

CESI has Air Quality Approval Order in 2016 (Approval Order Number: DAQE-AN155650001-16) from the State of Utah, Division of Air Quality. (Attachment A: Other Existing Permits)

Contingency Plan

Since there are no explosive gases possible at this facility, CESI addresses the failure of run-off containment system. In case of fire, emergency contacts are posted in the ticket building and will be reported immediately to the division.

R315-302-3. General Closure and Post Closure Requirements

CESI has been kept Landfill Bond and Landfarm Bond (Letter of Credit) that were held by the State of Utah. (DWMRC and DOGM) Furthermore, CESI has upgraded and maintained the Pollution Liability Insurance currently in place since the existing facility opened in 1999. (Attachment E: Financial Assurance)

CESI has been reporting quarterly report and annual report for Asbestos and C/D with total volume in cubic yards received for those periods. Records are also filed and kept in CESI main office with waste manifests.

Closure

A layer will be placed to minimize infiltration of at least 18 inches of soil graded to no more than 2%. A layer on top to minimize erosion able to sustain vegetative growth and seeded with grass or other shallow rooted vegetation. This layer will allow protection from wind and water erosion.

Fencing is already completed and maintained from the previous approvals at the property boundary with the 4' dike to impede entry by the public or large animals. A lockable gate is also in place at the facility.

Closure Plan

Daily cover over the asbestos and monthly cover C/D material will be minimum of 6" up to 12". This material will be compacted with equipment tires. Daily cover material may be remediated Oil & Gas soil, remediated UST soil or virgin soil as needed. The landfill will be closed in phases. It will be our goal to close each landfill cell as it is filled instead of waiting to the end of the landfill life. As we have stated the working face of the landfill will be approximately fifty (50') foot wide. The landfill cell may run continuously crossing internal roads and/or landfarm cells previously established. The final cover will be an additional of at least 18" of fill material compacted with equipment tires. Finally, approximately 6" of topsoil will be placed un-compacted over the area. Leveling and seeding will then take place with a seed mix. The seed mix will be drilled into the surface soils to establish a vegetative cover. When closure is complete, we should have at least 18" of compacted fill covered by at least 6" of topsoil that has been seeded. It is our plan to have the landfill cell closed or ready for closure within a 200' distance of working face. Therefore only a small portion of the landfill cell will have daily cover only over deposited waste debris.

Our projections show that of the 18 landfarm cells in the first 80 acres we could develop 9 miles of 50' wide landfill cell. If both 80 acres are fully utilized, it could develop 18 miles of 50' wide landfill cell.

Total area requiring cover, final cover, topsoil and seeding could be a maximum of 109 acres if both 80 acre pieces are utilized. CESI does not believe there will be this kind of demand for asbestos and C/D disposal for next 10 years. CESI has filled approximately 7.5 landfarm cells from the past 15 years experiences. (Approximately 7 acres) Therefore, CESI is projecting to fill total of 2 landfarm cells in next 10 years. (Approximately 6 acres)

Total Quantity of Waste would hold in the facility

18 miles of fifty (50') foot trench 7.5' tall = 35,640,000 ft³
= **1,320,000 cubic yards**
= 12,110 of the largest (53') truck trailers

The first 80 acres alone would be = 17,820,000 ft³
= 660,000 cubic yards
= 6,055 of the largest (53') truck trailers

Total Quantity of Waste received since the initial permit in 2005 = **85,962 cubic yards**
(Asbestos and C/D waste approximately 7.5 acres as of 2nd QTR 2019)

Final cover will be installed using a front loader. Since asbestos and C/D debris will be compressed differently in different places, the loader operator will have the job of covering the waste evenly. When final cover completes, section should end up with at least 18" compacted soil and 6" of soil to support the vegetative cover. QA/QC will be periodically measured across the landfill cell as necessary. CESI will utilize a third party for the testing.

A tractor will be used to establish seedbed preparation and seeds will be placed by a seed drill behind the tractor or broadcasting if necessary. CESI will utilize shallow-rooted plants for the vegetative cover perhaps grass seed. CESI will use a P.E. registered in Utah to certify closure was done in accordance with the closure plan. This may take place for each 80 acres instead of in phases as necessary.

CESI will file a plat with the County within sixty (60) days following certification of closure.

When closed, the permitted property will be done in a manner that minimizes further maintenance and continues to eliminate threats to human health and environment. Notification of the closure will be made 30 days prior to projected final receipt of waste. The closure activities will be completed within 180 days from initialization. Post closure activities for facility maintenance of land will continue for 30 years beyond closure date or until stabilization is confirmed if sooner.

Post Closure Plan

When the Executive Secretary approves the closure, the Post Closure Plan activities will begin. Maintenance will consist of quarterly walking through the landfill cell areas and monitoring for established vegetation and erosion from wind or water. Areas found to be deficient will be corrected using a front loader for wind or soil erosion and broadcasting or drilling seed if vegetation is missing.

CESI will establish reseeding to the level found in the surrounding acreage or better. Deficiencies will be corrected within the next thirty (30) days following the inspection – depending on severity.

At this point there are no plans to utilize the property during Post Closure. CESI reserves the right to make amendments to this as necessary. Post Closure monitoring reports will be kept at the CESI main office and CESI will provide the name, address, and phone of the person responsible when Post Closure is initiated. Annual reports will be provided and following completion of the Post Closure period. A P.E. licensed in Utah will certify the Post Closure activities were conducted in accordance with this plan. Post Closure documentation will be placed in the operating record and forwarded to the Executive Secretary.

Closure Care Steps

1. To place daily cover minimum of 6" to 12" approximately 132,000 ft² (3 acres) for each cell would take approximately 4 days with a loader. This activity is done in the normal daily operations.
2. To place final cover at least 18" approximately 132,000 ft² (3 acres) for each cell would take approximately 4 days with a loader. This activity is also done in the normal operations.
3. After placing 18" cover, to place topsoil cover of 6" approximately 132,000 ft² for each cell would take 4 days with a loader.
4. To complete compaction with equipment tires for each cell would take approximately 2 days with a loader.
5. To complete grading each cell would take approximately 2 days for each cell with a road grader.
6. To complete seed preparation would take approximately 1 day for each cell with a tractor and implement.
7. To complete seed drilling would take approximately 1 day for each cell.
8. For erosion repair based on 1 foot cover over 5% per year would equal 1 day with the loader.
9. For vegetative repair on 10% area per year would translate into 1 day with a tractor and implement.

As we have mentioned in Closure Plan above, CESI is projecting to fill 9 acres (3 cells) during the next 10 years. Step 1 and Step 2 would be completed during normal operations and there will be no costs. (Expenses are included in normal operation expenses) Step 3, Step 4 and Step 8 would take approximately 21 days for 9 acres (3 cells) using a loader and currently CESI has a frontend loader and a dozer for the daily operation. Step 5, Step 6, Step 7, and Step 9 would take 15 days for 9 acres (3 cells) with a frontend loader and dozer with landfarming equipment and currently CESI owns them for the daily operation.