

**RULES
OF
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
WATER RESOURCES DIVISION**

**CHAPTER 0400-42-09
SAND AND GRAVEL**

TABLE OF CONTENTS

0400-42-09-.01	Introduction	0400-42-09-.03	Operation, Backfilling and Grading
0400-42-09-.02	Access Roads	0400-42-09-.04	Revegetation

0400-42-09-.01 INTRODUCTION.

In addition to fulfilling all requirements of T.C.A. §§ 59-8-201 through 59-8-228 and all requirements of Chapters 0400-42-01 through 0400-42-06 the following special provisions contained in this Chapter shall be adhered to all operators of sand and/or gravel mines.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq. **Administrative History:** Original rule filed August 2, 2012; effective October 31, 2012. Rule renumbered from 0400-03-09.

0400-42-09-.02 ACCESS ROADS.

(1) Definition.

“Access road or haulageway” shall mean any road constructed, improved or used by the operator (except public roads) which ends at the pit or mine and which is located within the permitted area.

(2) Planning Construction.

Operators are required to plan such roads in accordance with accepted engineering standards with proper protection of streams by culverts where traversed. No road shall be constructed up a watercourse or drainage channel proper, or so close to its banks that material would spill into the channel during construction, use or maintenance. The location of the proposed haulageway shall be identified on the site by visible markings at the time the reclamation and mining plan is preinspected and prior to commencement of construction.

(3) Abandonment of Access Roads.

If the haulageway is to remain as a permanent road, it shall be left properly surfaced and drained for minimum maintenance by the landowner. If the road will be abandoned, it shall be graded to the approximate contour of the adjacent land and sown in grasses.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq. **Administrative History:** Original rule filed August 2, 2012; effective October 31, 2012. Rule renumbered from 0400-03-09.

0400-42-09-.03 OPERATION, BACKFILLING AND GRADING.

(1) Site Preparation and Mining

(a) Prior to opening a site heretofore undisturbed by mining, all possible preparation measures shall be taken so as to minimize the acreage disturbed and to facilitate reclamation at the conclusion of mining.

(Rule 0400-42-09-.03, continued)

- (b) Mining and handling of spoil shall be planned in advance and conducted so as to minimize offsite effects during mining and to achieve quick and permanent reclamation on each part of the site as soon as mining on that part is concluded.

(2) Regrading.

At the conclusion of mining, the surfaces shall be graded to approximately the original contour, unless quantities of the mineral produced have altered significantly the contour of the disturbed areas. In such situations, the site shall be regraded to rolling topography which will blend in naturally with the surrounding terrain. No water collecting depressions shall be left unless approved impoundments are to be constructed.

(3) Water Impoundments.

The operator may elect to impound water to provide lakes or ponds for wildlife, recreation or water supply purposes, provided such impoundments will not create conditions that will contribute to soft erosion, or stream pollution or jeopardize the health, safety or property of adjacent landowners. Impoundments must be included in the mine and reclamation plan and details concerning the size and location and the construction plans of dams, embankments and spillways must be included. The proposed impoundment must meet safety requirements of appropriate State agencies and must be approved by the Department if the surface area exceeds one acre.

(4) Water Control.

Because pits generally are small and are active intermittently as there is a demand for the product, the operator shall incorporate into the mining program appropriate measures to control erosion and offsite damage from silt by construction of log or rock silt traps. Other measures shall be required as appropriate to abate the problems associated with temporarily inactive sites.

(5) Alternate Reclamation.

The Division is aware of circumstances which might cause termination of mining with substantial quantities of the mineral remaining for probable future production, so the operator is encouraged to reclaim mined areas at the site which are not necessarily due to his operations. Such alternate reclamation must have the approval of the Commissioner in advance and must be where all the mineral has been exhausted with the likelihood of disturbance by future mining extremely remote.

(6) Dredging and other Special Circumstances.

In special circumstances such as those where an operation is conducted in an approved stream bed or impoundment and the product removal medium is pumping or any modification of dredging, special provisions must be justified. The final site use might be a water impoundment for recreational use, or the stream bed might be improved by mining through channel clearing. The operator must provide a logical plan approved by a local or area planning agency.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq. **Administrative History:** Original rule filed August 2, 2012; effective October 31, 2012. Rule renumbered from 0400-03-09.

0400-42-09-.04 REVEGETATION.**(1) Revegetation Plan.**

Each operator shall submit a Revegetation Plan in accordance with T.C.A. § 59-8-209 and Chapter 0400-42-05. Since most of the area mined for sand and gravel will be returned to farmland or pastures no specific planting requirements are established. However, the plan must provide for stabilization of the area, as quickly as possible, after it has been mined in order to prevent erosion and siltation of streams and to return the area to productive use.

(2) Evaluation of Vegetation Survival

(a) 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 after the completion of the first growing season. A revegetation evaluation report shall be prepared and filed by the inspector.

(b) If the regraded area is planted in row crops, the revegetation inspection may be made and the report filed as soon as the crop germination becomes evident. The Commissioner shall then cause the remainder of the bond to be released.

(3) Standards for Legumes and/or Perennial Grasses.

Standards for legumes and/or perennial grasses shall require at least an eighty percent (80%) ground cover. Bare areas shall not exceed 2,500 square feet (50 feet by 50 feet) in size, nor total more than twenty percent (20%) of the area seeded unless such areas are too stony to support vegetation.

(4) Performance Bond Release.

After the revegetative 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.

Authority: T.C.A. §§ 59-8-201 et seq. and 4-5-201 et seq. **Administrative History:** Original rule filed August 2, 2012; effective October 31, 2012. Rule renumbered from 0400-03-09.