Removal of Sediment Control Structures

PURPOSE

 To provide a procedure for removal of sediment control structures upon a drainage area meeting the definition of "reclamation area" per 40CFR434 while ensuring preservation of the hydrologic balance and meeting applicable regulations pertaining to abandonment procedures.

DEFINITION – "RECLAMATION AREA"

 Per 40CFR434 for "Reclamation Areas" include drainage areas which are backfilled, graded and revegetation commenced.

ABANDONMENT PROCEDURES

 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."

SUBSEQUENTLY...

- 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. "
- PLEASE NOTE: This section of 38CSR2 is NOT associated with bond release requirements of Section 12, but rather "Performance Standards", Section 14.

THEREFORE ...

 To remove a structure, one year of raw water data must be collected after the drainage area meets the definition of "reclamation area" and cannot be submitted to request structure abandonment until at least 2 years after the last augmented seeding.

DEFINITIONS....

- Treatment, for the purposes of this policy, includes any chemical treatment as well as sediment control structures.
- Diversions and conveyances, used strictly for conveyance of surface runoff (not sediment control) are not considered sediment control structures and therefore not considered treatment.
- However, these diversions and conveyances SHALL NOT be removed until appropriate raw water sampling is complete at the entrance of the sediment control structure into which these flow.

RAW WATER DATA NEEDED TO ENSURE PRESERVATION OF THE HYDROLOGIC BALANCE

 ALL OUTLETS - After the drainage area meets the definition of "reclamation area" per 40CFR434 for post mining areas (backfilling and grading complete, revegetation commenced), provide one (1) year of raw water data, sampled prior to the sediment control structure. Provide corresponding discharge data for the raw water sampling.

WHAT IF THE OUTLET DOES NOT FLOW?

ON-BENCH OUTLETS (precipitation-induced) -

- After the drainage area meets the definition of "reclamation area", provide one (1) year of raw water data, sampled when flow exists and document other sample dates as "no flow".
- If outlet does not flow at all, provide one (1) year of documentation demonstrating that no influent (raw water) flow occurred with confirmation from the inspector.
- Submit effluent data as confirmation of "no flow" conditions and inspector confirmation is required.
- Samples of pooled raw water are not necessary.

WHEN TO SUBMIT DATA...

- no sooner than two (2) years after the last augmented seeding, as per the Abandonment Procedures in 38CSR2.
- This raw water data is necessary to request removal of a sediment control structure or grant an MR-12 to allow a structure to remain in place after Phase III bond release.

WHERE TO SUBMIT DATA

 Permittee shall submit a "Request for Structure Removal" MR-13R form to inspector for approval, assuming the following requirements have been met:

1.Raw water and effluent data meets effluent limitations (monthly average and daily maximum) and any applicable water quality criterion for remaining report only parameters.

2. The required time frame of a minimum of two (2) years after the last augmented seeding has been completed.

3. The structure can be removed per the post-mining SWROA plan.

<u>MR-13R</u> 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 postmining SWROA plan must be revised or the structure cannot be removed.

Company Officer

Date

Environmental Inspector

Date Approved

Environmental Inspector Supervisor

Comments:

Date Approved

4 Series 12 of I&E Handbook

MR-13R Form

WHERE WILL INSPECTOR DOCUMENT

• The approved **MR-13R** "Request for Removal of Sediment Control Structure" form will be submitted by the inspector with the subsequent MR-6 inspection form.

NEXT STEPS

- Permittee shall commence structure removal as soon as possible after approval.
- Permittee shall notify inspector when removal is complete.
- Inspector shall document structure was removed on subsequent MR-6 form.

LASTLY...

- Once sediment structure(s) is removed, the permittee shall request deletion of the outlet on the associated NPDES permit through a permit modification or reissuance application.
- In the meantime, this outlet should be reported as "no flow" on DMRs. Do not revert to "not constructed".

ITEMS OF NOTE:

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

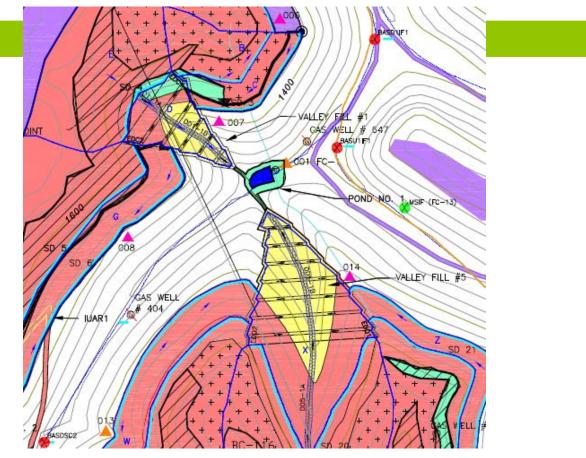
RAW WATER NOTES:

- Must contain analyses for any report only parameters remaining on the permit with the exception of TDS, Conductivity and Sulfates.
- If multiple sources of flow exist into the treatment system/structure(s), then individual inflow sources must be collected at the entrance of the sediment control structure. All valley fills (toe) and deep mine discharges (seal) must be sampled individually at the point of flow origin, even if they have a common outlet.

RAW WATER NOTES:

- 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.
- If outlets do not flow, pooled samples are not necessary but can be used to support the case to remove the structure.
- If during a sampling event, flow is entering the structure, but the structure is not discharging, the raw water sample should still be taken.

EXAMPLE OF MULTIPLE FILLS TO ONE POND



RECOMMENDED PROCEDURE

- Once definition of "reclamation area" is met, permittee requests Mn limits be removed (unless within 5 mile zone of a public water supply) via minor modification for Mn postmining limits only.
- Permittee works with NPDES to remove any other report only parameters, if possible.
- Permittee accumulates effluent and raw water data per the "Post Mining Limits under 47CSR 30" policy.
- Permittee submits modification to request post-mining limits.

RECOMMENDED PROCEDURE

- Permittee collects year of raw water data for remaining parameters to ensure preservation of the hydrologic balance.
- Permittee submits data along with MR-13R "Request for Sediment Structure Removal". Inspector documents on MR-6.
- Upon approval, permittee commences structure removal.
- Upon completion of removal, inspector documents on MR-6 and permittee proceeds with request to delete the associated outlet.

PLEASE NOTE: Securing post-mining limits before accumulating raw water data for structure removal is recommended, but not required per our policy.

Where does Phase Release come into play?

- It is recommended, that Phase I release be applied for after post-mining limitations have been received for all parameters on all outlets of a particular Article 3 permit.
- Although this is not required, it is recommended ,to ensure that permits can progress as quickly as possible through all phases of release.
- After all structures have been removed or have an MR-12 and all vegetative requirements are met, then Phase II release can be applied for.