) Only municipalities as defined in this chapter shall be eligible for loans to assist in financing the cost of construction of sewage treatment works.
  - (b) The applicant shall certify to the satisfaction of the Commissioner all of the following:
    - The applicant is a municipality as defined in this chapter;
    - 2. The applicant has the financial capacity to provide its share of the project costs. To the extent these project costs are to be provided on a pay-as-you-go basis, the full amount indicated from this source shall be represented by cash on hand and/or may be expected to be included in the applicant's annual budget for the years in which payments under the project contract will be due. To the extent that borrowed funds are anticipated, the applicant shall certify that the additional debt, together with the applicant's existing debt, is within the debt limitation provisions of the general laws of the State;
    - 3. The applicant has complied and/or will comply with all applicable laws, rules, regulations and ordinances of the State; and
    - 4. As determined from the detailed engineering report and other available information, the estimated revenues to be derived from the project under the applicant's proposed schedule of fees and charges will provide for proper operation, maintenance, administration, reasonable expansion of the system and repayment of present and proposed indebtedness. For this purpose, if the project described in the application is to be an integral part of an existing system, the revenues to be derived from operation of the entire system shall be utilized in determining the adequacy of the applicant's proposed schedule of fees and charges.

- (2) Applications and Loan Program Agreements.
  - (a) An application for a State loan shall be in the form of a letter from the municipality and include one of the following:
    - 1. A detailed engineering report; or
    - 2. An Environmental Protection Agency grant; or
    - 3. A Tennessee basic State grant; or
    - 4. Plans and Specifications approved by the Commissioner.
  - (b) Eligible projects receiving favorable review will be recommended by the Commissioner to the Tennessee Local Development Authority for a program loan. The applicant shall complete all program loan documents required by the Tennessee Local Development Authority. The terms and provisions of the program loan shall be established.
  - (c) The awarding of a loan shall be based upon the recommendation of the Commissioner, the applicant's compliance with this chapter, and the applicant's completion and submission of all documents required by the Tennessee Local Development Authority, subject to the approval of the State Funding Board.

#### (3) Costs.

- (a) Project Costs. Eligible project costs shall include but not be limited to: actual costs of construction of facilities; actual costs of equipment and appurtenances; actual costs of engineering, legal, and fiscal services related to the project; actual costs of purchase or acquisition of real property or interests therein; and actual costs caused by change orders and the costs of meritorious contractor claims provided the costs are within the scope of the project.
- (b) Limitations. Eligible costs are limited to the extent that any one project shall not be awarded a loan which exceeds 25% of the total funds appropriated by the Legislature in that funding year.
- (c) Exclusions. Ineligible costs shall include but not be limited to: recurring annual expenditures for administration, repairs, and operation and maintenance of any waste water treatment system. Costs caused by the municipality's mismanagement or by the vicarious liability for the improper action of others shall not be eligible. These costs must be excluded from the applicant's share of the total construction costs. Costs incurred prior to the approval of the application will not be eligible with the exception of reasonable costs involved in completing the documents for the application.

# (4) Inspections.

- (a) The municipality shall be responsible for continuous and sufficiently frequent inspections by qualified inspectors during the building of the project to ensure that the project complies with approved plans and specifications.
- (b) The Commissioner will conduct interim building inspections to determine compliance with approved plans and specifications and the loan agreement, as appropriate.
- (c) The interim inspection reports may be used for determining the amount of the loan payment.
- (d) The municipality shall notify the Commissioner in writing when the project is complete so that operation and maintenance and final inspections can be conducted by the Commissioner.

# (5) Payments.

(a) Invoices and requests for payment shall be submitted by the municipality to the Commissioner on a monthly basis.

(b) The Commissioner will certify all proper payment requests to the Tennessee Local Development Authority for payment as to eligibility and conformance with the approved plans and specifications.

# 0400-46-04-.04 Project Closeout.

- (1) Upon proper project completion, the Commissioner will certify to the Tennessee Local Development Authority construction completion and project start-up.
- (2) The official project loan files, held at the Department, will be administratively closed out and retained for three (3) years from the close out date.

I certify that this is an accurate and complete copy of proposed rules, lawfully promulgated and adopted by the Commissioner on 12/11/2023, 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 ninety (90) days of the filing of the proposed rule with the Secretary of State.

Date:	December 11, 2023
Signature:	
Name of Officer:	David W. Salyers, P.E.
Title of Officer:	Commissioner
Agency/Board/Commission: Commissioner of the	Department of Environment and Conservation
	2, 0400-42-06, 0400-42-07, 0400-46-02, and 0400-46-04
	mined by the Attorney General and Reporter of the State of nt to the provisions of the Administrative Procedures Act,
	Jonathan Skrmetti Attorney General and Reporter
	Date
Department of State Use Only	
Filed with the Departm	nent of State on:
	Effective on:
	Tre Hargett Secretary of State

# **Regulatory Flexibility Addendum**

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process, all agencies shall conduct a review of whether a proposed rule or rule affects small business.

- (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.
  - No small businesses will be impacted by the repeal of these rules. Each rule was identified through the retrospective rule review process as being out-of-date or redundant, and none are currently applied in practice.
- (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 are no reporting, recordkeeping, or other administrative costs resulting from this rulemaking.
- (3) A statement of the probable effect on impacted small businesses and consumers.
  - No small businesses or consumers will be impacted by this rulemaking.
- (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.
  - This rulemaking is the least burdensome, intrusive, or costly way to achieve the stated purpose.
- (5) A comparison of the proposed rule with any federal or state counterparts.
  - The proposed repeal of Chapter 0400-42-07 is consistent with other states that do not have primacy for surface coal mining. The federal government and some other states may retain out-of-date funding rules, but they are not implemented. Otherwise, these rules do not have clear federal or state counterparts.
- (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.
  - No small businesses will be impacted by this rulemaking.

# **Impact on Local Governments**

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228, "On any rule and regulation proposed to be promulgated, the proposing agency shall state in a simple declarative sentence, without additional comments on the merits or the policy of the rule or regulation, whether the rule or regulation may have a projected financial impact on local governments. The statement shall describe the financial impact in terms of increase in expenditures or decrease in revenues."

This rulemaking will not result in an increase in expenditures or a decrease in revenues for local governments.

# **Additional Information Required by Joint Government Operations Committee**

All agencies, upon filing a rule, must also submit the following pursuant to T.C.A. § 4-5-226(i)(1).

(A) A brief summary of the rule and a description of all relevant changes in previous regulations effectuated by such rule;

The Department of Environment and Conservation is repealing rules that were identified through the retrospective rule review as out-of-date or redundant, as follows:

- Rule 0400-02-07-.01. This provision is not legally required and is outdated.
- Rule 0400-42-02-.07 is redundant with T.C.A. § 59-8-205(a)(1), T.C.A. § 69-3-108(b), and Chapter 0400-40-05 for obtaining an NPDES permit.
- Rule 0400-42-02-.08 applies to a dealer, broker, or other purchaser of coal and there is no need for these
  entities to review a coal miner's permit before making a purchase of coal or to make purchase records
  available for inspection by the Commissioner.
- Chapter 0400-42-06. Blasting is regulated by the Department of Commerce and Insurance, not by the Department of Environment and Conservation, so this chapter is redundant.
- Chapter 0400-42-07. The enabling statute, the Coal Surface Mining Law of 1987, T.C.A. §§ 59-8-401 to
  -421, has been repealed. The repeal of Chapter 0400-42-07 will not affect the ability of industry to operate
  in Tennessee because it is regulated directly by the federal government. Moreover, as currently
  promulgated, Chapter 0400-42-07 would not be sufficient for the state to obtain primacy because it does
  not comply with current federal requirements.
- Chapters 0400-46-02 and 0400-46-04. These were promulgated in support of federal programs that no longer exist and are not entirely consistent with current federal and state funding priorities.
- **(B)** A citation to and brief description of any federal law or regulation or any state law or regulation mandating promulgation of such rule or establishing guidelines relevant thereto;

The Coal Surface Mining Law of 1987, T.C.A. §§ 59-8-401 to -421, has been repealed. Accordingly, Chapter 0400-42-07 has no statutory authorization and is no longer needed. Otherwise, there are no laws mandating the proposed repeal.

**(C)** Identification of persons, organizations, corporations or governmental entities most directly affected by this rule, and whether those persons, organizations, corporations or governmental entities urge adoption or rejection of this rule;

No persons are affected by the repeal of these provisions because they are not currently applied in practice or are redundant to other laws.

(D) Identification of any opinions of the attorney general and reporter or any judicial ruling that directly relates to the rule or the necessity to promulgate the rule;

The Department is not aware of any opinions of the attorney general and reporter or any judicial ruling that directly relates to this rule.

(E) An estimate of the probable increase or decrease in state and local government revenues and expenditures, if any, resulting from the promulgation of this rule, and assumptions and reasoning upon which the estimate is based. An agency shall not state that the fiscal impact is minimal if the fiscal impact is more than two percent (2%) of the agency's annual budget or five hundred thousand dollars (\$500,000), whichever is less;

There is no increase or decrease in state and local government revenues and expenditures resulting from this rulemaking.

**(F)** Identification of the appropriate agency representative or representatives, possessing substantial knowledge and understanding of the rule;

Stephanie Durman Office of General Counsel William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 2<sup>nd</sup> Floor Nashville, Tennessee 37243 Stephanie.Durman@tn.gov

**(G)** Identification of the appropriate agency representative or representatives who will explain the rule at a scheduled meeting of the committees;

Alli Williamson Legislative Liaison Office of General Counsel

**(H)** Office address, telephone number, and email address of the agency representative or representatives who will explain the rule at a scheduled meeting of the committees; and

Office of General Counsel
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 2nd Floor
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- (I) Any additional information relevant to the rule proposed for continuation that the committee requests.
- (1) A description of the action proposed, the purpose of the action, the legal authority for the action and the plan for implementing the action.

The Department of Environment and Conservation is repealing rules that were identified through the retrospective rule review as out-of-date or redundant.

(2) A determination that the action is the least-cost method for achieving the stated purpose.

This rulemaking is the least-cost method for achieving the stated purpose.

(3) A comparison of the cost-benefit relation of the action to nonaction.

This rulemaking enables the Department to eliminate obsolete rules.

(4) A determination that the action represents the most efficient allocation of public and private resources.

This rulemaking is an efficient allocation of public and private resources.

(5) A determination of the effect of the action on competition.

This rulemaking will not impact competition.

(6) A determination of the effect of the action on the cost of living in the geographical area in which the action would occur.

This rulemaking will not impact the cost of living in any geographic area.

(7) A determination of the effect of the action on employment in the geographical area in which the action would occur.

This rulemaking will not impact employment in any geographic area.

(8) The source of revenue to be used for the action.

This rulemaking is being accomplished with existing revenue.

(9)	A conclusion as to the economic impact upon all persons substantially affected by the action, including
	an analysis containing a description as to which persons will bear the costs of the action and which
	persons will benefit directly and indirectly from the action.

This rulemaking will not have an economic impact on any person.