



Blaylock and Brown Class III Landfill

Construction / Final Closure / Post-Closure

Brian Wolf, Solid Waste Program Manager – June 2023

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Meeting Agenda

- Background
- Schedule
- What we've done
 - Survey
 - Borrow Study
 - Storm Water Analysis
 - Minor repairs due to stormwater infiltration
- What we plan to do in remainder of 2023
 - Terminate the permit – Public notice published in Commercial Appeal Sunday, June 25th
 - Move sort pile and shingle pile to the landfill for disposal / grading
 - Cover disturbed area (soil) and shed water until final cap construction in 2024
 - Complete closure design, construction drawings, and Contractor bids in 2023
- What we plan to do in 2024
 - Construct stormwater pond(s) and other stormwater infrastructure
 - Work on final grading prior to cap construction
 - Construct final cap
 - Begin 2-year Post-Closure care period (late 2024/ early 2025)
- Project related questions



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Project Team

- **TDEC**
 - Craig Almanza – Deputy Director, Division of Solid Waste Management
 - Denard Mickens – Office of General Counsel
 - Kathryn Schulte – Regional Director, External Affairs
 - Ronnè Adkins – Director, External Affairs
 - Jim Holt – Memphis Environmental Field Office Manager
 - Rob Burnette – Chief Engineer, Division of Solid Waste Management
 - Brian Wolf – Solid Waste Program Manager



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Project Team (Continued)

- **Engineering / Design Consultant:**
 - Civil & Environmental Consultants, Inc. (CEC)
 - State Contractor for last 5 years and was selected in March to be such for next 5 years
 - Over 30 years in the Environmental/Consulting business
 - Nashville, Knoxville, Sevierville Offices, 31 other offices nation wide
 - Performed design, construction quality assurance, post-closure inspections for hundreds of landfills across the country...and beyond
 - Chris Murray, PE, PP, PLS – Principal in charge of project
- **Other Project Consultants / Contractors**
 - To Be Determined as project is designed and successful bids for construction and associated CQA are selected



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Aerial Photography (Entire Property)



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Aerial Photography (Landfill – North)



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Aerial Photography (Borrow Area – South)



Background - Historic

- Current Permit Issued August 10, 1999
 - Class III Landfill Permit (allows disposal of landscaping/land clearing waste, and construction and demolition wastes)
- Operated for 22 years
 - Numerous odor / noise / dirty roads complaints
 - HOA/Town Lawsuit
 - Agreed Order – February 6, 2001
- August 2022 – Unfortunate passing of Norman Brown

Background – Recent Events

- Blaylock and Brown Landfill (EPLEX)
 - Meeting on December 9, 2022 between TDEC and Blaylock & Brown personnel
 - Company ceased acceptance of waste
 - Company advised not enough funds not available for operations, closure, or post-closure
 - TDEC set up monthly calls with Town of Collierville shortly thereafter to keep communication lines open
 - Landfill Equipment Repossessed/Sold
 - Until equipment was removed from site, Byron Brown (and operators) worked closely with TDEC to address remaining operational issues
 - With Owner's passing, TDEC has been moved into role of managing the closure and post-closure of facility in a manner protective of human health and the environment and in compliance with State regulations.
 - Presently working to terminate the permit – Public notice of permit termination was placed in the Commercial Appeal on Sunday, June 25th
 - TDEC managing the contractors that will perform:
 - Design
 - Construction
 - Groundwater Monitoring
 - Construction Quality Assurance (CQA)
 - TDEC **not** taking ownership of the property



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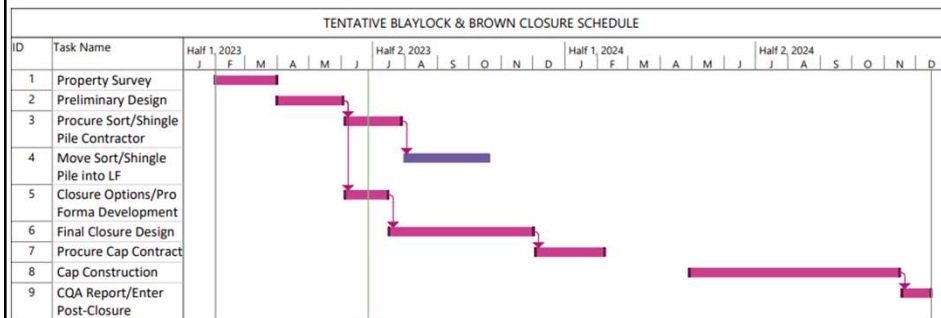
Background – Recent Events

- EBOX / Wastebox (hauling company currently on site) to be potentially relocated in near future
 - E-Box / Wastebox personnel currently provide gate security during working hours
 - When E-Box / Wastebox leaves the property, TDEC will be placing additional security which includes:
 - Gate obstruction / locks
 - Working with the Town to provide an increased police presence
 - Possibly a community member(s) that would help keep an eye out for suspicious activity at the facility and report to Town / Police / TDEC



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Preliminary Schedule (Subject to Change)



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Schedule (Continued)

- Main Project Milestones
 - TDEC initiated actions to begin closure in February 2023
 - 2023 Construction – Tentative Start date of August 1
 - Consist of placing sort pile and shingle pile into landfill
 - Achieve positive drainage to reduce infiltration
 - Install interim soil cover (1-foot cover)
 - 2024 Construction – Tentative Start date of May 1
 - Final Cap Construction
 - Placement of Deed Notice / Restriction on landfill portion of the property.
 - 2024/2025 Begin 2-year Post-Closure care period
 - Mowing (if earth cap is selected)
 - Groundwater monitoring
 - Cap inspections
 - Any required repairs / maintenance

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Schedule – What We’ve Done So Far...

- Conducted Aerial Topography of Entire Property – February 10, 2023
- Completed repairs to erosion rills and liquid pop-outs – March 27-30, 2023
- Conducted Soil Availability Study (on-site) – Report dated May 19, 2023
- Preliminary Stormwater Assessment (determination of effort needed for closure) – Report dated May 19, 2023
- Permit Termination – Public Noticed June 25, 2023
- Monthly calls with Town of Collierville



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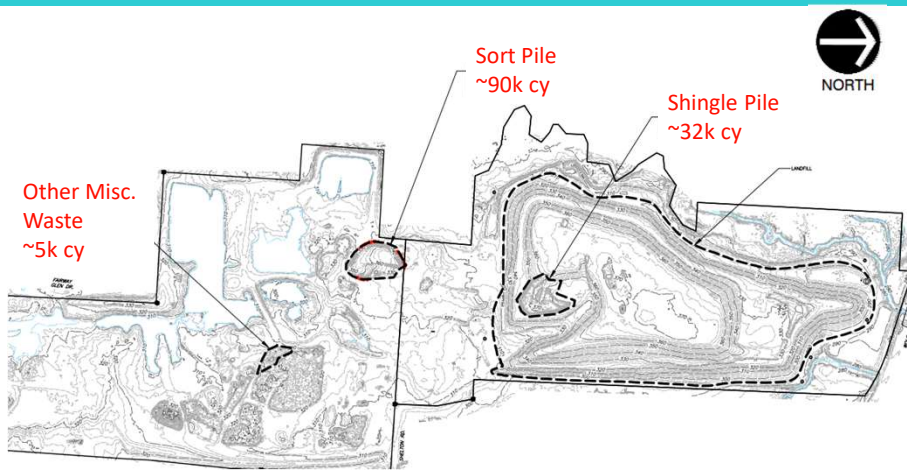
2023 Construction Activity Details

- Moving the sort and shingle piles into the landfill
 - Sort pile was established to remove wallboard from waste prior to disposal
 - Sort pile will be moved to the landfill to achieve positive drainage
 - Shingle Pile was a stockpile of a material thought to have value as a recyclable material
 - Shingle Pile will also be moved to the landfill to achieve positive drainage
 - Small area of excavated waste (approximately 5k Cubic Yards) placed outside of footprint near brush piles. This material will also be placed in the landfill for grading / disposal.



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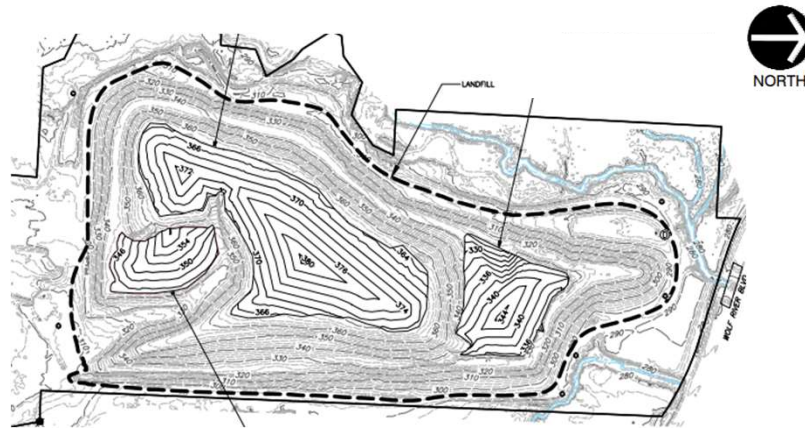
2023 Construction – Waste Disposal / Grading



2023 Construction Activity Details

- Sort pile and shingle pile volume is needed for final cap grading material.
 - Presently, landfill has extremely flat surfaces
 - Flat surfaces allow significantly more liquid (rain) infiltration than sloped surfaces causing waste saturation / leachate / potential odors
 - Placing the sort and shingle pile material in the landfill will reduce the infiltration
 - Reduce the potential for future repairs before cap construction can occur
 - Keep liquids out of the landfill preventing leachate generation and potential odors.

2023 Construction – Preliminary Interim Grading Plan



2023 Construction Activity Details

- Construction Priorities
 - Minimize odors
 - Minimize noise/disruption
- Proposed Plan
 - Small open areas on the landfill
 - Small enough to be covered every evening to minimize odors
 - Working hours / days
 - Work schedules will be evaluated with the bids
 - No Sunday work or during holidays
 - Planned for 90 days but likely shorter time frame
 - Full-time 3rd-Party Oversight of Contractor
 - Local TDEC-DSWM employee check-in every evening

2023 Post-Construction Activities

- TDEC will continue inspections
 - Any erosion or liquid seeps entering stormwater structures will initiate immediate repairs
 - Ensure security measures are keeping trespassers from entering the property
- Lines of Communication:
 - Plan to continue monthly virtual meetings with Town of Collierville
 - Questions/concerns to be routed to Town to be discussed during these meetings
- Meanwhile, TDEC will be working on the Final Closure Design



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2024 Construction Activity Details

- 2024 Construction Project Activities
 - Evaluate (financial / technical analysis) closure design options
 - All options will meet regulatory standards and will be protective of human health and the environment
 - Option 1: Typical Regulatory Class III cap (from bottom to top):
 - 12" Interim Cover
 - 18" low permeability soil above existing interim cover
 - 12" vegetative support soil above low-perm soil layer
 - 42-inches of soil total above waste



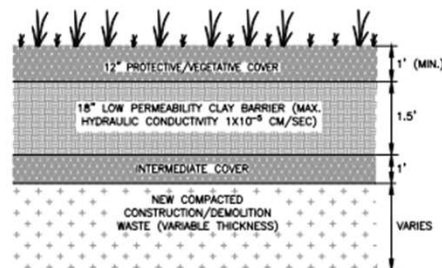
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2024 Construction Activity Details

- Option 2: Alternative geosynthetic cap:
 - Closure Turf® or equivalent – Typical installation:
 - » 12-inch interim cover/leveling course over waste
 - » 50-60 Mil LLDPE/HDPE Super Grip Net synthetic membrane placed on leveling course
 - » Closure turf (synthetic turf) placed on super grip net synthetic membrane
 - » Minimum ½" Sand Ballast on top of closure turf
 - The costs will be affected by the availability of suitable soil on the property
- Site does not appear to have enough soil on the property for completion of the regulatory cap so depending on costs for importation, geosynthetic cap may be economically advantageous

2024 Construction – Cap Cross Sections

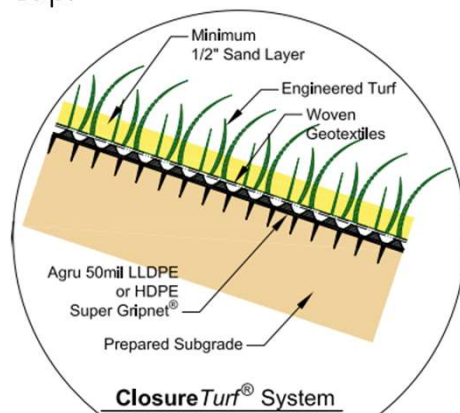
Regulatory Cap:



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8 FINAL COVER SYSTEM
NOT TO SCALE

2024 Construction – Cap Cross Sections

Closure Turf® Cap:



Examples of Typical Regulatory Soil Cap



May 17, 2023 at 11:15:44 AM
Spencer TN
United States

Examples of Typical Regulatory Soil Cap



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Examples of Closure Turf®



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Examples of Closure Turf®



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Post-Closure

- After closure, regulatory standard is 2 years of post-closure for Class III Landfills
 - Groundwater Sampling, Inspections of Cap/Stormwater Infrastructure
- Release from Post-Closure
 - Deed notice that landfiling occurred on property



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Other Considerations

- TDOT – Sanders Creek Stream Mitigation Project
 - Schedule of project is unknown at this time but could run concurrent with the landfill projects

Questions

