



June 23, 2020

Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801
Denver, CO 80203

Attn: Mr. Alex Fischer, P.G.
Environmental Supervisor – Western Colorado

Re: **WPM EPCC Estimate Number – 1906-149**
Review of available documentation and construction drawings as prepared by TRC
Environmental, Elevation Midstream LLC and their consultants.

Facility ID: **#455012** - Elevation Midstream LLC - Badger Central Gathering
Facility – Weld County Colorado

Dear Mr. Fischer,

Western Project Management (WPM) is pleased to provide the following review narrative and attached Estimate of Probable Closure Costs (EPCC) for the above referenced water facility. Per your request, we have reviewed the available project documentation for this site.

The Operator's estimated cost for site reclamation, as proposed, has an total of \$1,578,000. The WPM total cost estimate for the scope of work is **\$2,003,703** for the full closure and reclamation of the site. Noted differences between and clarifications of the WPM estimate and the Operator's submitted basis are as follows:

1. The demolition and reclamation of the electric substation as shown on the project drawings (Sheets U3 and U4) is not included within the scope of this estimate.
2. Any building or improvement shown on the project drawings as "future" is not included within the scope of this estimate.
3. It is unclear whether Elevation included costs for site concrete and drainage improvements (RCP pipe etc) were included in the Operator's estimate for closure. WPM addressed and has included these costs.
4. It does not appear that the wastewater septic field and associated piping and tank removal are included in Elevation's estimate. WPM has included costs for this work.
5. Trucking costs for tanks, recycled materials and waste are not specifically noted in Elevation's estimate. WPM has included costs for all trucking.
6. The grading scope is addressed in Elevation's closure plan but the costs stated in their estimate are far short of the required level of effort for the work.
7. Costs for site fencing, landscaping and irrigation do not appear to be included in Elevation's estimate. WPM has included costs for this work.
8. Elevation has addressed fluids disposal in their closure plan but costs for pumping, trucking and disposal are not included in their estimate. WPM has included costs for this work.

9. No costs for monitoring well closure or abandonment are included in this estimate. WPM has included costs for this work.

The general basis for this estimate includes the following assumptions:

1. Takeoff quantities, labor rates, manhours, and markups are all detailed in the attached estimate tabs.
2. Costs for ongoing post reclamation management and observation are not included in this estimate.
3. Costs for ongoing post-closure water monitoring is not included in this estimate.
4. The proposed operating life of the referenced facility is anticipated to be thirty years therefore, we cannot assume that any waste disposal or municipal water treatment plant will be available at their current locations when closure is initiated.
5. Due to the fact that it is difficult to accurately plan for escalation for this reclamation project over the next twenty years, WPM has not included escalation or an inflation factor within this estimate.
6. WPM suggests that this estimate be updated every five years to capture inflation or escalation impacts to probable costs.
7. The scope of this estimate includes the decommissioning and demolition of all existing equipment shown on the project drawings and site photos.
8. The planned site grading and restoration work includes the removal of miscellaneous piping, fence, and erosion control measures as well as re-seeding of disturbed areas.

The following includes summary descriptions of the estimate by section:

1. Mobilization and demobilization
 - a. For the purposes of this estimate, WPM assumed using the services of a local contractor will be used and have included rates and costs for mobilization and demobilization consistent with that market.
 - b. WPM anticipated that it will take one day to accomplish the mobilization efforts.
 - c. WPM has included costs for contractor demobilization as well.
2. Soils sampling
 - b. WPM has included additional cost for soils sampling on site for an estimated twelve (12) locations on site (hand auger).
 - c. Surface to 2 feet below will be sampled.
 - d. The focus will be near where load in/load out activities have taken place and at the tank farm.
 - e. The shallow soils testing will occur prior to the reclamation efforts initiating.
 - f. Any visibly stained or impacted soils will be noted for removal.
 - g. All sampling will occur per the Table 910-1 sampling requirements.
3. Stored / surface water sampling
 - a. WPM assumed that all existing stored water locations will be sampled and tested for evaluation and are a part of this estimate.

- b. Forty five (45) total samples will be collected. These tests include:
 - a. 21 - domestic water wells
 - b. 14 - monitoring wells
 - c. 1 - surface water sample
 - d. 8 - stored water samples
 - e. 0 - subsurface samples
 - f. 1 - seep/spring sample is included.
 - c. Samples will be analyzed per Rule 609 requirements.
- 4. Monitoring well abandonment
 - a. The fourteen (14) existing 2" inch monitoring wells that are drilled an average of 25 ft in depth will be abandoned in accordance with the State of Colorado State Engineers Monitoring Well Abandonment Requirements.
- 5. Pre-job decommissioning and removal of equipment
 - a. Pre-job decommissioning is included in this estimate.
 - b. Equipment will be disconnected from electrical source, fluids removed and piping cleaned, blind flanges placed on open end connections, loaded on trucks and hauled off site for sale, recycle or disposal.
- 6. Fluids disposal
 - a. Costs for fluids disposal anticipated from tanks, equipment and piping are included in this estimate. Fluids will be disposed of at the onsite injection well.
- 7. Pre-job decommissioning and removal of equipment
 - a. All utilities will be locked out and placed in a safe condition prior to demolition activities.
 - b. Equipment to be decommissioned and removed from the site as shown on the site drawing.
 - c. Equipment will be disconnected from electrical source, fluids removed and piping cleaned, blind flanges placed on open end connections, loaded on trucks and hauled off site for sale, recycle or disposal.
- 8. Demolition of site improvements and other equipment.
 - a. One (1) primary structure will be demolished and removed. Including the concrete slab, utilities, septic system and foundation.
 - b. Select landscape and irrigation infrastructure will be demolished and removed. WPM assumed that trees and shrubs along the county roads will remain.
 - c. Site power will be excavated and removed from the nearest power pole at the main road.
 - d. Demolished metal / waste will be trucked to a recycle center, scrap yard or landfill location.
 - e. Steel / metal waste will be recycled, sold for scrap metal or disposed as waste.

- f. All onsite culverts, fence and gates will be removed and disposed as a part of the closure work.
- g. There are no costs for removal of and portable frac water tanks or other portable tank equipment on site.
- h. Any additional equipment not shown or detailed in the Pre-job Decommissioning section is assumed to have been removed by the operator prior to the closure work.

9. Liner removal

- a. There are no lined ponds on site. No liner removal is included in this estimate.

10. Treated soils and solids disposal

- a. WPM assumes that the soils and materials to be treated on site will be in accordance with the air quality permitting requirements at the time of closure.
- b. WPM included costs for the removal of 110 CY of soils to be disposed of at a licensed and approved landfill.

11. Earthwork

- a. All soils will be used onsite in the existing condition. No import of off site soils is required for the closure.
- b. WPM estimated the line of delineation between the injection well pad and the balance of the site as well as the impacted area for the purposes of this estimate. No costs for injection well pad earthwork is included in this estimate.
- c. It is assumed that no soil is classified as hazardous. No cost provisions for removal or treatment of hazardous soils have been included.
- d. Assume that the class 5/6 road base will be tilled into fill material and wasted on site.
- e. Approximately 300tons of rip rap material will be wasted on site.
- f. Final earthwork grade is assumed to be +/- 3 /10ths of a foot therefore, bluetop grading is not included in the scope of this work.
- g. Seeding consistent with a typical reclamation project is included.
- h. For the purposes of this estimate the following classes of heavy equipment performance data per the Caterpillar Performance Handbook was utilized:
 - i. Caterpillar 627G scraper
 - ii. Caterpillar 140H motor grader
 - iii. Caterpillar 815F vibratory compactor
 - iv. PC 220 Trackhoe
 - v. Water truck

12. Site Management

- a. Site personnel and contractor general conditions are included for the scope.
- b. Storm water management is included in this section of the estimate.

13. Labor Rates

- a. Labor classifications and burden is detailed in the estimate tabs. Most of the labor rates have been taken from the recent and local county, Colorado Davis Bacon Wage Determination. RS Means and or WPM Database rates are quoted where current market rates are not available.

Additional estimate backup and assumptions are detailed on the corresponding estimate tabs.

This concludes WPM's efforts for a third party review and estimate for the above referenced project. Thank you for the opportunity to provide this service to the State of Colorado. Please contact me via email at jag@western-pm.com or by phone at 970.674.1618 for further clarification or with questions.

Best regards,

via email

John Goad, Jr.
Senior Project Manager
Western Project Management

Attachments - (1) WPM Estimate of Probable Closure Costs #1906-149