

## Interoffice Memorandum

To: Clayton Wein  
From: Rob Zuber *RZ*  
Date: October 2, 2019

Subject: Deserado TR72 SEDCAD and water quality compliance review, Second Adequacy

I have reviewed the PAR response from Blue Mountain Energy (received September 18, 2019). I have the following points for our second adequacy letter, with numbers matching your adequacy items in the PAR.

1. NA
2. No additional response required.
3. The Division somewhat disagrees with the statement by Blue Mountain Energy (BME) regarding the purpose of riser pipes. Another reason to use riser pipes is to limit the amount of sediment that is transported into the outlet (aka spillway) and downstream to the receiving water. We suggest that BME reconsider the design of the primary spillway. Alternatively, please provide supporting information to show that your outlet design will not become plugged.
4. No additional response required.
5. No additional response required.
6. No additional response required.
7. No additional response required.
8. No additional response required.
9. No additional response required.
10. NA – related to ZTT review.
11. NA – related to ZTT review.

An improved submittal (after the preliminary adequacy review) allowed for a more detailed review of the surface water control plan, and the following additional adequacy items were discovered.

12. Several channels on Map 162 take nearly 180-degree turns, therefore baffles or other energy dissipation structures may be needed at these locations. Blue Mountain Energy should add a discussion of these structures (and possibly figures) to the design.
13. It appears that there are errors in the Structure Routing Details tables in the SEDCAD output (one table for each return event). Please address the following and check all others for accuracy.
  - a. There is no Structure #2 in the tables.
  - b. For Structure #3, the vertical and horizontal distances appear to be much smaller than indicated on Map 162.

- c. For structure #4, the vertical distance in the table is 40 feet, but the map indicates that it should be between 20 and 25 feet.
- 14. In the introductory text for Illustration 59, please provide more details regarding the SEDCAD model inputs. For example, what is the source for the particle size distribution? If this is the same as distributions used for other refuse piles at Deserado, can you explain the original source?
- 15. On page 4 of Illustration 60, the 100-year flow into the pond does not match the value in the SEDCAD output (page 117). Please revise or explain.