

December 12, 1994

TO: Daron Haddock, Permit Supervisor

FROM: Sharon Falvey, Senior Reclamation Hydrologist *Skf*

RE: Permit Renewal 1994, Genwal Coal Company, Wellington Preparation Plant,  
ACT/007/012, Working File, Carbon County, Utah

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**SYNOPSIS**

The objective of this memo is to determine whether the Operator's plan requires midterm stipulations. Because the submittal to address Midterm Deficiencies was recently submitted, November 10, 1994, a full review of that submittal cannot be conducted. This memo identifies major easily noted problems brought about through concern of on-site inspection.

Dryer Sedimentation Pond as-built's have not demonstrated that the pond meets the requirements of the **R645 Regulations**.

**Proposal:**

The operator has now proposed that four ponds exist rather than the previously identified six ponds (five and one proposed). Currently the operator is considering the Dryer Sediment pond to contain the 10 year - 24 hour precipitation event from Watershed #4 and pass the Peak 25 year - 6 hour storm event through a drop inlet spillway structure. The operator contends the sediment storage (below the decant level) is nearly 50 times the computed 3 year sediment volume. The operator has changed the original design of the spillway, enlarged the pond, and has proposed a new emergency spillway location.

The following lists problems with the submitted information:

1. In order for the drainage to reach the pond the operator must retain the Auxiliary pond (The road pond could be filled and graded to promote drainage). Existing detention time analysis and pond routing include the auxiliary and road ponds. The operator presents routed peak in-flows, which would need to be recalculated for the pond design using the dryer pond only. If both the auxiliary and road ponds are removed water would pond behind the higher elevation of the railroad spur before entering the pond. Without the existing ponds the design of the pond would not prevent short circuiting therefore the inlet would need to be relocated. Regrading is also necessary

during reclamation phase for the previously stated reasons. The information presented must be clear as to the operational configuration, the operator would have to regrade the site and move the inlet to provide a prudent engineering design required by R645-301-R645-301-512.240 and meet R645-301-742.221.35. Prior to retaining the pond for the reclamation phase the elevation in the rail road spur area must be graded to allow drainage to reach the pond in a manner designed to prevent short circuiting.

2. The north west emergency exit functions as a inlet until the water reaches a 95.1 foot (map) elevation. The use of an inlet as an outlet is not considered a prudent engineering design especially when this pond is a newly constructed pond. The operator would better meet the objectives of the regulations showing the pond can retain the larger of the 100 year - 6 hour and 10 year - 24 hour event. With the intent of meeting the design requirements of the R645-301-745.225.2, demonstrating a single discharge spillway is adequate.
3. It is not clear what the function of the concrete box inlet to the west end of the pond is. The elevation of the inlet (inflow and outflow elevations) should be identified to determine whether water would back out of this structure prior to flowing out of the emergency spillway exit. This structure should be designed for the area draining to it and meet the requirements of R645-301-742.300.
4. Relative elevations should be determined and included on maps 712E and 712D to determine whether the ponds properly function (the inlets and outlets properly drain in the manner which they are designed) to meet the requirements of R645-301-742.300 and R645-301-742.200.
5. The operator commits to remove the decant structure for reclamation of the pond. However, the operator must remove all structures except those which the operator has indicated can be retained to meet post mining land use and the requirements of R645-742.332 and 742.313.