

Foreword

The attached Standard Operating Procedure is the internal policy of the Land Quality Division (LQD) of the Wyoming Department of Environmental Quality (WDEQ) covering Sediment Control Release (SCR) and its relationship to Area and/or Incremental Bond release on permanently reclaimed lands. LQD staff shall not significantly deviate from this policy without the prior approval of the District Supervisor and the Administrator

Signed this _____ day of _____, 2005.

Richard A. Chancellor
Administrator, Land Quality Division

COAL STANDARD OPERATING PROCEDURE NO. 7.4

Land Quality Division

SUBJECT: Sediment Control Release for Permanently Reclaimed Lands and Its Relationship to Area and Incremental Bond Release Procedures

**Coal
Standard Operating Procedure (SOP) No. 7.4**

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I. Introduction

This document provides guidance on the procedures for obtaining Sediment Control Release (SCR). SCR is not defined in the Coal Rules & Regulation (R&R) or in the Wyoming Environmental Quality Act (WEQA). For purposes of this SOP, *Sediment Control Release means a formal, written statement by the LQD that a unit of permanently reclaimed lands exhibits sufficient surficial stability and sufficient development of its postmining vegetation cover that surface drainage from that reclaimed unit does not need to pass through a sediment pond (or an approved Alternative Sediment Control Measure structure) as required by Coal R&R Chapter 4, Section 2.(f)(i).* The approved SCR will serve to support the provisions of LQD Coal R&R Chapter 15, Section 5(a)(ii)(B)(I) regarding bond release requirements.

The SCR process applies only to Category 5 lands, i.e. those lands affected after May 3, 1978.

II. Coal R&R and Portions of the WEQA Relating to Sediment Control Release

A. Under provisions of LQD Coal R&R Chapter 4, Section 2(f)(vi):

“Sediment ponds shall be maintained until removal is authorized by the Division and the affected lands have been stabilized and initial vegetation established in accordance with the approved reclamation plan and the requirements of this Chapter. In no case must sediment ponds treating reclaimed lands be removed sooner than two years after the last augmented seeding”.

B. Under provisions of LQD Coal R&R Chapter 15, Section 5(a)(ii)(B)(I):

“No part of the remaining bond or deposit shall be released... So long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of premining concentrations of receiving waters.”

C. Supporting WEQA Regulatory Information

1. Wyoming Statute (W.S.) § 35-11-402(a)(vi) authorizes the establishment of standards that control substantial erosion and sedimentation.
2. W.S. §§ 35-11-406(b)(xv) and (xviii) discuss permit requirements regarding erosion control, siltation and minimizing impacts to the hydrologic balance.
3. W.S. § 35-11-415(b)(viii) outlines duties of the operator regarding the pollution of surface waters.

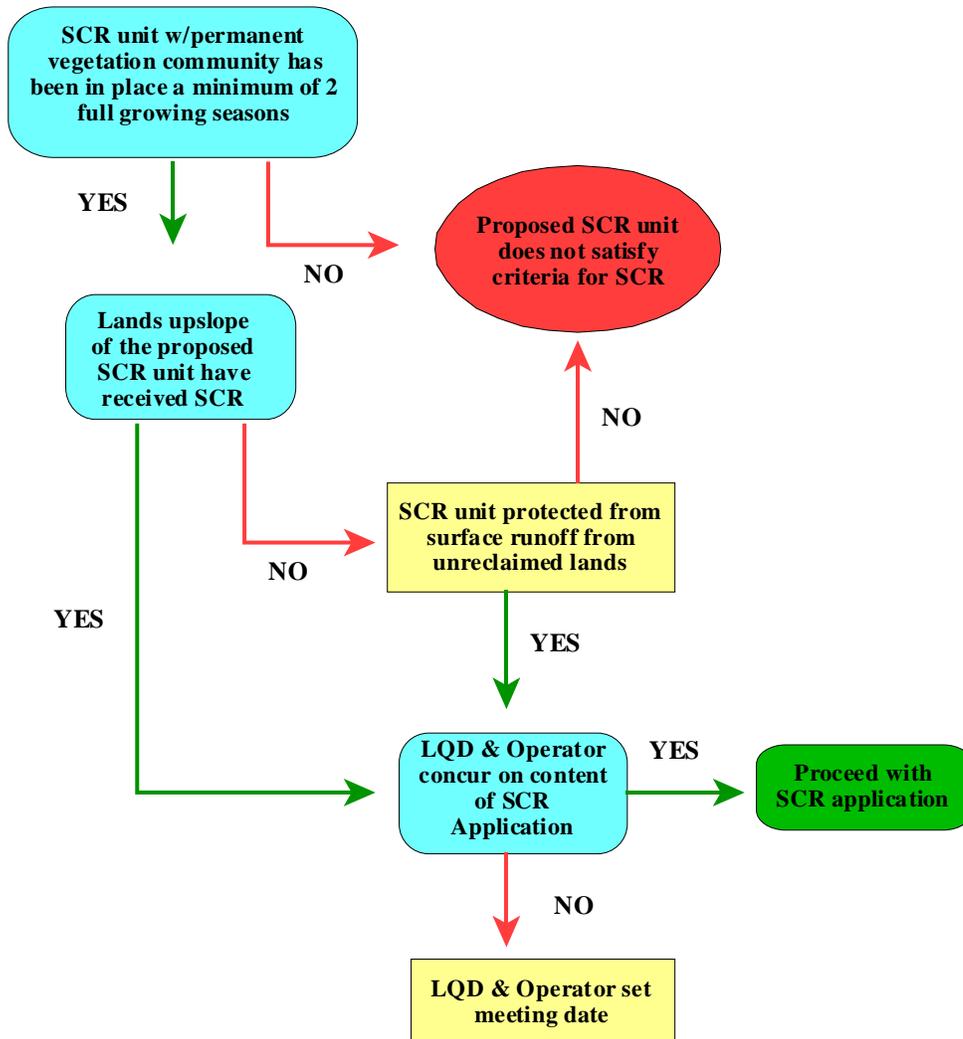
III. Relationship of Sediment Control Release to Area and Incremental Bond Release

- A. The LQD encourages each coal permittee to move designated permanent reclamation units sequentially through the process to secure formal, written approval of Area Bond release, Phase 1 Partial Incremental Bond Release, Sediment Control Release, Phase 2 Partial Incremental Bond Release, and Phase 3 Full Incremental Bond Release. LQD Guideline No. 20, particularly Attachments 5-1, 5-2 and 5-3, outlines possible sequential release progressions.

The following information documents when SCR is required in relation to the different phases of bond release:

1. Formal Area Bond release should occur prior to a SCR request (LQD Instruction Memorandum No. 41 and the Coal Bond Release Guideline No. 20 outline Area Bond release procedures).
2. Formal Phase 1 Partial Incremental Bond Release should occur prior to a SCR request. Phase 1 Partial Incremental Bond Release is defined according to the provisions of Coal R&R Chapter 15, Section 5(a)(i), which states that sixty percent of the Incremental Bond may be released "...when the operator completes the backfilling, regrading, topsoil replacement, recontouring and drainage control of a bonded area in accordance with his approved reclamation plan...for the applicable permit area."
3. SCR must occur prior to or coincidently with Phase 2 Partial Incremental Bond Release. Phase 2 Partial Incremental Bond Release is defined according to the provisions of Coal R&R Chapter 15, Section 5(a)(ii) and allows for release of more than sixty percent of the Incremental Bond "...after vegetation whose species composition is commensurate with that of seed mix(es) of the approved reclamation plan and the species composition required by Coal R&R Chapter 4, Section 2(d)(x)...."
4. The DEQ Director has stated that if the coal permittee does not request Phase 2 Partial Incremental Bond Release, then a SCR request must be submitted a *minimum* of two (2) years prior to Phase 3 Full Incremental Bond Release. Phase 3 Full Incremental Bond Release occurs when there is no dollar amount for the Area Bond or Incremental Bond associated with a specific unit of reclaimed land.

B. Flowchart of Sediment Control Release and Bond Release Combinations



IV. Information Requested to be Submitted for SCR

The LQD strongly recommends that the coal permittee and LQD staff achieve mutual (written) agreement on the content and format of each SCR application. At a minimum, each SCR request should include the following information and shall be submitted in duplicate to the District Office.

A. Cover Letter

This cover letter must outline the reasons for the request and briefly summarize the content of the SCR submittal package.

B. Supporting Information

1. Map(s)

The operator should present the following as a topographic map, preferably a map from the approved permit; the most recent Annual Report, or the most recent Reclamation History. The scale must be the same as the approved postmining topography map. The LQD strongly encourages the submission of digital/electronic spatial data such as Geographical Information System (GIS) format maps. The appropriate format of such data should be identified and agreed upon by the permit coordinator and operator prior to submission.

- a. Show the location and areal extent of each SCR unit and identify each unit is using a unique identification nomenclature. If the identification nomenclature of the SCR unit differs from that used for reclaimed units in the Annual Report, the SCR application shall provide a cross-reference for the Annual Report. The date of permanent seeding for each SCR unit must also be included.
- b. Identify the approved sediment control structure(s) which service each SCR unit and delineate the current (postmining) drainage basin for each sediment control structure.
- c. Identify the respective areal extent of native land, permanently reclaimed land, and affected/unreclaimed land within each SCR unit.
- d. Identify the location of the native ground unit(s) chosen as the SCR reference unit(s).

2. Demonstration Of Adequate Surficial Stability

The SCR application must show that each SCR unit has attained the provisions of Coal R&R Chapter 15, Section 5(a)(ii)(B)(I). The LQD and permittee must agree on the demonstration method prior to submitting a SCR application

a. Revised Universal Soil Loss Equation (RUSLE)

The LQD strongly encourages use of the most recent version of the RUSLE erosion prediction model to demonstrate that each SCR unit is sufficiently stable and that it is not contributing additional sediment to runoff and streamflow outside the affected land.

The SCR request must include a tabulation using the actual R, K, LS, C and P factors for the reclaimed unit(s). A comparison between premine and postmine values must be included in the SCR application. The permittee must derive each factor using the standard methods specified for RUSLE in Renard et al., (1997) and expanded upon in Toy et. al., (1998).

The SCR request must fully explain how each factor was determined for the SCR unit and native land. The calculations used to determine each factor must be presented in the SCR application. The permittee must reach agreement with the LQD District Office concerning the number and location of field sampling sites for appropriate factors. The LQD encourages clear agreement on all factors prior to submittal of the SCR request.

The SCR request must also present and discuss the RUSLE output values for the SCR unit in comparison to native or premining values.

b. Acceptable Alternative Demonstrations of Surficial Stability

LQD will work with operators who wish to use other methods to demonstrate the surficial stability of an SCR unit. However, any other method must satisfy the same performance standards of Coal R&R Chapter 15, Section 5(a)(ii)(B)(I). Other methods meeting the performance standards for SCR may include actual field measurements and SEDCAD modeling.

3. Sediment Control Structure Removal

The SCR application must tabulate the approved sediment control structures, including Alternative Sediment Control Measures, which will be removed after the SCR application is approved. A brief narrative should also be included which demonstrates why these structures are no longer needed.

V. Literature Cited

Renard, K.G., Foster, G.R., Weesies, G.A., McCool, D.K., and Yoder, D.C. coordinators. 1997. Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE). U.S. Department of Agriculture, Agricultural Handbook 703, 404 pp.

Toy, T.J., Foster, G.R., and Galetovic, J.R. editors. 1998. Guidelines for the use of Revised Universal Soil Loss Equation (RUSLE) Version 1.06 on Mined Lands, Construction Sites, and Reclaimed Lands. Office of Surface Mining - Western Regional Coordinating Center, Denver, CO.