

Facility File: Duval County
TRAIL RIDGE LF
Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

NOTICE OF PERMIT

33628

In the matter of an
Application for Permit
by: Trail Ridge Landfill, Inc.
Post Office Box 6987
Jacksonville, Florida 32236

DER File Nos. 184444
184445, and 184447
Duval County

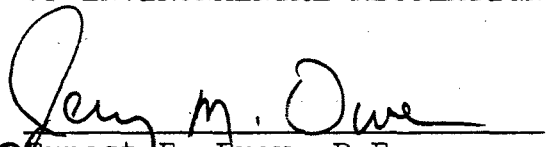
3116P02787 W

Enclosed is Permit Number SC16-184444 to construct and operate the Trail Ridge Landfill, including the related surface water management system, issued pursuant to Chapters 373 and 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

for 
Ernest E. Frey, P.E.

Director of District Management
Northeast District
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7577
(904) 448-4300

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Duval County
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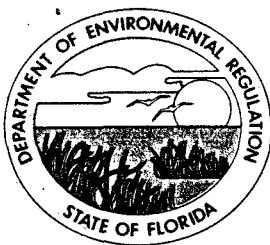
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on December 24, 1991 to the listed persons.

Copies furnished to:

Honorable Ed Austin
Honorable Sherry Walker
Honorable George Crady
Honorable Steve Kennedy
Honorable Marvin E. Godbold, Jr.
Honorable Warren Jones
Mr. Doug Miller
Mr. William Congdon
Mr. Clarence Suggs
Mr. & Mrs. Fred Munson, Sr.
Ms. Karen Peterson
Ms. Janice Whatley
Mr. Nolan Green
Mr. Darrell Sperry
Mr. Will E. Furlong, P.E.
Ms. Pamela Presnell Garvin
Ms. Ellen Long
Ms. Sylvia Thibault
Mr. Lambert L. Herring
Mr. John G. Herring
Mr. Maurice T. Samples
Mr. Ronnie E. Hall
Mr. J. R. Jacobs
Ms. Jeanette Bullock

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.
Delia Richards 12/24/91
Clerk Date



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Trail Ridge Landfill, Inc.
Post Office Box 6987
Jacksonville, Florida 32236

3116P 02787 W

I.D. Number: ~~CMS116P03090~~
Permit/Cert Number: SC16-184444
Date of Issue: 12-24-91
Expiration Date: 12-24-96
County: Duval
Lat/Long: 30°14'00"N/82°02'30"W
Section/Township/Range: 18, 19,
20, 21/3S/23E
Project: Trail Ridge "Plan A" Landfill

This permit is issued under the provisions of Chapters 373 and 403, Florida Statutes and Florida Administrative Code Chapters 17-3, 17-4, and 17-701. The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

To construct and operate the Trail Ridge "Plan A" Landfill, with a total site area of 1288± acres of which 148± acres will be used for disposal of Class I wastes and 28 acres will be used for disposal of Class III wastes. The leachate containment system is a double liner system as spelled out in Florida Administrative Code Rule 17-701.050(5)(d)1.b., with the addition of 0.25 inches of Claymax below the bottom liner. The primary and secondary leachate collection systems will consist of synthetic geodrains and a two (2)-foot protective soil layer will lie above the primary drain.

The facility design includes wetland mitigation and a surface water management system. A groundwater monitoring system is also included.

The Trail Ridge Landfill entrance is located on the west side of U.S. Highway 301 approximately one mile north of Maxville in Duval County.

This permit is issued in accordance with the application received July 27, 1990 and additional information provided on September 12 and October 10 and 11, 1990, and includes Department File Nos. 184444, 184445, and 184447.

PERMITTEE:

Trail Ridge Landfill, Inc.

I.D. Number: GMS3116P03090

Permit/Cert Number: SC16-184444

Date of Issue: 12-24-91

Expiration Date: 12-24-96

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the Permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The Permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the Permittee, its agents, employees, servants, or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.
6. The Permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.
7. The Permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

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GENERAL CONDITIONS:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the Permittee does not comply with, or will be unable to comply with, any condition or limitation specified in this permit, the Permittee shall immediately notify and provide the department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The Permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
10. The Permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the Permittee does not waive any other rights granted by Florida Statutes or department rules.
11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The Permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

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GENERAL CONDITIONS:

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- (X) Certification of Compliance with State Water Quality Standards
- () (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The Permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the Permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
- b. The Permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the department, the Permittee shall, within a reasonable period of time furnish any information required by law which is needed to determine compliance with the permit. If the Permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

- 1. Construction of the Trail Ridge "Plan A" Landfill shall be in conformance with plans, specifications, and contract drawings submitted in support of the application received July 27, 1990 and the additional information provided on September 12 and October 10 and 11, 1990. Permittee shall submit, in writing, to the Department of Environmental Regulation, Northeast District, 7825 Baymeadows Way, Suite 200-B, Jacksonville, Florida, 32256-7577, notification of the date that construction activities authorized by this permit commence.

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SPECIFIC CONDITIONS (CONT'D):

2. The Permittee shall submit to the Department for approval a revised Quality Control/Quality Assurance Plan for installing the Class I area synthetic liner system, after selection of the synthetic liner manufacturer, and prior to its installation. The plan shall include the following:
 - a. Retention of a registered professional engineer for independent quality assurance.
 - b. Minimum qualifications of the Construction Quality Assurance engineer and supporting Quality Assurance personnel.
 - c. Sampling activities, size and locations, frequency of testing, acceptance and rejection criteria, and plans for implementing corrective measures that may be necessary.
 - d. Procedure for testing the density of the compacted clay subbase at least once per acre.
 - e. Procedures for testing the permeability of the Claymax at least once per 40,000 square feet.
 - f. The synthetic liner manufacturer's and installer's specific recommendations for acceptability of the soil portion ("subgrade" for the synthetic liner) and the Claymax portion of the liner system. The Permittee shall ensure that the installation contractor of the synthetic portion submits his certification of acceptance of the subgrade to the Department immediately upon its execution.
 - g. The synthetic liner manufacturer's specifications and recommendations for installing and testing the specific liner selected and demonstrating that it meets or exceeds NSF Standard 54. Quality Assurance Reports shall be submitted to the Department with the Certification of Completion. Installation of the synthetic liner for the leachate holding basin shall be performed in accordance with the Department approved Construction Quality Assurance Plan and shall meet the liner manufacturer's recommended installation procedures, pursuant to FAC Rule 17-701.050(4)(c).
3. The Permittee shall establish financial assurance for closure and long-term care. Proof that the financial assurance mechanism is funded in accordance with FAC Rule 17-701.076 shall be submitted to the Department sixty (60) days prior to the acceptance of any solid waste at the facility [17-701.076(2)]. All submittals in response to this specific condition shall be submitted to: Financial Coordinator, Solid Waste Section, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

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SPECIFIC CONDITIONS (CONT'D):

4. A design for the Class I area to include 15-foot wide benches or terraces on the side slopes approximately every 20 vertical feet shall be submitted to the Department no later than 30 days after the commencement of construction. If the Department determines that such a design is inadequate, the Permittee shall correct such inadequacies to the satisfaction of the Department. If such inadequacies are not corrected to the satisfaction of the Department, the Permittee shall cease accepting waste at the facility. The final design shall be implemented by Permittee for each solid waste disposal side slope unit described in Specific Condition No. 36.
5. A design which provides an oil and grease skimmer for the outlet control structures for each stormwater management area shall be submitted to the Department no later than 30 days after the commencement of construction. If the Department determines that such design is inadequate, the Permittee shall correct such inadequacies to the satisfaction of the Department. The final design shall be implemented by Permittee during construction, prior to the acceptance of any waste.
6. A design to include an adequate berm system surrounding the leachate truck loading area to segregate potential leachate spills from the stormwater system shall be submitted to the Department no later than 30 days after the commencement of construction. If the Department determines that such design is inadequate, the Permittee shall correct such inadequacies to the satisfaction of the Department. The final design shall be implemented by Permittee during construction, prior to the acceptance of any waste.
7. Surface water runoff and/or diversion controls included in the plans and/or this permit shall be installed and operational prior to construction of the disposal areas. Surface water runoff shall be controlled during the construction stage and shall comply with FAC Chapter 17-3 at the site boundary.
8. Turbidity barriers shall be installed at all locations where the possibility of transferring suspended solids into the receiving water body exists due to the proposed work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. The Permittee shall be responsible for the removal of the barriers.
9. Turbidity controls shall be utilized throughout the project to contain any turbidity generated that exceeds State water quality standards.
10. Turbidity monitoring shall be conducted during any activity authorized by this permit which dislodges, removes or otherwise disturbs the soils within 50 feet of waters of the State which maintain a base flow in response to groundwater or flow during storm events. Sampling shall be conducted within 50 feet, in the down-current direction, of the activity or a turbidity curtain surrounding the activity and in a nearby unaffected area (background). During the activity, samples shall be taken every 3 hours. If turbidity levels exceed 29 NTU's above the background level, then the activity shall be halted until authorization from the Department has been received. A complete monitoring report shall be submitted to the Department on a weekly basis which shall include sample time, turbidity level, background turbidity, distance between sample and source, and method of analyses. A negative report shall be submitted if no activities take place within 50 feet of waters of the State as described above.

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SPECIFIC CONDITIONS (CONT'D):

11. For each phase of the surface water management system, the Permittee shall submit, within 30 days after completion of construction, a "Certification of Completion of Construction". At that time the Permittee shall notify the Department that the facility is ready for inspection and approval.
12. The Department must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a permitted system or facility or within 30 days of any transfer of ownership or control of the real property at which the permitted system or facility is located. The Permittee shall, at that time, provide the Department with two copies of any agreement between the Permittee and property owner which may affect the facility.
13. If any other regulatory agency should require revisions or modifications to the permitted project, the Department is to be notified of the revisions so that a determination can be made whether a permit modification is required.
14. The Permittee is responsible for the selection, implementation, and operation of all erosion and sediment controls on-site and to prevent violations of water quality standards in Chapters 17-3 and 17-4, F.A.C. The Permittee is encouraged to use the appropriate Best Management Practices described in the Florida Land Development Manual: A Guide to Sound Land and Water Management (DER, 1988).
15. The operation phase of the stormwater management system shall not become effective until the following criteria have been met:
 - (a) Within thirty (30) days after completion of construction, permittee shall submit a signed and sealed certification by an appropriate registered professional that the appropriate phase of the system has been constructed and is ready for inspection.
 - (b) The registered professional shall certify that the appropriate phase of the system has been constructed in accordance with approved plans and specifications; deviations from the plans must be submitted for prior approval to the Department.
 - (c) Record drawings will be furnished and revised to reflect any changes made during construction and signed and sealed by a Professional Engineer. The following information, at a minimum shall be verified on the record drawings:
 1. Dimensions and elevations of all discharge structures.
 2. Locations, dimensions, and elevation of all underdrain systems including cleanouts, connections to control structures, and points of discharge to receiving waters.
 3. Dimensions, elevations, contours or cross sections of all treatment storage areas.
 4. Dimensions, elevations, contours, final grades to determine flow direction and runoff.

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SPECIFIC CONDITIONS (CONT'D):

16. The following operational maintenance activities shall be performed on all permitted systems on a regular basis or as needed:

- (a) Removal of trash and debris.
- (b) Inspection of inlets and outlets.
- (c) Removal of sediments when the storage volume or conveyance capacity of the system is below design level.
- (d) Stabilization and restoration of eroded areas.
- (e) Mowing and removal of grass clippings.
- (f) Aeration, tilling or replacement of topsoil as needed to restore percolation capability of the system.
- (g) Replanting if vegetative cover in littoral zones falls below 80% coverage.

The stormwater management system shall be inspected after each heavy rain, but at a minimum once per quarter.

17. The permittee is required to provide for periodic inspections of the stormwater management system. The permittee shall submit reports to the Department certifying that the stormwater management system is operating as designed. The reports shall be submitted to the Department as follows:
- (a) Inspection reports for retention, underdrain, wet detention, and swales shall be submitted one year after completion of construction and annually thereafter.
 - (b) Inspection reports for filtration treatment systems and pumped systems shall be submitted one year after completion of construction and annually thereafter. A registered professional must sign and seal the report certifying the filtration treatment system and/or pumped system is operating as designed.
18. If the stormwater management system is not functioning as designed and permitted, operational maintenance must be performed immediately to restore the system. If operational maintenance measures are insufficient to enable the system to meet the design standards, the permittee must either replace the system or construct an alternative design. If the Department determines that the original design is deficient, the Permittee must submit a permit modification application within sixty (60) days of the date the system was determined to be design deficient.
19. Following completion of all significant construction activities, the Permittee or authorized representative shall complete and submit to the Department, DER Form 17-7.130(2), entitled "Certification of Construction Completion Application to Operate only Resource Recovery and Management Facility." The Permittee shall

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SPECIFIC CONDITIONS (CONT'D):

submit to the Department, Record Drawings signed and sealed by a professional engineer registered in the State of Florida, and a Quality Assurance Report on liner installation prepared, signed, and sealed by a professional engineer registered in the State of Florida. The Permittee shall specify where leachate will be treated and/or disposed of; and the Permittee shall submit to the Department for approval, a letter of acceptance from the wastewater treatment plant which will provide treatment and/or disposal. At such time the Permittee shall arrange for Department representatives to inspect the facility in the company of the Permittee, engineer, and on-site operator, as required by FAC Rule 17-701.030(6). The facility shall not be operated or accept solid waste until the Department has notified the Permittee in writing that all applicable submissions required for the permit, including financial responsibility documentation have been received and found acceptable.

20. The facility shall not be operated or accept solid waste until the Department has notified the Permittee, in writing, that the applicable certification, attesting that the surface water management system has been constructed in accordance with the permitted design, has been received and approved.
21. Following notification that the Department has found the submittals acceptable, the Permittee shall operate the facility in conformance with the criteria contained in FAC Rule 17-701.050, any other applicable DER rules, any applicable permits, and the operation plan submitted with the permit application.
22. Daily records of waste quantities and types received shall be kept at the site. These records shall be summarized and a monthly waste quantity report shall be submitted to the Department by the fifteenth (15th) day of the following month.
23. Hazardous waste as defined in FAC Chapter 17-730, or biohazardous wastes as defined in FAC Rule 17-712.100(2) shall be prohibited from disposal. The Department shall be notified immediately in the event such wastes are discovered. If such wastes are discovered, the Permittee shall implement the waste control procedures as contained in the operations plan.
24. Laws of Florida, Chapter 88-130, Section 15, prohibits the disposal of whole tires, lead acid batteries, and white goods in solid waste landfills.
25. All construction and demolition debris must be disposed of in segregated areas according to FAC Rule 17-701.061(2).
26. An effective barrier to prevent unauthorized entry shall be installed and maintained in accordance with the plans in the permit application. Unauthorized scavenging or salvaging shall be prohibited. A screening barrier (i.e., trees or other vegetation) shall be installed and maintained to shield landfill operations from public view in accordance with FAC Rule 17-701.040(2)(h).

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SPECIFIC CONDITIONS (CONT'D):

27. Objectionable odors originating from the site shall be effectively controlled. A gas venting system shall be installed in accordance with the plans and specifications in the permit application. Should objectionable odors or gas migration become a problem, the passive gas venting system shall be converted to an active system with a flare or other means to destroy the landfill decomposition gas(es).
28. Litter control devices shall be installed as necessary to prevent litter from leaving the disposal areas.
29. Any interruption of regular landfill activities (fire, natural disasters, equipment breakdown) shall be immediately reported to the Department by phone. In the event of equipment breakdown, reserve equipment capable of performing basic disposal operations shall be made available at the site within 24 hours, excluding holidays or other days when the landfill is closed.
30. No landfill side slope, including temporary internal side slopes, shall be steeper than 3-to-1 (horizontal to vertical).
31. All exterior landfill side slopes shall have an initial cover of eighteen inches.
32. The proposed practice of punching holes into the intermediate cover layer on top of each cell of solid waste within the Class I area is prohibited.
33. The initial placement of select waste in the Class I area will be done under the supervision of a quality assurance engineer.
34. The final cap and cover system including permanent vegetation shall be placed over the entire surface of each completed solid waste disposal exterior side slope unit within 180 days after final waste placement. An exterior side slope unit is that area between the toe of the slope and intermediate benches or terraces, or that area between two intermediate benches or terraces in which final waste deposition has occurred.
35. A trained supervisor or foreman shall be responsible for maintaining the site in an orderly, safe, and sanitary manner in accordance with FAC Rules 17-703.300 and 17-703.400. This includes maintenance of the leachate collection system by water jet cleaning. Sufficient personnel shall be employed as noted in the operations plan to adequately operate the facility.
36. All-weather access roads to the site and disposal areas shall be maintained. Dust control methods (i.e. water sprays) shall be employed as necessary.
37. Quantitative records of leachate collected and sent off-site for treatment shall be kept and made available to the Department upon request. Disposal of leachate shall be in accordance with all applicable regulations and shall include the running of a TCLP analysis prior to disposal to determine if it is hazardous. Within six months of placing waste in the lined facility or when sufficient leachate has been generated, a detailed chemical characterization of a representative sample of the

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SPECIFIC CONDITIONS (CONT'D):

leachate shall be performed pursuant to FAC Rule 17-28.700(6)(a)2. This characterization shall include those parameters listed for initial sampling of the ground water monitoring wells. Routine sampling and analysis of leachate shall be established and incorporated by permit modification following review of the initial leachate characterization.

38. In Accordance with FAC Rules 17-28.700(6) and 17-701.050, the Permittee shall within ninety (90) days of the issuance of this permit install and place into operation a Department approved Ground Water Monitoring system.

a. The Ground Water Monitoring System shall be designed and constructed in accordance with plans submitted to and approved by the Department, subject to Department modifications.

b.

(1) Approximate monitoring well locations and designations shall be in accordance with Attachment 1. A surveyed drawing shall be submitted showing the location of all monitoring wells (active and abandoned) which will be horizontally located by metes and bounds or equivalent surveying techniques. The surveyed drawing shall include the monitor well identification number as well as location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a Florida Registered Surveyor. All wells are to be clearly labeled and easily visible at all times.

All existing and new shallow surficial monitoring wells shall be constructed such that a portion of the screened interval shall extend into the vadose zone during all portions of the year and the screened interval shall be of sufficient length that a minimum of approximately five feet of screen shall extend into the water column throughout the year.

The Permittee shall install a deep surficial background monitoring well (B-31) on the center of the western boundary of the waste management area. The well shall be designed to monitor the base of the surficial aquifer and be constructed such that the screened interval shall exist at the bottom of the aquifer and shall extend to the base of the aquifer.

To monitor direction of ground water flow in the surficial aquifer, the Permittee shall have install groundwater monitoring wells: B-2 S,I B-33 S,I B-31 D B-7 S,I,D B-11 S,I B-12 S,I,D B-13 S,I B-14 S,I,D B-16 S B-17 S B-18 S B-19 S,I,D B-25 S,I,D B-26 S B-27 S,I,D B-28 S B-29 S B-30 S; and shall install intermediate and deep piezometers: P-17 I, D and P-29 I, D; by March 1, 1992.

Following installation of the monitoring wells and piezometers, weekly ground water elevation data will be obtained from each well. This data shall be analyzed and ground water surface maps constructed for the shallow surficial, intermediate surficial and deep surficial portions of the monitored aquifer. Data and maps shall be submitted monthly to the Department.

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Following review of the initial month of data collection and analysis, the Permittee shall submit to the Department proposed locations and completion intervals for additional monitoring wells, as needed, on the north and south boundaries of the waste management area and for additional existing wells to be sampled for compliance during Phase 1 of landfill operations, no later than April 15, 1992.

Approval of the proposed additional wells to be utilized as part of the ground water monitoring plan, as needed, during Phase 1 of the facility's operation will be obtained from the Department, wells required be constructed, initial sampling conducted, samples analyzed and results submitted to the Department thirty (30) days prior to the acceptance of waste by the facility.

Weekly groundwater elevation data shall be collected from all existing and constructed wells and piezometers for a period of nine additional months. The data will be compiled, analyzed, and groundwater surface maps constructed, this data shall be submitted to the Department on a quarterly basis. Following analysis of the year of data, the Permittee shall propose additional monitoring wells or sampling of existing wells, as needed, for groundwater monitoring of the waste management area.

- (2) The Permittee shall construct and utilize the groundwater monitoring wells for each phase of the facility's operation in accordance with the schedule below. This phasing will be subject to modification by the Department based on the groundwater flow direction information collected and presented by the Permittee as required prior to the acceptance of waste and during the initial year of ground water data collection. Installation and initial sampling of background ground water monitoring wells and Phase 1 compliance wells shall be conducted within ninety (90) days of the issuance of this permit. Initial sampling and analysis of compliance wells for each additional phase shall be conducted and the analytical results submitted to Department sixty (60) days prior to acceptance of waste in that phase.

Class I Landfill**Background Well Clusters:**B-2 S,I Locations as indicated on
B-3, S,I**Drawing No. 9 and submittals.**

B-31 D

Compliance Well Clusters:**Phase I**B-7 S,I,D B-11 S,I B-12 S,I,D, B-14 S,I,D
B-18 S B-19 S,I,D B-20 S B-21 S B-22 S
B-25 S,I,D B-27 S,I,D**Phase II**

B-16 S B-17 S,I,D

Phase III

B-13 S,I B-23 S

Phase IV

as above

Phase V

B-24 S B-26 S B-28 S B-29 S,I,D B-30 S

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SPECIFIC CONDITIONS (CONT'D):

Class III Landfill

Background Well Cluster: B-9 S,I

Compliance Well Clusters: B-8 S,I,D B-10 S,I B-15 S,I

Additional wells as required by the Department will be installed and/or sampled, based on sampling results and groundwater measurements.

- c. Upon completion of construction of the groundwater monitoring wells, the following information shall be submitted for all groundwater monitoring wells (permanent and temporary) and any new well(s) constructed:

Well identification	Driller's Lithologic Log
Latitude/Longitude	Total well depth
Aquifer monitored	Casing diameter
Screen type and slot size	Casing type and length
Elevation at top of pipe	SJRWMD well construction
Elevation at land surface	permit number

- d. In the event any monitoring well becomes damaged or inoperable, the Permittee shall notify the Department within seventy-two (72) hours and a detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent a recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation.
- e. The zone of discharge shall extend horizontally to the property line or one-hundred (100) feet beyond the waste management area, whichever is less, and vertically to the base of the surficial aquifer, in accordance with F.A.C. Rule 17-28.700(2). This zone of discharge shall remain in effect unless it becomes necessary to seek a change, pursuant to F.A.C. Rule 17-28.700(5). All groundwater monitoring wells shall be used to determine compliance with state and groundwater standards and criteria and shall exist outside the zone of discharge.
- f. The Permittee shall ensure that the water quality standards for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge according to F.A.C. Rules 17-3.402 and 17-3.404.
- g. The Permittee shall ensure that the minimum criteria for ground water specified in F.A.C. Rule 17-3.402 shall not be violated within the zone of discharge.
- h. Ground water levels shall be recorded no less than forty-eight (48) hours after well installation and prior to evacuating the well for sample collection. Measurements, referenced to N.G.V.D., shall include ground water surface elevation, the top of well casing, and land surface at each site at a precision of plus or minus 0.01 feet. This information shall be submitted to the Department with the quarterly ground water analytical results. A map must be constructed depicting locations of wells and piezometers and corresponding water level measurements.

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SPECIFIC CONDITIONS (CONT'D):

- i. The Permittee shall initially analyze all ground water samples collected from the monitoring wells required for each phase of the facility as described in Specific Condition 40.b.2 of the permit for parameters listed in Attachment 2 (Initial Groundwater Parameters). Tentative identification of all constituents which register greater than 10 ppb is required.
- j. All sample collection and water quality analysis shall be performed by organizations with approved comprehensive or Generic Quality Assurance Plans (CompQAPs) on file with the Department. The CompQAP shall address all sampling and analysis requirements of this permit. Within 60 days of permit issuance, the Permittee shall submit to the Department for approval the name of the sample collecting organization and laboratory to be utilized. The Department reserves the right to reject all results generated by the Permittee prior to CompQAP approval, or which are not in accordance with the Department approved CompQAP. Sampling and analytical work is also subject to the provisions of FAC Rule 17-28.700(6)(d). In addition, the Permittee shall be in compliance with the provisions of FAC Rule 17-160 within 90 days of the effective date of that rule.
- k. Ground water sampling results shall be reported on the attached Parameter Monitoring Report Form [DER Form 17-1.216(2)] (Attachment 5). In order to facilitate entry of this data into the state computer system, these forms or an exact replica must be used and must not be altered as to content. The original forms should be retained so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DER Parameter Monitoring Report Forms described above. The Permittee shall submit to the Department the results of the ground water monitoring well water quality analysis no later than the fifteenth (15th) day of the month immediately following the end of the sampling period. Quarterly analytical results shall be accompanied by a brief narrative summary. The results shall be sent to the Department of Environmental Regulation, Northeast District, 7825 Baymeadows Way, Suite 200-B, Jacksonville, Florida, 32256-7577.

In addition to the information provided on the Parameter Monitoring Report Form, the following shall be generated:

1. The laboratory report shall indicate the analytical method, the detection limit and the dilution factor used on each data sheet.
2. The report shall show in columnar form the analysis results and, where applicable, the corresponding Florida Groundwater Standards and/or criteria.
3. All peaks greater than the EPA specified detection limit for the analytical method shall be identified.

The Permittee shall submit to the Department a minimum of two complete reports and, upon request by the Department, as many additional reports as the Department deems necessary.

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SPECIFIC CONDITIONS (CONT'D):

The Permittee shall prepare and submit to the Department groundwater surface contour maps, prepared from data collected from all permitted wells on site, for the initial sampling event and each quarterly sampling event. A shallow surficial map, utilizing data from the shallow wells; an intermediate surficial map, utilizing the data from the intermediate wells; and a deep surficial map, utilizing data from the deep wells will be prepared and submitted to the Department, with the groundwater elevation data. This information shall be submitted in conjunction with the initial and quarterly analytical data.

1. All ground water monitoring wells shall be sampled and analyzed quarterly for the parameters listed in Attachment 3 (Quarterly Groundwater Parameters). However, additional samples, wells, and parameters may be required based upon subsequent analyses.

Quarterly groundwater samples in the first year of the permit will be collected from all wells required for each phase of monitoring prior to June 30, 1992, September 30, 1992 and December 30, 1992, respectively. A report of the laboratory data will be submitted to the Department for each quarter no later than July 15, 1992, October 15, 1992, and January 15, 1993, respectively. Quarterly groundwater samples in the following years of the permit will be collected prior to March 30, June 30, September 30, and December 30, of each year respectively. A report of the laboratory data will be submitted to the Department for each quarter no later than April 15, July 15, October 15, and January 15, respectively.

- m. If, at any time, ground water standards and/or criteria are exceeded, the Permittee has fifteen (15) days in which to resample the monitor well(s) to verify the original analysis. Should the Permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility.
- n. Following two (2) years of quarterly sampling, data will be reviewed by the Department to evaluate changes in parameters and sampling frequencies that may be appropriate.
- o. Sixty (60) days prior to the renewal of this permit, the Permittee shall sample and analyze all monitoring wells for the parameters listed on Attachment 1.
- p. Compliance with ground water standards and/or criteria shall be determined by analysis of unfiltered or settled ground water samples.
- q. Within sixty (60) days of issuance of this permit, all piezometers and wells not a part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with F.A.C. Rule 17-21.10(4) and St. Johns River Water Management District Rule 40C3.531. The Permittee shall submit a written report to the Department providing verification of the well plugging and abandonment. A written request for exemption to the plugging and abandonment of a well must be submitted to the Department for approval.

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SPECIFIC CONDITIONS (CONT'D):

- r. F.A.C. Rule 17-28.700(6)(d)11 requires that the ground water monitoring program must inventory and map surface waters within one mile of the landfill. If there are any modifications to surface waters within one mile of the landfill, the Permittee shall upon request submit to the Department a revised inventory and map of surface waters within ninety (90) days.
 - s. F.A.C. Rule 17-28.700(6)(d)7 requires an inventory of all wells within a one (1) mile radius of the landfill, including the owners' names and addresses, well locations, well specifications (well depth, diameter, screened interval, capacity, etc.) and utilization. If there are any changes to the well inventory, the Permittee shall upon request of the Department revise the well inventory and shall submit the revised inventory to the Department within ninety (90) days.
39. In accordance with F.A.C. Rule 17-28.700(6)(d)11, surface water monitoring is required on a quarterly basis in conjunction with the ground water monitoring schedule. The following Surface Water Monitoring Program shall be implemented within ninety (90) days of the issuance of this permit.
- a. The Surface Water Monitoring System shall be designed and operated in accordance with plans submitted to and approved by the Department.
 - b. The surface water monitoring sites shall be located as follows:

<u>Location</u>	<u>Site Number</u>
	SW-1
	SW-2
	SW-3
	As indicated on Drawing No. 9

- c. All surface water sampling sites shall be sampled and analyzed quarterly for the parameters listed in Attachment 4. However, additional sampling sites and parameters may be required based upon subsequent analyses. Following two (2) years of quarterly sampling, data will be reviewed by the Department to evaluate changes in parameters and sampling frequencies that may be appropriate.

In addition to the information provided on the Parameter Monitoring Report Form, the following shall be generated:

1. The laboratory report shall indicate the analytical method, the detection limit and the dilution factor used on each data sheet.
2. The report shall show in columnar form the analysis results and, where applicable, the corresponding Florida Groundwater Standards and/or criteria.
3. All peaks greater than the EPA specified detection limit for the analytical method shall be identified.

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SPECIFIC CONDITIONS (CONT'D):

The Permittee shall submit to the Department a minimum of two complete reports and, upon request by the Department, four additional reports.

40. Closure of the landfill is subject to the provisions of FAC Rules 17-701.070 through 17-701.076. Pursuant to FAC Rule 17-701.072, at least ninety (90) days prior to the date when wastes will no longer be accepted, the Permittee shall submit a closure permit application to the Department for review and approval. The application shall include a closure plan which meets the requirements of FAC Rule 17-701.073.
41. A copy of the Department approved engineering drawings, plans, reports, operational plan, and supporting information shall be kept at this landfill at all times for reference and inspections.
42. The Permittee shall immediately notify the Department by telephone whenever a serious problem occurs at this facility. During regular business hours notification shall be made to the Northeast District Office at (904)448-4300. If an emergency occurs outside regular business hours, the Permittee shall telephone the 24-hour emergency phone number (904)488-1320. This number is for emergencies only. Within 7 days of telephone notification, the Permittee shall submit to the Department a written report explaining the extent of the problem, its cause, and what actions have been or will be taken to correct the problem.
43. The Department shall be notified and prior approval shall be obtained for any changes or revisions made during construction.
44. Receipt of this permit from the Department does not relieve the applicant from obtaining other federal, state, and local permits required by law.
45. A survey of the waste disposal area shall be conducted at the end of each year from the date of permit issuance until it is within ten (10) feet of design height after which it shall be conducted quarterly. This information is to be submitted to the Department within 30 days and shall include the maximum elevation at the design high point, all points designed for terraces, and the location of the toe of the slope.
46. The mitigation plan, "Trail Ridge Landfill Wetland Impacts and Mitigation Plan," submitted on June 18, 1990, shall be appended as a Specific Condition of this permit. Any specific condition requirements listed herein, shall supersede or modify any requirements contained in the appended mitigation plans.
47. Prior to initiating any construction, Permittee must record a conservation easement on the real property pursuant to Section 704.06, F.S., prohibiting all construction including clearing, dredging or filling, except that which is authorized by this permit within the conservation creation/preservation areas as delineated on plans dated as received by the Department on June 18, 1990. The easement must contain provisions as set forth in subsections 1(a)-(b) of Section 704.06, F.S., as well as provisions indicating that they may be enforced by the Department and may not be

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SPECIFIC CONDITIONS (CONT'D):

amended without Department approval. Within 30 days of the date of issuance of this permit and prior to recording, said easement must be submitted to the Department for review and approval. Within 30 days of receipt of Department approval, Permittee must provide to the Department a certified copy of the recorded easement showing the date they were recorded and the official records book and page number.

48. In order to evaluate the effects of the discharging of water from the stormwater management systems by pumping into the adjacent wetlands, the permittee shall establish a monitoring plan which shall include the following:

I. For the Class I Stormwater Management System:

(a) A Base Line Data Study shall be conducted which shall include the following:

(1) A detailed scaled plan site drawing shall be submitted to the Departments Northeast District Office which contains the location of all wetland stormwater discharge structures to include details of the structures. The jurisdictional delineation line shall be depicted on the drawings.

(2) A series of line transects shall be established, divided into appropriate intervals, and vegetation shall be determined by the appropriate methodology which shall be approved, in writing, by the Department. The transect vegetational data shall be compiled in a report format and submitted to the Northeast District of the Department.

(3) The transects shall be established at appropriate intervals along the areas of discharge and extend into the wetland areas to the lowest elevation along each transect line. All transect lines shall be approved by the Department prior to data collection for the Base Line Study. All transects shall be clearly indicated on the site plan drawing required in (1) above.

(4) The transect lines shall be permanently marked and utilized for all wetland stormwater discharge monitoring requirements established in this permit.

(5) Photographs along each established transect line shall be submitted as part of the Base Line Data Study. These photographs shall be labeled so as to graphically depict each interval along each transect line.

(6) At the wetland/upland boundary and at the mid-elevation of each transect as required in (2) above, a piezometer shall be installed to determine ground water elevations in the wetland discharge areas. A reference piezometer shall be established at the same elevation as the mid-elevation piezometer for each transect at a point extended along

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SPECIFIC CONDITIONS (CONT'D):

each transect so as to be at the greatest distance from the stormwater pond. These ground water elevations shall be recorded as part of each transect evaluation the location of each piezometer shall be clearly indicated for each transect as required in (1) above on the scaled site plan for each monitoring report.

(7) The complete Base Line Study shall be submitted to the Northeast District Office prior to the commencement of the construction of the stormwater pond.

(b) The wetland areas of discharge shall be monitored at 1 year intervals commencing one year from the start date of the construction of the stormwater pond until the expiration date of this permit. These monitoring reports shall utilize the transect established in the Base Line Study and shall include all the information required in the Base Line Study. These monitoring reports shall be submitted no later than two (2) weeks after each monitoring event. The monitoring requirements shall be reviewed and/or revised by the Department at the time of renewal of this permit.

(c) The permittee shall notify the Northeast District Office of the Department, in writing, of the start date of the stormwater pond and the date of the first wetland stormwater discharge within seven (7) days of the event.

(d) In the event of any quantified vegetational species compositional changes along any interval of any transect during any monitoring event, the permittee shall include any such changes in that periods monitoring report and include any proposed changes in the discharge schedule to mitigate these changes. The Department shall review the proposed changes and the permittee shall take what remedial actions deemed necessary by the Department.

(e) The permittee shall take all appropriate measures to insure that the wetland stormwater discharge system does not cause erosion into any wetland area during construction and operation.

(f) The wetland stormwater discharge system shall be completed and operational prior to excepting any waste in the Phase I, Class I Landfill.

II. For the Class III Stormwater Management System:

(a) All provisions of paragraphs (a), (b), (c), (d), and (e), shall apply to the Class III Storm Water Management System Wetland Discharge System.

(b) The wetland discharge system shall be completed and operational no later than 180 days from the commencement of the excavation of the Class III Stormwater Management Pond.

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SPECIFIC CONDITIONS (CONT'D):

(c) The permittee shall notify the Northeast District Office of the Department, in writing, of the "start date" of the excavation of the Class III Stormwater Management Pond within 7 days of the commencement of the activity.

49. The initial planting of the mitigation areas, per appended mitigation plan Section 4(b)(4), shall be completed no later than one year after commencement of the construction activities authorized by this permit.
50. The Permittee shall submit an as-built survey of the wetland creation areas showing dimensions, grades, ground elevations, and water surface elevations certified by a registered surveyor or professional engineer. The as-builts must be submitted within thirty (30) days of the initial planting.
51. The Permittee shall furnish the Department with monitoring reports on the wetland creation areas describing:
 - a. Percent survival and diversity of planted species within each stratum;
 - b. Recruitment density and composition within each stratum;
 - c. Recorded growth via established parameters for planted trees and shrubs;
 - d. Percent cover of herbaceous species;
 - e. Surface water elevations referenced to N.G.V.D., or if surface water is not present, groundwater elevation referenced to N.G.V.D.

The first monitoring year shall start as of the planting date and data shall be collected and submitted in accordance with Specific Condition No. 4. Reports to the Department must also include photographs, descriptions of problems encountered, and solutions undertaken.
52. Within the wetland creation areas, non-native vegetation and nuisance vegetation such as Typha spp. shall be controlled by hand clearing or other methods approved by the Department so that they constitute no more than 10% of the areal cover at any monitoring period.
53. Successful establishment of wetland creation shall occur when:
 - a. on an annual basis at least 80% of the planted individuals in each stratum have survived and are showing signs of normal annual growth, based on standard growth parameters such as height and base diameter, or canopy circumference; and
 - b. the above criteria has been achieved and maintained for a three (3)-year period following initial planting
54. In the event that the success criteria as stated in Specific Condition No. 33 are not achieved by the expiration date of this permit, Permittee shall enter into a long-term agreement with the Department so as to ensure the success of the mitigation plan.

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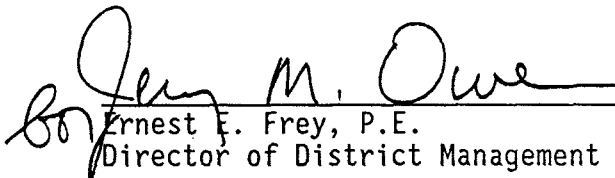
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SPECIFIC CONDITIONS (CONT'D):

55. All wetland areas or water bodies which are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity or dewatering.
56. All disturbed areas adjacent to the mitigation area must be sodded or seeded and mulched within 10 days following their completion and a substantial vegetation cover must be established within 60 days of sodding or seeding.
57. The Permittee shall submit to the Department within sixty (60) days prior to acceptance of wastes, two copies of the final version of the Department approved Operations Plan, including a leachate spillage control plan.
58. Pursuant to FAC Rule 17-4.090, prior to sixty (60) days before the expiration of this permit, the Permittee shall apply for a renewal of the permit on forms and in a manner prescribed by the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Ernest E. Frey, P.E.
Director of District Management