

Western Project Management

May 19, 2015

Spadfora Water Storage Facility - Gunnison Energy, LLC
Facility ID# 440177 – **WPM PFCC Estimate Number 1105-121**

Estimate Clarifications

The following addresses the discrepancies noted between the revised WPM estimate and the Weston Solutions quantity takeoffs. Each item is listed in the order shown in the email received from Alex Fischer on May 19, 2015 7:00 am MDT.

Fluids – Estimated water volume

The original fluids takeoff was incorrectly conveyed in gallons rather than barrels. This just consequently aligned closer with the 548,213 gallons submitted by Weston.

To confirm the quantity we re-calculated the pond volumes by importing the pdf construction drawings in to AutoCad. The volumes calculated from the pdf's totaled 636,500 bbls for all three ponds. We did not include water volume in the underdrain system as it added a minimal amount of volume to the calculation. (2,695.38 lineal feet of 6" collection lines x 1.47 gallons per lineal foot x 90% capacity = 3,566 gallons (85 bbls))

Refer to sheet C101 Construction Note "A" of the construction documents which states that the total volume of all three ponds is 643,264 bbls. We added the individual volumes shown in this note which totaled 643,262 bbls which was used for the basis of our estimate.

643,262 bbls = 27,017,004 gallons. We assumed that the ponds would be 90% full at the time of reclamation which yields 24,315,304 gallons to remove. This is the correct amount for the basis of the estimate.

Liner Disposal

The liner takeoff was also captured from the imported pdf to AutoCad. The total for each of five layers of liner, Geonet and subdrain was calculated as 1,064,250 SF.

Refer to Construction Drawings Sheet C117 and see the Table for Approximate Quantities (Square Feet) for the liners. The total shown on this table equals 1,464,147 SF total. This amount is 399,847 SF more than the WPM estimate and 368,946 SF more than Weston's takeoff. This large difference is not defined or supported on the Construction Drawings. Due to this fact, WPM opted to keep our calculated quantity of 1.064 MM SF as the basis for the estimate.

Regarding the difference between the WPM and Weston quantities, the 30,951 SF represents a minimal cost ($30,951 \text{ SF} \times .25/\text{SF} = \$7,737.75$) that would be added to this estimate. The magnitude of potential added cost to this estimate is negligible and can be covered with the contingency carried.

Backfill

The dirt quantities were captured from importing the pdf into AutoCad. We ran the quantity takeoff twice, added excavated material for the collection lines and gravel as shown on the drawings. This only yielded an additional 32,000 CY of material. Some minor variance can be attributed to WPM could not justify any more yardage for unclassified dirt/backfill for this estimate.

It is likely that Weston's takeoff includes means and methods not consistent with WPM's plan for moving and placing the backfill. WPM assumes "cut to fill" in which dirt is only moved once from the cut to the filled location. Some contractors will cut, stockpile and then move to fill location. This approach increases the total amount of dirt moved (twice moved dirt) and may be a cause for the difference in quantities noted in this estimate.