

CLOSURE/POST CLOSURE PLAN

**DELINEATION AND VERIFICATION FOR
FRANK ROAD CLASS III-IV DEMOLITION
LANDFILL
SHELBY COUNTY, TENNESSEE**

**HBA Project Number
97-09167**

Prepared For:

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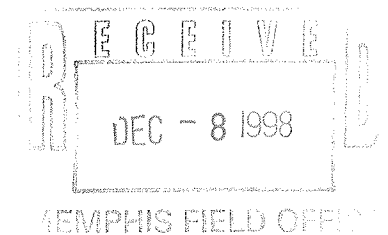


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FACILITY CLOSURE

Partial Closure

1. General. If the landfill is to be completely closed at any point during its intended operating life, the owner, Blaylock & Brown Construction, or subsequent owners, either by sale or inheritance, will notify the Tennessee Division of Solid Waste Management (TDSWM) 60 days prior to closure. Plan revisions to address modification of final contours, drainage, and methane collection will be submitted.

2. Final Cover. Within 90 days of achieving final grade of the disposal facility or disposal facility parcel, a minimum thickness of 30 inches of soil will be placed as final cover. The top 12 inches of this cover material will support the growth of suitable vegetation. The bottom 18 inches will be compacted to achieve a low permeability layer.. As discussed below, permanent vegetation will be established within 180 days of closure and a drainage system will be constructed to insure the integrity of the finished surface.

3. Drainage System. All surface runoff from closed portions of the landfill will be routed to the sedimentation basin by diversion ditches and culverts adjacent to the closed fill area. All ditches and culverts are sized to carry flows caused by the 100-year, 24-hour storm. The ditches will contain rock check dams where necessary to reduce water velocities.

4. The finished plateau area will be graded at a slope of two percent to provide adequate drainage without allowing erosion. Each area will be seeded upon completion of final grading to further prevent erosion.

5. Side slopes will be terraced to slow the velocity and thus the eroding capability of the surface runoff. Runoff from the finished plateau will be diverted as much as possible to rip-rapped flumes which can withstand high velocities.

6. Three sediment basins are proposed for the Frank Road Class III/IV Landfill. Each of the proposed sediment basins will be constructed at a natural drainage discharge area. This basin will retain much of the sediment load produced during rainfall events. With a good grass cover established on the finished surface, sediment loads from these areas should be minimized.

7. Vegetative Cover. The surface of closed portions of the landfill will be seeded upon completion of final grading to prevent erosion. Vegetation activities (including rates of application and scheduling for seeding, fertilization and mulching) will be conducted in accordance with recommendations made by the U.S. Soil Conservation Service. On finished slopes, the grass seed may be tied down with jute, cotton, paper netting or with straw mulch.

8. Gas Monitoring. The existing site is now and has been monitored for more than 4 years to determine if methane gas is escaping from the landfill. A protocol has been developed to insure that appropriate and uniform sampling procedures are used to field test for the methane gas. These tests utilize commercially available portable field equipment and are conducted to determine the production and migration of methane gas. The objectives of the program are to insure that methane gas is being properly monitored. To date, no methane gas from the landfill has been detected.

9. Ground Water Monitoring. Three downgradient monitoring wells have been added to the existing 4 wells for a total of 7 monitoring wells at the site. These wells will be sampled in accordance with the Ground Water Prevention/Monitoring Plan found in Section 5.

10. If the monitoring plan reveals that ground water contamination has occurred, the TDSWM will be immediately notified. Additional ground water sampling and analysis will be conducted as directed the by the TDSWM. If this facility appears to be adversely affecting ground water quality, the company will develop and submit to the TDSWM for their approval a specific ground water quality assessment plan.

11. Maintenance Activities. Mowing of the finished portions of the landfill may be required twice each year. Mowing should be conducted when the grass is mature and in "seed head." Seeded areas should be mowed with approved mowing equipment to a height of 4 inches.

12. If final cover subsides or cracks, filling and scraping of the affected surfaces will be necessary to alleviate or prevent ponding and maintain the integrity of the cover. Reseeding may be required annually on certain areas of the finished surface. The sediment pond will also be maintained to achieve maximum efficiency. The pond will be inspected on a monthly basis and after each major storm event. If needed the pond will be "cleaned out" on an annual basis. This clean out will most likely occur during the months of August through October of each year, i.e. the expected drier months. In that the amount of sediment should diminish as vegetative cover is established, the ponds should require less maintenance during the post closure years. Therefore inspections of the drainage facilities, i.e. sediment pond, drainage ways, will be conducted on an annual basis during the post closure period.

13. Notification of Partial Closure. The owner, Blaylock & Brown Construction, Inc., or any future owner of Frank Road Class III/IV Demolition Landfill, will notify the TDSWM Director in writing when any part of the landfill has been completely closed. Such notification will include certification that each disposal facility parcel has been closed in accordance with this closure/post-closure care plan.

Complete Closure

14. General. As mentioned previously, site life is estimated to be 10 years with final closure occurring in 2008. During the next 10 years, considerable data will be obtained concerning cover performance, drainage system performance, sedimentation basin performance, ground water quality, etc., and success of partial closure maintenance procedures. Using this wealth of information, the owner, can then optimize landfill closure operations.

15. Final closure operations should be similar to the partial closure operations. A final cover will be placed on the last active portion of the fill area. Final drainage and outlet control structures will be constructed, and slope protection and erosion control measures will be completed. Final closure activities will be conducted in a manner so as to achieve all performance criteria as defined by TDSWM.

16. Final Cover. Final cover will be placed as indicated in paragraph 2 of this plan. A registered professional engineer will measure the final cover thickness as required by TDSWM. In addition, a final contour map at an interval of not more than five feet will be submitted.

17. Drainage System. The drainage system will be constructed as indicated in paragraph 3 unless problems occur during the operating life of the landfill. Problems are not anticipated, but some that could occur are sedimentation in off-site streams, ponding of water on the finished plateau, and erosion of cover material. If such problems are observed, the owner, will modify its drainage system as required to correct such problems. It is inappropriate to submit detailed corrective measures until problems arise and the cause and magnitude of the problems are known.

18. Vegetative Cover. Vegetative cover will be established as discussed in paragraph 7.

19. Gas Monitoring. Gas monitoring will be established as discussed in paragraph 8.

20. Estimated Closure Scheduling.

The following are the estimated activities and dates for Area C.

<u>Date</u>	<u>Activity</u>
January 2008	Notify TDSWM of final closure
January 2009	Complete landfilling operations
April 2009	Place final cover
July 2009	Complete grading and establish vegetative cover
August 2009	Submit closure certification
August 2009	Record notation on property deed

POST-CLOSURE ACTIVITIES

Groundwater Monitoring System

21. Post closure groundwater monitoring will be conducted for two years after closure of the site.

Maintenance

22. All appropriate maintenance activities discussed in paragraphs 11 and 12 will be continued. These activities will insure a healthy vegetated finished surface, continued integrity of the final cover, functional drainage, proper erosion control and monitoring as necessary. Consequently, the air-water-aesthetic-social-recreational values of the community will be protected throughout the post-closure period.

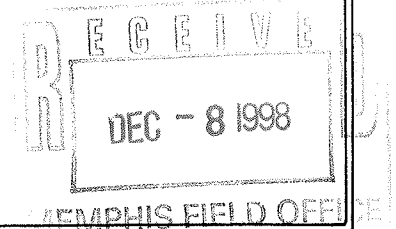
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Facility Contact During Closure/Post Closure

23. The contact for the facility during closure/post closure will be Mr. Norman Brown, III. The telephone number at the facility is 901/853-0953 and at the Germantown office it is 901/754-6300. Mr. Brown may be reached by beeper at 901/532-7700 and his home number is 901/854-4444. Mailing Address for Mr. Brown is 1941 Germantown Road South, Germantown, TN 38138.

Post Closure Usage of Facility

24. The facility will remain idle after closure and post closure activities are complete.



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