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**INTEROFFICE MEMORANDUM**

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**TO:** ZACH TRUJILLO  
**FROM:** ROB ZUBER

*Phil D. ZL*

**SUBJECT:** COLOWYO TR-126, AS-BUILTS FOR SECTION 26 POND AND SIDEHILL POND  
**DATE:** 10/5/2018

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Zach –

I looked at the TR-126 submittal to determine if the two ponds (Section 26 and Sidehill) have been constructed in accordance with the approved design in Exhibit 7, Item 23 (Volume 18) of the Colowyo Mine PAP. I found no problems; per the as-built drawings, the ponds have been built in accordance with the design, as detailed below.

**Section 26 Pond**

Primary spillway specifications: As-built specifications are the same as the design in the PAP.

Emergency spillway dimensions: As-built dimensions are the same as the design in the PAP.

Key elevations: As-built elevations are the same as the elevations in the PAP design.

Pond dimensions: As-built dimensions (width and length) are nearly identical to the dimensions in the PAP design.

Comparison of area/capacity tables: The as-built table has more detail than the table in the PAP design, but capacities for given elevations are all the same or nearly the same. For example, at elevation 6980, the design capacity is 1.08 acre-feet, and for this elevation on the as-built figure the capacity is 1.09 acre-feet.

**Sidehill Pond**

Primary spillway specifications: As-built specifications are the same as the design in the PAP.

Emergency spillway dimensions: As-built dimensions are nearly the same as the design in the PAP.

Key elevations: As-built elevations are nearly the same as the elevations in the PAP design.

Pond dimensions: As-built dimensions (width and length) are nearly identical to the dimensions in the PAP design.

Comparison of area/capacity tables: The as-built table has more detail than the table in the PAP design, but capacities for given elevations are all the same or nearly the same. For example, at elevation 7168, the design capacity is 4.6 acre-feet, and for this elevation on the as-built figure the capacity is also 4.6 acre-feet.

This “paper exercise” is, of course, no substitute for a field check. I recommend that you check the ponds, especially the following:

- Do the spillways meet the specs in terms of shape and dimensions? For example, are the holes in the riser pipe the same size as the spec? (Three-inch diameter.)
- Check all important elevations, including the elevations of pond bottoms, dam heights, emergency spillway inverts, and riser holes. I recommend the use of a laser tool such as a Rangefinder. This is more accurate than standard GPS tools, I believe, and more convenient than more sophisticated GPS tools.
- Check the horizontal dimensions of the ponds, namely average width and average length. Again, a laser tool is good for that.

I did not look at the compaction and dry density test results. You are much more qualified than I am to perform that part of the review.

I hope this helps.

Rob