TITLE: Removal of Sediment Control Structures	
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APPROVED BY: Harold Ward – Acting Director	DATE APPROVED: 10/16/2014

16-Oct, 2014

PURPOSE

The purpose of this guidance is to identify the procedure for removal of sediment control structures upon a drainage area meeting the definition of "reclamation area" per 40CFR434 for post mining areas (backfilling and grading complete, revegetation commenced) while ensuring preservation of the hydrologic balance and meeting applicable regulations pertaining to abandonment procedures of sediment control structures.

DISCUSSION

According to 38CSR2-14-7(d), "Where any discharge from the permit requires treatment during the mining operation in order to meet applicable effluent limitations, water monitoring of such discharges shall continue following grading approval. If it is established on the basis of such monitoring that the hydrologic balance is being preserved without treatment, the treatment facilities can be removed. A one (1) year history of meeting applicable effluent limitations shall be adequate to establish that the hydrologic balance is being preserved. "

Additionally, 38CSR2-5.4(h) *Abandonment Procedures,* states "abandonment and/or removal of sediment control or other water retention structures shall not occur within 2 years after the last augmented seeding nor less than 2 years before final bond release."

"Adequate treatment" is defined in Chapter 22, Article 3, Section 3 as "treatment of water by physical, chemical or other approved methods in a manner so that the treated water does not violate the effluent limitations or cause a violation of the water quality standards…"

38CSR2-2 further defines chemical treatment and sediment control structures as follows:

> *Chemical Treatment means the treatment of water from a surface coal mining operation using chemical reagents such as but not limited to sodium hydroxide, calcium carbonate, or anhydrous ammonia for the purpose of meeting applicable state and federal effluent limitations. Chemical treatment does not include passive treatment systems such as but not limited to limestone drains, wetlands, alkaline addition, application of fly ash, agricultural lime, or injection of fly ash, limestone, or other minerals into underground coal operations.*
>
> *Sediment Control or Other Water Retention Structure, Sediment Control or Other Water Retention System, or Sediment Pond means an impoundment designed, constructed, and maintained in accordance with this rule for the purpose of removing solids from water in order to meet applicable water quality standards or effluent limitations before the water is discharged into the receiving stream. Examples include wildlife ponds, settling basins, and all ponds and facilities or structures used for water treatment.*

Sediment control structures will be considered treatment facilities, requiring one year of monitoring to ensure the hydrologic balance, for the purpose of this policy. Chemical treatment can be removed at any point when no longer necessary. Diversion ditches/ conveyances used strictly for conveyance of surface runoff only are not considered sediment control structures for the purpose of this policy and therefore, not

considered treatment. Diversions/conveyances, even if not designed for sediment control, should not be removed until appropriate raw water is sampled at the entrance to the sediment control structure(s). Therefore, the procedures set forth in the following paragraphs shall be followed to determine data requirements to ensure preservation of the hydrologic balance prior to removal of a sediment control structure:

PROCEDURE

1. Permittee shall collect and submit the following data required to ensure preservation of the hydrologic balance to the inspector for review. ***Raw water shall be analyzed for all parameters on the approved NPDES permit.***

   A. **Outlets with sediment control structures** – Provide one (1) year of raw water data, sampled prior to the sediment control structure, and submitted no sooner than two (2) years after the last augmented seeding. This raw water data is necessary to request removal of the sediment control structure or grant an MR-12 to allow a structure to remain in place after Phase III bond release. Provide corresponding discharge data for the raw water sampling.

   B. **On-bench outlets (precipitation-induced) are associated with sediment control structures designed to minimize solids. Therefore, the one (1) year raw water requirements apply to on-bench outlets as well.** Provide one (1) year of raw water data, sampled when flow exists and document other sample dates as "no flow"; submit effluent data as confirmation of "no flow" conditions and inspector confirmation is required. If outlet does not flow, provide one (1) year of documentation demonstrating that no influent (raw water) flow occurred with confirmation from the inspector. **Samples of pooled raw water are not necessary.**

2. Assuming all raw water and effluent data meets effluent limitations (monthly average and daily maximum) and applicable water quality criterion for report only parameters, the required time frame of a minimum of two (2) years after the last augmented seeding has been completed, and the structure can be removed per the post-mining SWROA plan, permittee shall submit a "Request for Structure Removal" form to inspector for approval. The approved form will be submitted by the inspector with the subsequent MR-6 inspection form.

3. Permittee shall commence structure removal as soon as possible after approval from Environmental Inspector Supervisor is received.

4. Permittee shall notify inspector when removal is complete so inspector can document on MR-6 inspection form.

5. Once the sediment structure is removed, the permittee shall request deletion of the outlet on the associated NPDES permit through a modification or reissuance application.

MUST NOTE:

i. For wet seals, if sediment control structure is removed, then outlet must be relocated to the wet seal. This outlet and its associated monitoring requirements will remain until Phase III bond release.

ii. If multiple sources of flow exist into the structure(s), then individual inflow sources must be collected at the entrance of the sediment control structure. All observed sources of flow, i.e. valley fill toes, deep mine discharge seals, must be sampled individually at the point of flow origin, even if they have a common outlet. The sampling frequency is the same as set forth in the current NPDES permit and is parameter-specific. Therefore, if semi-monthly sampling is required at the associated outlet for a particular parameter, then the raw water sampling frequency is semi-monthly. If the outlet has a reduced monitoring frequency of quarterly, then the sampling frequency for raw water is quarterly.

MR-13R

REQUEST FOR REMOVAL OF SEDIMENT CONTROL STRUCTURE

Permittee Name:_____
Article 3/4 Permit #:_____
NPDES Permit #:_____
Outlet:_____
Sediment Control Structure Name:_____
_____

I, hereby certify that, the area controlled by the referenced sediment control structure(s) meets the following:

- ☐ **One-year raw water data attached and meets monthly average and daily maximum effluent limits and applicable water quality criterion for all report only parameters.**
- ☐ **No exceedances of pH and Settleable Solids have occurred on Discharge Monitoring Reports nor in the raw water samples.**
- ☐ **Last augmented seeding occurred > 2 years ago. Date of last augmented seeding:** _____
- ☐ **Reclamation has been conducted in accordance with the approved reclamation plan and grading meets approved grading profiles.**
- ☐ **The post-mining SWROA plan allows for removal of this structure. If not, then post-mining SWROA plan must be revised or the structure cannot be removed.**

_____
Company Officer

_____
Date

_____ _____
Environmental Inspector **Date Approved**

_____ _____
Environmental Inspector Supervisor **Date Approved**

Comments: