

leb Bush Governor

Department of **Environmental Protection**

South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Colleen M. Castille Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

CERTIFIED MAIL NO. 7005 1160 0000 2711 2375 RETURN RECEIPT REQUESTED

In the matter of an Application for Permit by:

Waste Management Inc. of Florida c/o R. David McConnell, Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339

Re: Lee County - SW

> Gulf Coast Class III Landfill and Recycling Facility - Lateral and Vertical Expansion of Parcel 1 of Closed Class I Landfill

DEP File No. 0128933-015-SC/T3

Enclosed is Permit No. 0128933-015-SC/T3 to construct a Class III Landfill, specifically identified as Gulf Coast Class III Landfill and Recycling Facility, consisting of lateral and vertical expansion of Parcel 1 of the closed Class I Gulf Coast Landfill. The lateral expansion will comprise 57 acres, and the proposed maximum design height will be 120 feet National Geodetic Vertical Datum (NGVD), subject to no objection from Lee County, otherwise it will be 100 feet NGVD. The project is located at 11990 State Road 82 East, City of Fort Myers in Lee County, Florida, issued under Sections 403.061, 403.087 and 403.707 of the Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Rules 62-4, 62-25, 62-160, 62-302, 62-522, 62-701.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68 of the Florida Statutes, by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department in the office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000 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 thirty (30) days after this notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Igléhart

Director of

District Management

Continued...

"More Protection, Less Process"

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Mr. R. David McConnell Gulf Coast Class III Landfill and Recycling Facility DEP File No. 0128933-015-SC/T3 Page 2

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency Clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on 2006, to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk)

(Date)

Enclosure JMI/GAM/se

Copies furnished to:

Robert Mackey, P.E.
John Wong, WMIF
Ray Chewning, WMIF
Richard Tedder, DEP
Chris McGuire, OGC DEP
Jack Chisolm, OGC DEP
Tor Bejnar, DEP
Jeff Gould, DEP
Bill Krumbholz, DEP
Jack D. Myers, DEP



Department of Environmental Protection

Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Colleen M. Castille Secretary

PERMITTEE:

Waste Management Inc. of Florida c/o R. David McConnell, Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339 WACS ID No. 00076728

Permit/Certification No. 0128933-015-SC/T3

Date of Issue: October 31, 2006 Expiration Date: October 31, 2011

County: Lee

Latitude: 26° 36′ 21″ Longitude: 81° 45′ 40″

Section/Township/Range: 36/44S/25E Project: Gulf Coast Class III Landfill and

> Recycling Facility – Lateral and Vertical Expansion of Parcel 1 of Closed Class I Landfill

This Permit is issued pursuant to Sections 403.061, 403.087 and 403.707, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-25, 62-160, 62-302, 62-522, and 62-701. The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings(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 a Class III Landfill, specifically identified as Gulf Coast Class III Landfill and Recycling Facility, consisting of lateral and vertical expansion of Parcel 1 of the closed Class I Gulf Coast Landfill. The lateral expansion will comprise 57 acres, and the proposed maximum design height will be 120 feet National Geodetic Vertical Datum (NGVD), subject to no objection from Lee County, otherwise it will be 100 feet NGVD. The project is located 11990 State Road 82 East, City of Fort Myers in Lee County, Florida.

The Permit is subject to the following fifteen (15) General and twenty-six (26) Specific Conditions. An approved application package is enclosed for your records.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this Permit are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The Permittee is placed on notice that the Department will review this Permit periodically and may initiate enforcement action for any violation of these conditions.

Mr. R. David McConnell Gulf Coast Class III Landfill and Recycling Facility – Lateral and Vertical Expansion of Parcel 1 WACS ID No. 00076728 Permit/Certification No. 0128933-015-SC/T3

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GENERAL CONDITIONS:

- 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) F.S., the issuance of this Permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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 acknowledgement 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 or plant life, or property caused by the construction or operation of this permitted source or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
- 6. Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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 credential or other documents as may be required by law, and at reasonable times, access to the premises where the permitted activity is located or conducted to:

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GENERAL CONDITIONS:

- (a) Have access to and copy any records that must be kept under the conditions of the Permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this Permit: and
- (c) Sample or monitor 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 provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 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. A reasonable time for compliance with a new or amended surface water quality standard, other than

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GENERAL CONDITIONS:

those standards addressed in F.A.C Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

- 11. This Permit is transferable only upon Department approval in accordance with F.A.C Rules 62-4.120 and 62-730.300, 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This Permit also constitutes:
 - (a) Determination of Best Available Control Technology (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
 - (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (d) Compliance with New Source Performance Standards
- 14. The Permittee shall comply with the following:
 - (a) Upon request, the Permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.
 - (b) The Permittee shall hold 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) required by this Permit, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;

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GENERAL CONDITIONS:

- 3. the dates analyses were performed;
- 4. the person responsible for performing the analyses;
- 5. the analytical techniques or methods used;
- 6. the results of such analyses.
- 15. When requested by the Department, the Permittee shall, within a reasonable time, furnish any information required by law, which is needed to determine compliance with the Permit. If the Permittee becomes aware the 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 corrected promptly.

- 1. The construction of the lateral and vertical expansion of the closed Parcel 1 shall be in accordance with the approved application package submitted for this Construction Permit.
- 2. The Permittee shall provide reasonable advance notice to the Department so that the Department can schedule site inspections before and after placement of the geomembrane on the subbase (bedding layer) in the proposed disposal unit(s).
- 3. (a) The Permittee shall submit a Certification of Construction Completion (C.C.C.) [DEP Form 62-701.900(2)] signed, dated, and sealed by a Professional Engineer within thirty (30) days of construction completion of disposal unit(s).
 - (b) The new leachate collection system shall be water pressure cleaned or inspected by video recording, and a report shall be submitted along with the C.C.C.
 - (c) When an Operation Permit is desired, the Permittee shall submit an application on the Department's specified form with the appropriate fee and the required supporting data, well in advance of the intended date of starting operation.
 - (d) Many of the Specific Conditions No. 4-26 pertain to operation of the facility, but included herein to make the Permittee aware of them.

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- 4. A copy of the Operation Plan from the Permit application package, approved by the Department, shall be kept at the disposal facility, shall be accessible to facility operator(s) and made available for inspection by the Department staff. All activities at the facility shall be performed in accordance with this Plan. The Plan shall be updated as operations change and the Department shall be notified of changes.
- 5. A minimum of two (2) trained spotters shall be present at the working face whenever waste is being received. The spotters shall be stationed where they can thoroughly inspect each shipment of waste for prohibited materials.
- 6. The facility is allowed to receive the following types of waste:
 - (a) Construction and Demolition (C&D) Debris
 - (b) Yard Trash
 - (c) Shredded/Cut Tires
 - (d) Asbestos
 - (e) Carpet
 - (f) Glass
 - (g) Plastic
 - (h) Furniture
 - (i) Commercial Wastes, which may include: outdated paper products, outdated non-treated and treated wood products, cardboard materials, outdated metal products, empty plastic and metal containers, and mobile homes
 - (j) Industrial Wastes (non-hazardous), which may include: paper, wood, plastic, Styrofoam, metals, dredging material without liquids that has been tested for parameters of concern as addressed in F.A.C. Rule 62-777, water treatment plant lime sludges without liquids; reject from C&D debris recyclers and Class III Material Recovery facilities that has been properly monitored to preclude the presence of Class I material
 - (k) Agricultural Farm Plastics
 - (1) Any other material with the prior approval of the Department

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- 7. The facility **shall not** receive the following waste for disposal:
 - (a) Vehicles, vessels or containers that once contained fuel;
 - (b) WWTP sand filter material;
 - (c) Ash from yard trash incinerators, except with prior approval from the Department;
 - (d) Reject from C&D debris recyclers and Class III material recovery facilities, which includes Class I material mixed with the reject;
 - (e) Untested dredging material;
 - (f) Brown goods, including small appliances, electronic goods, and cathode ray tubes.
- 8. Permittee is not allowed to process any wood, which has been treated or painted, into mulch.
- 9. Prohibited material shall be removed from the waste stream and placed in secure areas for disposal or recycling at a facility authorized by the Department to receive such waste. Empty receptacles or containers, which were used for hazardous material or waste, shall be removed from the transport vehicle prior to dumping, or immediately after dumping, and placed into a secure container for proper disposal. However, empty C&D debris containers can be disposed of at this landfill.
- 10. If any hazardous waste is identified before or after unloading, the operator shall notify the Department before redirecting/rejecting/reloading/removing the waste, and follow the instructions from the Department. The operator, whenever possible, shall record the name of the person responsible for shipping the waste to the landfill, the generator of the waste and particulars of transport vehicle. The area where the waste is unloaded shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator is responsible for cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.
- 11. The Facility shall be operated to control objectionable odors in accordance with the methods described in the Operation Plan and pursuant to F.A.C. Rule 62-296-320(2). If objectionable odors are detected off-site, the owner or operator shall comply with the requirements of F.A.C. Rule 62-701.530(3)(b).

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- 12. Initial cover (6 inches) on the disposed waste and intermediate cover (minimum 12 inches), in addition to the initial cover, shall consist of soil only. Any alternative material, including soil blend, shall need the prior approval of the Department.
- 13. The initial cover shall be applied weekly. The intermediate cover shall be applied within seven days of cell completion and maintained if additional solid waste will not be deposited within 180 days of cell completion. The landfill owner/operator may remove all or part of the intermediate cover before placing additional waste or installing final cover.
- 14. The entire Class III landfill expansion shall receive final cover within 180 days after the final waste deposit.
- 15. Synthetic barrier layer consisting of geosynthetic clay liner or polyethylene liner of the final cover shall be placed on a 6-inch protective soil layer (bedding material). The top 24-inch-thick protective soil layer on the liner shall consist of 18-inch-thick sand drainage layer and 6-inch-thick topsoil layer over it.
- 16. Reasonable precautions pursuant to F.A.C. Rule 62-296.320(4)(c) shall be taken to control fugitive particulate at the site including truck loading and unloading, truck traffic, and all material processing and disposal activities.
- 17. The Permittee shall record in tons-per-day the amount of solid waste received and materials recovered/recycled. Waste reports shall be compiled monthly, and shall be provided annually to the Department's Tallahassee office with a copy to the District office in Fort Myers.
- 18. The Permittee shall maintain an annual estimate of the remaining life and capacity in cubic yards of the Landfill and report annually to the Department.
- 19. All records and data relating to the physical operation of the facility shall be made available for inspection by the Department staff. The facility shall be open for inspection by the Department employees during normal hours of operation.
- 20. **Water Quality and Leachate Monitoring:** This approved water quality and leachate monitoring program is intended to address the "existing installation"

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SPECIFIC CONDITIONS:

consisting of Parcels 1, 2, and 3; as well as the Class III landfill vertical and lateral expansions of Parcel 1 and Parcel 2.

- (a) The zone of discharge for the "existing installation" (Parcels 1, 2, and 3) pursuant to F.A.C. Rule 62-522 shall be to the property boundary. The vertical zone of discharge shall not extend beyond the top of the upper Hawthorne confining bed.
- (b) The zone of discharge for the Class III landfill lateral expansion area of Parcel 1 shall be one-hundred (100) feet from the edge of the disposal units. The vertical extent of discharge shall not extend beyond the top of the upper Hawthorne confining bed.
- (c) Monitoring Wells numbered 1S, 3S, 5S, 9S, 14S, 18S, 19S, 20S, 21S, and 26S shall be used to monitor groundwater quality within the zone of discharge for the "existing installation" (Parcels 1, 2, and 3).
- (d) Monitoring wells identified as DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, and BG-1 shall be used to monitor the water quality within the zone of discharge for the Class III landfill expansion area of Parcel 1. These wells must be installed prior to waste disposal in this lined area of lateral expansion.

 Routine semiannual monitoring of these wells shall commence upon waste disposal.
- (e) Field sampling to comply with semiannual groundwater monitoring shall be performed preferably in February and August. Field sampling to comply with leachate sampling shall be performed preferably in February.
- (f) Monitor wells 14S, 18S, and 26S are only required to be sampled and analyzed (semiannually) for chloride. Field parameters of pH specific conductivity, turbidity, and temperature must be measured and reported for all sampling events.
- (g) Monitoring wells 1S, 3S, 5S, 9S, 19S, 20S, 21S, DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, and DW-7 shall be sampled and analyzed on a semiannual basis for the parameters below. This is a modified list of parameters contained in

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SPECIFIC CONDITIONS:

F.A.C. Rule 62-701.510(8)(a) and is based on historical groundwater and leachate data available for this facility. The laboratory parameters normally required for testing in F.A.C. Rule 62-701.510(8)(a) were reduced by eliminating those parameters, which have been previously tested for and not detected.

Field Parameters		
Static Water Level	Turbidity	
Specific Conductivity	Temperature	
pH	Colors and Sheens (by observation)	
Dissolved Oxygen		

Inorganic Laboratory Parameters		
Total Ammonia – N	Thallium	
Chlorides	Calcium	
Iron	Arsenic	
Nitrate	Barium	
Sodium	Zinc	
Total Dissolved Solids (TDS)	Antimony	
Potassium	Beryllium	
Sulfate	Cobalt	
Manganese		

Organic Laboratory Parameters		
Benzene	trans-1, 3-Dichloropropene	
Bis-phthalate	Methylene Bromide	
Chloroform	Methyl Ethel Ketone	
1, 4-Dichlorobenzene	Methyl Iodide	
Ethylbenzene	4-Methyl-2-Pentanone	
Acetone	Naphthalene	
Acrylonitrile	Styrene	

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Organic Laboratory Parameters (Continued from Previous Page)		
Bromochloromethane	1, 1, 1, 2-Tetrachloroethane	
1, 2-Dibromo-3-Chloropropane	1, 1, 2, 2-Tetrachloroethane	
o-Dichlorobenzene	Toluene	
p-Dichlorobenzene	1, 1, 1-Trichloroethane	
trans-1, 4-Dichloro-2-Butene	1, 2, 3-Trichloropropane	
cis-1, 2-Dichloroethylene	Vinyl Acetate	
cis-1, 3-Dichloropropene	Vinyl Chloride	
	Xylenes	

- (h) Under the facts of Case No. 96-4995, it is not necessary to add any additional monitor wells, or otherwise modify the groundwater monitoring plan, except as stipulated by Lee County.
- (i) 1. Untreated leachate from the closed Class I landfill area shall be sampled annually at the designated location (LC440A) at the end of the collection system, but before discharging/pumping to the storage system/pond.
 - 2. Untreated leachate from the lined Class III landfill (Parcel 1 expansion) shall be sampled annually at the end of the collection system, but before it is subject to conditions that may change its characteristics (e.g., mixes with leachate from the Closed Class I landfill).
 - 3. Leachate from the closed Class I landfill and from the Class III landfill shall be analyzed separately for the leachate monitoring parameters in accordance with F.A.C. Rule 62-701.510(8)(c) and (d).
 - 4. Permittee, at its own discretion, may sample and analyze leachate from the existing oxidation ponds; however, it is not required by this Permit.
- (j) The water quality and leachate monitoring results, required by F.A.C. Rule 62-701.510(9)(a), shall be submitted within sixty (60) days of the date the Permittee receives a complete report of analysis from the laboratory.

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- (k) The technical report required by F.A.C. Rule 62-701.510(9)(b) shall be submitted within one hundred-twenty (120) days after the completion of each two-year monitoring period.
- (l) All other applicable requirements of F.A.C. Rule 62-701.510 concerning water quality and leachate monitoring shall be done in accordance with the manner and time frames specified therein.
- 21. The Permittee shall comply with Permit(s) issued by Air Resource Management Section of the Department.
- 22. The Permittee shall submit a no objection letter, regarding the proposed vertical expansion from Elevation 100 feet to 120 feet (NGVD), from Lee County before reaching Elevation 96 feet (NGVD) or one year prior to reaching 98 feet (NGVD), whichever comes earlier. Otherwise, the maximum elevation including the final cover shall be 100 feet (NGVD).
- 23. **Closure Schedule**: The Permittee shall at least one year prior to the projected date when wastes will no longer be accepted at the Landfill site, provide written notice to the Department District office with a schedule for cessation of waste acceptance and Landfill closure in accordance with guidelines set forth in F.A.C. Chapter 62-701.600.
- 24. **Closure Plan submittal:** The Permittee shall submit a Closure Plan (engineering drawing sheets and a narrative), revised to include any changes, and to agree with the requirements of F.A.C. Rule 62-701.600 to the Department for approval no less than ninety (90) days prior to the scheduled closing day.
- 25. Closure Design Plan: The Permittee shall submit a Closure Design Plan along with the Closure Plan which shall describe provisions for cover material for long-term care, erosion control, filling areas of subsidence or other depressions, and general maintenance of the facility, and specify the anticipated source and amount of material necessary for proper closure of the Landfill.
- 26. The Permittee shall submit updated closure and long-term care cost estimates or an inflation adjustment statement on DEP Form No. 62-701.900(28), between January 1 and March 1 every year to the FDEP District office in Fort Myers. Financial

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SPECIFIC CONDITIONS:

Assurance documents (insurance bond, certificate, etc.) corresponding to the submitted cost estimates or statements shall be submitted to the FDEP office in Tallahassee to the following address:

Solid Waste Financial Coordinator
Attn: Tor Bejnar
Florida Department of Environmental Protection
2600 Blair Stone Road, Mail Station 4565
Tallahassee, Florida 32399-2400

The above conditions do not exempt the Permittee from complying with requirements of other federal, state, municipal, county or regional pollution control rules, regulations, ordinances, or codes.

This Permit is issued for a period of five (5) years and expires October 31, 2011. If a renewal is desired, the Permittee shall apply for a renewal by submitting the appropriate application form along with the appropriate fee, sixty (60) days prior to the expiration date.

Should you need further information regarding the above, please call Ghous Minhaj, Solid Waste Permitting Engineer, at (239) 332-6975, extension 185.

Note: In the event of an emergency, the Permittee shall contact the Department by calling (850) 413-9911 or toll free at (800) 320-0519. During normal business hours, the Permittee shall call (239) 332-6975.

Sincerely,

Jon M. Igléhart

Director of

District Management

Enclosure JMI/GAM/se



July 17, 2006

Mr. Phillip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection South District P.O. Box 2549 Fort Myers, Florida 33902-2549

RE: Gulf Coast Class III Landfill & Recycling Facility
Permit Application No. 0128933-015-SC/T3
Supplement to the revised Operation Plan submitted in response
to Request for Additional Information (RAI) No. 2 dated March 27, 2006,
and received by DEP on April 18, 2006, regarding final cover

Dear Mr. Barbaccia:

On behalf of Waste Management Inc. of Florida (WMIF), S2L, Incorporated (S2Li) is pleased to provide this letter to confirm WMIF's intent for the final closure of the above referenced site. Final cover will be placed over the entire Class III landfill within 180 days after the final waste deposit.

Further, please be advised that the Class III landfill has been designed to be constructed in phases. WMIF understands that the phases must receive intermediate cover of a minimum 12" in thickness, in addition to the 6" initial cover, if subsequent filling will not occur for six months or longer.

Please feel free to contact me at 407-475-9163 should you have any questions or require any additional information.

Sincerely,

S2L, Incorporated

Robert E. Mackey P.E., Principal Engineer

Florida Registration No. 40176

cc: John Wong – WMIF Ray Chewning – WMIF



June 29, 2006

AL GROW

Mr. Philip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

RE: Gulf Coast Landfill

Parcel 1 - Class III Vertical and Lateral Expansion

Application No. 0128933-015-SC/T3

Request for Additional Information (RAI) No. 3

Dear Mr. Barbaccia:

This letter and attachments are in response to the Florida Department of Environmental Protection Request for Additional Information dated June 8, 2006, for the permit application for the referenced facility. On behalf of Waste Management Inc. of Florida (WMIF), S2L, Incorporated (S2Li) is pleased to submit this response to the Department's request. Enclosed please find four (4) copies of the revised pages and drawings to be inserted into the original permit application. Additionally, we have included one (1) tracked copy of all text changes made.

APPLICATION NARRATIVE: Section 9(3)

Comment i: It is noted that the design will include an interface liner between the closed

unlined Parcel 1, Class I Landfill and the proposed Class III Vertical Expansion. Consequently, please modify the last sentence of description in Application PART B.1 to state that, "The 4-acre vertical expansion will involve the removal of final cover currently on the side slope of Parcel 1, for installation of the proposed

interface liner."

Response: Acknowledged. The last sentence of description in Application PART B.1

has been revised as per Departmental suggestion. Please refer to Attachment 1 of this response letter for revised pages of the Application

Form (Form).

Comment ii: Please label, for perforated leachate collection laterals typical spacing 97 feet to

124 feet apart from the nearest lateral on Drawing 8 [Florida Administrative Code

(F.A.C.) Rules 62-701.400 and 62-701.430].

Response: Drawing 8 has been revised to add a note in the legend to suggest that the

perforated leachate collection laterals are typically spaced 97' to 124' apart from the nearest lateral. The revised engineering drawings are provided in

Attachment 2 of this response letter.

June 29, 2006

Mr. Philip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection Page 2

APPENDIX J: Closure and Long-term Care Estimates

Comment i: Please modify the name on the Financial Assurance Form, Item I, to "Gulf Coast

Class III Landfill and Recycling Facility" and add "Closed Parcel 1, Lateral and Vertical Expansion" under it, and provide a footnote to clarify that Parcel 1 is of

Gulf Coast Class I Landfill.

Response: The facility name on the Financial Assurance Form, Item I, has been

modified to "Gulf Coast Class III Landfill and Recycling Facility, Closed Parcel 1, Lateral and Vertical Expansion." A footnote has been added to clarify that "Parcel 1 is of Gulf Coast Class I Landfill." The revised pages of the Financial Assurance Form are provided in Attachment 3 of this

response letter.

Comment ii: Please add "Entire Site, including Closed Parcel 1, 2 and 3" under Phase/Cell

and furnish acreage "280" [F.A.C. Rule 62-701.630].

Response: A note to indicate that the entire site, including Closed Parcels 1, 2, and 3,

encompasses 280 acres has been added under Phase/Cell of the Financial Assurance Form. The revised pages of the Financial Assurance Form are

provided in Attachment 3 of this response letter.

DRAWINGS

Comment i: The revised Drawings 2A, 2B, 4, 5 and 6 do not have reference to a datum. All

elevations shall be referenced to National Geodetic Vertical Datum (NGVD). Instead of furnishing a note on each drawing and submitting the revised drawings, it is suggested that a note to this effect may be added to the COVER

SHEET, Drawing 1 [F.A.C. Rule 62-701.320(7)(f)6].

Response: Acknowledged. A note has been added on the Cover Sheet, Drawing 1, to indicate that all elevations shown in the Engineering Drawings are

referenced to the National Geodetic Vertical Datum (NGVD). Please refer to

Attachment 2 of this response letter for revised engineering drawings.

Comment ii: Please clarify the reference to Drawing 2, because there is no Drawing 2 in the

submittal, but there are Drawings 2A and 2B.

Response: S2Li apologizes for providing an incorrect reference to Drawing 2 in the

response to Request for Additional Information dated 5-17-2006 and wishes

to clarify that the correct reference was meant for Drawings 2A and 2B.

Comment iii: Drawing 11, referenced in the third paragraph of Section 12, APPLICATION

NARRATIVE could not be located in the submittal. Please submit it [F.A.C. Rule

62-701.320(7)(f)].

Response: S2Li apologizes for providing an incorrect reference to Drawing 11 in the

third paragraph of Section 12, APPLICATION NARRATIVE (Narrative). The

third paragraph of Section 12 of the Narrative has been amended to

indicate that the reference was to Drawing 10. Please refer to Attachment 4 for the revised pages of the Narrative.

Comment iv: Please submit the BOUNDARY SURVEY, Drawing 12, with the seal and original

signature of the professional land surveyor [F.A.C. Rule 62-701.320(f)].

Response: A BOUNDAY SURVEY (Drawing 12 of Appendix C), signed and sealed by a

professional land surveyor, is provided in Attachment 2 of this response

letter.

Please feel free to contact me at 407-475-9163 if you have any questions or require any additional information.

Sincerely,

S2L, Incorporated

Robert E. Mackey, P. Principal Engineer

Florida Registration No. 40176

Enclosures

cc: John Wong – WMIF w/enc. Ray Chewning – WMIF w/enc.

I:\S2Li PROJECTS\WM-West FL\04-172 Gulf Coast - Design, Permit Lined Class III LF\Deliverables\RAI 3 (06-08-2006)\Response to FDEP RAI d 6-08-06.doc

ATTACHMENTS

- 1 Revised DIVISION 1 DEP Form 62-701.900(1) Application for Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility (changed pages)
- 2 Revised Engineering Drawings (Appendix C)
 - Drawings 1, 8, and 12
- 3 Revised Closure Cost and Long-Term Care Estimates (Appendix J) (changed page)
- 4 Revised DIVISION 2 Application Narrative (changed pages)

JUL 0 3 2006

D.E.P.- South District



May 17, 2006

Mr. Philip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

RE: Gulf Coast Landfill

Parcel 1 – Class III Vertical and Lateral Expansion

Application No. 0128933-015-SC/T3

Request for Additional Information (RAI) No. 2

Dear Mr. Barbaccia:

This letter and attachments are in response to the Florida Department of Environmental Protection Request for Additional Information dated March 27, 2006, for the permit application for the referenced facility. On behalf of Waste Management Inc. of Florida (WMIF), S2L, Incorporated (S2Li) is pleased to submit this response to the Department's request. Enclosed please find four (4) copies of the revised pages and drawings to be inserted into the original permit application. Additionally, we have included one (1) tracked copy of all text changes made.

APPLICATION FORM

Comment PART H.5a(3)(e): Please modify the reference to "Application to Renew Permit No. SO36-180572" on the Application Form, Page 21/40 and in the APPLICATION NARRATIVE, Section 9(6)(b) [Florida Administrative Code (F.A.C.) Rule 62-701.400(6)].

Response: Acknowledged. The previously submitted document in reference to Item H.5.a (3)(e), on page 21/40 of the application form (Form), is modified as per the Department's suggestion. The revised pages of the Form and table of content are provided in Attachment 1 of this response letter.

Comment PART I.1.i: The Response states that the expansion area is reduced, but the change from the original application is not described in the revised APPLICATION NARRATIVE, Section 1. INTRODUCTION [F.A.C. Rule 62-701.320(7)(d)].

Response: Acknowledged. Section 1 of the application narrative (Narrative) is amended to describe the reduction in the proposed disposal area from 77 acres to 61 acres. Please refer to Attachment 2 for revised pages of the Narrative.

<u>Comment PART S</u>: Please see Comment PART I.1.i. The reduction in the proposed disposal area is required to be addressed [F.A.C. Rule 62-701.630].

Response: Acknowledged. Please refer to response to Part I.1.a.

APPLICATION NARRATIVE

Comment Section 8(1): Performance Standards is not revised in accordance with the response [F.A.C. Rule 62-701.340(1)].

Response: Acknowledged.

Comment Section 9(3): The narrative addresses the "old" final cover barrier layer permitted for the Closure of Parcel 1. This argument is not relevant to our requirement to line the expansion disposal unit. The determination for a vertical expansion liner is based on the "old" landfill's bottom liner, not its top liner. F.A.C. Rule 62-701.430(1)(c)1 specifically states that, for vertical expansion over unlined landfills, a single membrane geomembrane slope liner overlain by a leachate collection and removal system (LCRS) is required.

The narrative also addresses the expected life [APPLICATION PART A.14 and APPLICATION NARRATIVE SECTION 7(3)(E)] of the proposed lateral/vertical expansion unit. Again, the argument is not relevant. F.A.C. Rule 62-701.430 does not address the life expectancy of the proposed disposal unit. F.A.C. Rule 62-701.430(1)(3)7 addressing Class III landfill vertical expansion refers back to F.A.C. Rule 62-701.340(3)(c). Using this Rule, the Department required WMIF to line the new Class III lateral/vertical expansion. Our determination to require a bottom liner was based on the fact that the expansion will not fall within the existing footprint of the landfill site; the fact that the expansion will not be exempt from the secondary groundwater standards. However the response to the comment on APPLICATION NARRATIVE Section 8 notes this, but the narrative on Page 8 is not revised.

The response to the comment on APPLICATION Part B.24 has been reviewed and, as agreed in responses to the comment on APPLICATION NARRATIVE Section 9(3), the Department will be contacted to arrange a meeting to discuss this issue.

Response:

Acknowledged. WMIF is proposing to install an interface liner between the closed unlined Class I landfill and the proposed Class III vertical expansion landfill. The interface liner will consist of a single 60-mil high density polyethylene (HDPE) geomembrane that will be installed on the north side slope of Parcel 1. During the construction of the bottom liner system within phases 4 and 5 of the lateral expansion area, WMIF will install the geomembrane component of the bottom liner system to the top of Parcel 1 side slope instead of terminating it at the bottom of the side slope. The geomembrane will be supported by an anchor trench on the top of the side slope. The drainage layer on top of the interface liner will be comprised of 2' of sand with a permeability of 1x10-3 cm/sec, which is chemically resistant to the waste and leachate. The liner bedding will consist of at least 2' of soil between the liner and the waste material.

The leachate generated within the drainage layer of the interface liner will be collected by means of 4" ADS® or equivalent corrugated perforated HDPE pipes with polyester sock to minimize soil intrusion. Based on the hydrologic evaluation landfill performance (HELP) model and Giroud's head over liner equation, the collection pipes will be installed at a maximum distance of 94' in order to limit the head over the interface liner to less than one (1) foot. The proposed pipes will be required for the control of leachate head for a relatively short period of time (less than 36 months) between filling of the interface area and landfill closure above the interface liner portion of the landfill. Based on application of the HELP model, once final cover is installed over the sideslope, the leachate impingement rate over the interface liner reduces drastically to trace amounts, thereby eliminating the need for the proposed leachate collection pipes to maintain head at less than one foot. Please refer to Attachment 6 of this response letter for the HELP model results and Giroud's head over liner equation. These two results have been added as an addendum (Appendix T) to the original application. Detail 26, shown on Drawing 10 in Appendix C, has been revised to show the proposed interface liner and anchor trench.

WMIF is also proposing to install two (2) additional 6" HDPE perforated leachate collection laterals at the bottom of the north side slope and within the lined expansion area of Parcel 1. These laterals will gravity drain the additional leachate that is generated from the drainage layer of the interface liner to 6" HDPE non-perforated leachate collection header pipes. The base grades shown on Drawing 8 in Appendix C have been revised since the original submittal to accommodate the additional 6" perforated HDPE leachate collection laterals and 6" solid HDPE leachate collection header pipes. Details 15 and 29, shown on Drawings 9 and 10 in Appendix C, respectively, have been revised to add a note indicating that there is a 2" clearance between the pipe and the top of the composite drainage net (CDN).

The perforated 6" leachate collection laterals have been designed with a maximum slope of 0.86% and typically spaced from 97' to 124' apart from the nearest lateral, as shown on Drawing 8 in Appendix C. The maximum spacing between each lateral piping has been amended within Section 9(4)(b) of the Narrative. The 6" non-perforated HDPE leachate collection header pipes have been designed to have a minimum post settlement slope of 0.35%.

An active landfill gas (LFG) collection system is installed on Parcel 1 that will continue to be operated during the proposed expansion and during the post-closure period of the entire Gulf Coast Landfill. The vertical LFG extraction wells, W-21, W-22, W-23, and W-24, installed on top of Parcel 1, have an adequate radius of influence to collect gas that may accumulate beneath the interface liner that will be installed on the north side slope of

Parcel 1. Therefore, WMIF is not proposing to install additional gas collection piping to vent gas from underneath the interface liner.

WMIF has updated its anticipated construction costs on page 5/40 of the Form to include the cost of installing the interface liner, 2' drainage sand, 4" ADS® corrugated perforated HDPE pipe with sock, additional 6" perforated HDPE leachate collection pipes, and the additional 6" nonperforated leachate collection header. Approximately 16,100 yd2 of 60-mil HDPE liner will be required on the north side slope of Parcel 1. The HDPE liner will be obtained at an installed cost of approximately \$3/yd2. Approximately 10,700 yd³ of drainage sand will be required, which can be obtained at a cost of \$10/yd3. Approximately 1,640 ft of 4" ADS® corrugated perforated pipe HDPE pipes will be installed on the side slope of Parcel 1. which can be obtained at a cost of \$1.80/LF. Approximately 1,080 ft of additional 6" perforated HDPE leachate collection pipes, 334 ft³ of rounded river rock, and 1,280 yd² of 8-ounce geotextile, required for the bottom liner leachate collection system, can be obtained at a cost of \$10/LF, \$9.75/ ft3, and \$1.68/yd², respectively. Approximately 212 ft of additional 6" nonperforated leachate collection header will be required, which can be obtained at a cost of \$6/LF. The total construction cost on page 5/40 of the Form is updated from the original amount of \$4,700,000 to \$4,876,147, to include the cost of installing an interface liner and associated leachate collection piping. Please refer to Attachment 1 for revised pages of the Form.

Sections 12(1) and 12(2)(b) of the Narrative are revised to describe WMIF's intent in installing an interface liner. The revised pages of the Narrative and engineering drawings are provided in Attachments 2 and 3 of this response letter, respectively.

Comment Section 9(4)(a): The amount of leachate that will be discharged outside of the liner over the expected life of the disposal unit (Phases 1 thru 5, plus closure in Attachment 6) is not acceptable. Phase 1 equals 1,075,000 gal/year; Phase 2 equals 1,075,000 gal/yr; Phase 3 equals 1,075,000 gal/yr; Phase 4 equals 1,763,000 gal/yr; Phase 5 equals 1,753,000 gal/yr; and Closure equals 74,000 gal/yr. There is no point in requiring that a CQA Plan be used to assure minimal or no leakage in construction of the bottom liner, if we don't require that vertical expansion over closed Parcel 1 be lined [F.A.C. Rule 62-701.500(8)].

Response: Acknowledged. WMIF will install a 60-mil high density polyethylene (HDPE) liner between the closed unlined Class I landfill and the proposed Class III landfill, as discussed in response to Section 9(3).

Comment Section 13(2): The clarification in the response is not acceptable. It is made clear (again) that personnel operating equipment cannot replace trained spotters at the working face/tipping area. OGC Case No. 05-2826-11-SW demonstrated that unauthorized waste was accepted at two different landfills, operated by WMIF, when equipment operators (without the aid of trained spotters) acted as spotter.

May 17, 2006

Mr. Philip A. Barbaccia, Environmental Administrator

Florida Department of Environmental Protection

Page 5

Please modify the OPERATION AND CONTINGENCY PLAN accordingly [F.A.C. Rule 62-701.500(2)(c)].

Response:

Acknowledged. Based on a discussion between WMIF and Department personnel, it was agreed that WMIF would use an excavator with thumb and a spotter/equipment operator as an acceptable option for the monitoring of waste disposal at the working face. The text within the Operation and Contingency Plan (Operation Plan) in Appendix B, part c, has been amended to reflect this waste monitoring procedure. Please refer to Attachment 4 for revised pages of the Operation Plan.

APPENDIX J

Comment 1: Please correct the typographical error "61 areas" to "61 acres" in the first paragraph of the letter dated March 1, 2006.

Response: S2Li apologizes for the typographical error in the first paragraph of the cost estimate description letter. The error has been corrected and an updated descriptive letter is provided in Attachment 5 of this response letter.

Comment 2: Please include updated closure and long-term care cost estimates for the Year 2006, because they are due between January 1 and March 1 of each year.

Response: Acknowledged. The updated closure cost and long-term care estimate, based on the 2006 unit costs, are provided in Attachment 5 of this response letter.

Comment 3: Please clarify 61-acre in Item 1 on Page 2 of the referenced letter [F.A.C. Rule 62-701.630].

Response: S2Li has revised the descriptive letter to clarify that the closure cost estimate is based on the closure of 61-acres. Please refer to Attachment 5 of this response letter for an updated descriptive letter, closure cost estimate, and the long-term care estimate.

DRAWINGS

Comment 2: Please show the flow of waste traffic with arrows to the new scale house and then to the disposal unit(s) [F.A.C. Rules 62-701.500(4)(a) and 62-701.330(3)].

Response: Drawings 4, 5 and 6 have been revised to show the flow of waste traffic with arrows to the new scale house and to each disposal unit. Please refer to Attachment 3 of this response letter for revised engineering drawings.

An updated topographic survey (dated 12/14/05) is provided in Drawings 2A and 2B. S2Li wishes to clarify that the total property area shown as 606 acres in the previously submitted documents to FDEP, erroneously

included an adjacent property owned by Sadisco of Florida. The property owned by WMIF's Gulf Coast Class III Landfill and Recycling Facility is 588 acres, as shown on Drawings 2A and 2B in Appendix C.

S2Li also wishes to clarify that a property boundary, referenced in note 1 on Drawings 2A and 2B of Appendix C, was originally surveyed by Ink Engineering in October 2000, and updated in December 2004. This property boundary was provided to the FDEP, South District, within Appendix H, Application for Landfill Class III Expansion Environmental Resource Permit No. 36-0247969-001. No changes to the property boundary have occurred since the time of previous submittal. A copy of the boundary survey is provided within Attachment 3 of this letter as an addendum (Drawing 12) to the Engineering Drawings (Appendix C). Note 1 on Drawing 2 of Appendix C is revised to reference the attached boundary survey. Subsequently, all applicable pages of the Narrative are revised to include the reference to the attached boundary survey. Please refer to Attachment 2 of this response letter for revised pages of the Narrative.

Please feel free to contact me at 407-475-9163 if you have any questions or require any additional information.

Sincerely,

S2L, Incorporated

Robert E. Mackey, P. E. Principal Engineer

Florida Registration No. 40176

Enclosures 😗

cc: John Wong – WMIF w/enc. Ray Chewning – WMIF w/enc.

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ATTACHMENTS

- 1 Table of Contents and revised DIVISION 1 DEP Form 62-701.900(1) Application for Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility (changed pages)
- 2 Revised DIVISION 2 Application Narrative (changed and repaginated pages)
- 3 Revised Engineering Drawings (Appendix C)
 - Drawings 1, 2A, 2B, 4, 5, 6, 8, 9, and 10
 - Drawing 12 (new drawing)
- 4 Revised Operation and Contingency Plan (Appendix B)
- 5 Revised Closure Cost and Long-Term Care Estimates (Appendix J)
- 6 New Appendix T Hydrologic Evaluation of Landfill Performance (HELP) Model and Giroud's Equation Results

2006 A 2006



March 1, 2006

Mr. Philip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

RE: Gulf Coast Landfill

Parcel 1 – Class III Vertical and Lateral Expansion

Application No. 0128933-015-SC/T3

Request for Additional Information (RAI) No. 1

Dear Mr. Barbaccia:

This letter and attachments are in response to the Florida Department of Environmental Protection Request for Additional Information dated October 28, 2005, for the permit application for the referenced facility. On behalf of Waste Management Inc. of Florida (WMIF), S2L, Incorporated (S2Li) is pleased to submit this response to the Department's request. Enclosed please find four (4) copies of the revised pages and drawings to be inserted into the original permit application. Additionally, we have included one (1) tracked copy of all text changes made.

APPLICATION FORM

Comment PART A.13: Please furnish an anticipated date when the first disposal unit will be ready for receiving waste.

Response:

It is anticipated that the first disposal unit will be ready for waste disposal within 1 year of permit issuance. Item A.13 of the application form (Form) has been amended to indicate the inspection date. The revised page 5/40 of the Form is provided in Attachment 1 of the response letter. Also included within Attachment 1 is the revised Table of Contents.

Comment PART A.15: Please include the cost of preparing the closed Parcel 1 area for receiving waste.

Response:

WMIF is proposing to limit the area of vertical expansion to include only the north sideslope of Parcel 1. When the vertical expansion is implemented, WMIF will strip away the existing cover over the sideslope as part of their daily operation. Therefore, the area exposed at any one time will be very limited. No changes to the existing landfill gas collection system have been proposed with this permit application, and, as a result, there will be no additional cost associated with preparing the closed sideslope of the Parcel 1 area for receiving waste. As such, no changes are made to Item A.15 on page 15/40 of the Form.

Comment PART A.16: Please furnish the anticipated dates of construction starting and completion.

Response:

WMIF anticipates construction of the first disposal unit to start within 3 months of permit issuance and end within 1 year of permit issuance. The anticipated start and end dates of construction have been provided on page 5/40 of the Form (Attachment 1).

Comment PART B.1: Please include the design maximum elevation (NGVD) of the proposed landfill and the existing elevation of Closed Parcel 1. Please see Comment PART E.13 below regarding design maximum elevation.

Response:

The reference to the proposed design maximum elevation of 120' National Geodetic Vertical Datum (NGVD) has been included in the description of Item B.1 on page 6/40 of the Form. Please refer to Attachment 1 of this response letter for revised pages of the Form.

Comment PART B.3: Please delete the figures "21" and "56" from "Used" and "Available", because no acres have been used or constructed for the proposed expansion.

Response:

It is WMIF's intent to limit the extent of the proposed vertical expansion to include only the north sideslope of Parcel 1. As a result, the revised area of lateral and vertical expansion has been reduced from 77-acres to approximately 61 acres. The figures referring to the "used" and "available" disposal area on Item B.3 (page 6/40) of the Form have been amended: the numbers '21' and '56' have been replaced by '0' and '61', respectively. Please refer to Attachment 1 of this response letter for revised pages of the Form.

Comment PART B.24: The Department requires justification for not using an interface liner between the existing Parcel 1 and the proposed expansion [Florida Administrative Code (F.A.C.) Rule 62-701.430].

Response:

Item B.24 does not refer to landfill liner requirements, however Item B.21 does. Parcel 1 is currently closed and utilizes a barrier layer in this closure that met Department requirements at the time of closure. This barrier layer consists of low permeability soil with a hydraulic conductivity of 4 x 10⁻⁶ cm/sec. When the vertical expansion of Parcel 1 is implemented, the barrier layer over the side slope will be stripped away during the filling of Phase 4. For the interim period between when this barrier layer is removed and when the new proposed barrier layer is installed, the infiltration into the waste pile may be expected to be greater than currently experienced. Precipitation that falls within the active area will not be allowed to run off into the storm water management system, while that not falling directly into the active area will continue to be released into the storm water system. For the much longer period after the new geosynthetic clay liner (GCL) or linear low density polyethylene (LLDPE) Super GripNet geomembrane barrier layer has been placed, infiltration into the waste pile should

decrease dramatically in comparison to the rate associated with the currently constructed closure. The proposed GCL barrier layer option provides a hydraulic conductivity of less than 5 x 10⁻⁹ cm/sec, providing a much more effective barrier to infiltration (with an LLDPE barrier providing even less infiltration). The performance of HELP Model runs provided in Attachment 2 of this response letter indicates that the proposed landfill closure will significantly reduce leachate generation in comparison to that being generated through the currently installed landfill cap. The HELP Model result has been inserted as an addendum to the original application (as Appendix R). All applicable sections of the application Narrative (Narrative) have been revised to indicate the reference to Appendix R, and are provided within Attachment 3 of this response letter.

Comment PART E.7: Please include Section 13 for the Operation Plan.

Response:

Item E.7 on page 12/40 of the Form has been revised to include Section 13 as a reference for the Operation Plan. Please refer to Attachment 1 of the response letter for revised pages of the Form.

Comment PART E.13: The Department did not receive a copy of the Notice of Application published in a newspaper and affidavit of publication. Please clarify whether the existing top elevation of Parcel 1 and maximum design elevation of the proposed landfill were included in the notice. Please submit copies of notice mailed to elected officials.

Please note to submit a no objection letter from Lee County and reference to Florida Statute (F.S.) that allow the proposed maximum elevation.

Response:

S2Li apologizes for not providing a copy of the Notice of Application (Notice) to the FDEP, South District. The Notice was published in the News Press on October 21, 2005 and proof of publication was subsequently provided to the FDEP on November 1, 2005. The existing top elevation of Parcel 1 and maximum design elevation of the proposed landfill were not included in the Notice. Copies of Notice of Application to elected officials were also provided to the Department with the November 1, 2005 correspondence.

WMIF is in the process of obtaining an evidence of approval from Lee County (County) to raise the maximum elevation of the proposed landfill to 120' NGVD. A copy will be forwarded to the Department upon receipt from the County. WMIF respectfully requests that the Department include a specific condition in the permit that requires WMIF to provide a copy of the aforementioned approval to the Department prior to raising the landfill elevation above 100' NGVD.

Comment PART E.15: Please note Section 6(15) and Appendix H include In-house Training of spotter. Please delete this training, because the forthcoming Rule will not allow it.

March 1, 2006

Mr. Philip A. Barbaccia, Environmental Administrator

Florida Department of Environmental Protection

Page 4

Response:

WMIF will abide by the new Rule for spotters at the time it becomes effective, and subsequently update their training plan via a permit modification. No changes to Section 6(15) of the Narrative and Appendix H have been made with this response to RAI.

Comment PART F.3.g: Drawings 2A and 2B do not clearly show the access control. Please describe fencing or other measures to restrict access [F.A.C. Rule 62-701.330(c)].

Response:

S2Li regrets not clearly showing the access control methods on Drawings 2A and 2B. The current method of preventing unauthorized waste disposal and access to and use of the facility is by means of fencing, gates, or other barriers, as well as signs and facility personnel. The reference to Drawings 2A and 2B has been deleted and replaced with the reference to Drawing 3 to show fencing around the GCLF. Please refer to Attachment 4 of the response letter for revised engineering drawings. Item F.3.g on page 14/40 of the Form has been revised to indicate the reference to Drawing 3. The revised pages of the Form are provided in Attachment 1 of this response letter.

Comment PART F.4.c: Please refer to Drawing 3/11 because Drawings 2A and 2B show the inside roads from the entrance [F.A.C. Rule 62-701.330(3)(d)].

Response:

Acknowledged. The reference to Drawings 2A and 2B has been deleted and replaced with the reference to Drawing 3 for location of access roads. Please refer to Attachment 4 of the response letter for revised engineering drawings. The revised page 14/40 of the Form is provided in Attachment 1 of this response letter.

Comment PART F.4.g: Please see PART F.3.g above.

Response:

Acknowledged. The reference to Drawings 2A and 2B has been deleted and replaced with the reference to Drawing 3 to show fencing around the GCLF. Please refer to Attachment 4 of the response letter for revised engineering drawings. Item F.4.g on page 15/40 of the Form has been revised to indicate the reference to Drawing 3. The revised pages of the Form are provided in Attachment 1 of this response letter.

Comment PART F.6: Please provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160 F.A.C. [F.A.C. 62-701.330(3)(h)].

Response:

The approved laboratory to conduct water quality monitoring in accordance with Chapter 62-160, FAC at the GCLF is STL Laboratories, 4955 Yarrow Street, Arvada, Colorado. STL-Denver is an FDEP-approved, National Environmental Laboratory Accreditation Program (NELAP) certified analytical laboratory, DOH ID No. 87667. Evidence of the laboratory has been submitted to the Department in the past and is still

valid. WMIF does not intend to change the laboratory employed to conduct water quality monitoring at the GCLF. As a result, Item F.6 on page 15/40 of the Form has been revised to denote it as a "No substantial change (N/C)" item. Please refer to FDEP PERMIT RENEWAL APPLICATION NARRATIVE, SECTION 62-701.340 - GENERAL CRITERIA FOR LANDFILLS and APPENDIX E, Renewal Application No. SO36-267692, Response to FDEP Comments, for the original document. A footnote indicating the original document has been provided on page 15/40 of the Form.

Section 7(3)(h) of the Narrative has been amended to include the aforementioned reference to the original document. Please refer to Attachment 3 of this response letter for revised pages of the Narrative. Revised pages of the Form are provided within Attachment 1 of this response letter.

Comment PART H.2.a(2): Please address foundation and base below the liner; it is not addressed in Section 9(3).

Response:

The landfill base will be sloped at a minimum of 2% toward the nearest leachate collection lateral. To accommodate for predicted landfill settlement of 1" for every 6.66 ft. of waste placed, the leachate collection laterals have been designed to have, at a minimum, a post settlement slope of 0.35%. It is WMIF's understanding that the underlying soil hydrology is adequate to prevent differential settlement of the landfill and to prevent liner failure. A copy of the hydrogeological/geotechnical report has been provided to the Department in Appendix I of the original permit application. Section 9(3) of the Narrative has been amended to address the foundation and base below the liner. Please refer to Attachment 3 in this response letter for the revised pages of the Narrative. Item H.2.a(2) on page 16/40 of the Form has also been revised to indicate the reference to the hydrogeological/geotechnical investigation report and the applicable section within the Narrative.

<u>Comment PART H.2.a(3)</u>: Please furnish the range of groundwater elevation and elevation of bottom liner.

Response:

Based on the hydrogeological/geotechnical investigations conducted at the GCLF, the seasonal high water table is estimated to range between el. 21.5' and el. 22' NGVD. The bottom liner will be constructed between el. 22' (at the sump location) and 30' NGVD. The bottom liner system is not anticipated to be adversely impacted with fluctuations in the groundwater. Section 9(3) of the Narrative has been amended to address the groundwater and bottom liner elevations. Please refer to Attachment 3 in this response letter for the revised pages of the Narrative.

Comment PART H.2.a(4): Please see the above comment.

Response:

The seasonal high water table is estimated to range between el. 21.5' and el. 22' NGVD based on the hydrogeological/geotechnical investigation provided in Appendix I of the original permit application. The bottom liner will be constructed between el. 22' (at the sump location) and el. 30' NGVD; therefore, the requirements of this Rule are not applicable. Item H.2.a(4) on page 16/40 of the Form and Section 9(3) of the Narrative have been revised to indicate that Rule 62-701.400(3)(a)(4), FAC is not applicable. Please refer to Attachments 1 and 3 of this response letter for revised pages of the Form and Narrative.

<u>Comment PART H.2.a(5)</u>: Please address the existing elevation and bottom elevation of the proposed liner.

Response:

The existing ground surface where the liner will be installed is between el. 22' and el. 27.5' NGVD. The bottom liner will be installed between el. 22' (at the sump location) and el. 30' NGVD to adequately cover all the surrounding earth that would come in contact with the waste or leachate. Section 9(3) of the Narrative has been amended to address the requirements of Rule 62-701.400(2)(a)(5), FAC. Please refer to Attachment 3 of this response letter for revised pages of the Narrative. Subsequently, Item H.2.a(5), on page 16/40 of the Form, has been revised and provided within Attachment 1 of this response letter.

Comment PART H.5.a(3)(e): Please address daily inspection requirements regarding surface impoundments and notification and corrective action requirements if leakage rates exceed calculations [F.A.C. Rule 62-701.400(6)(b)].

Response:

WMIF currently utilizes three (3) surface impoundments to store leachate that is collected from closed Parcel 3 (closed Class I lined landfill). The design of these surface impoundments has already met the requirements outlined in Rule 62-701.400(6), FAC, including the daily inspection requirements and notification and corrective action requirements if leakage rates exceed calculations. If the daily checks indicate the upper liner is leaking at a rate greater than the design calculations, the Department will be notified by WMIF. If the leakage rate results in the flooding of the leak detection and collection system, WMIF will empty the surface impoundment and repair the liner system.

Information pertaining to the design and daily operation of the existing leachate impoundments has been provided to the FDEP in the past and remains valid. Please refer to FDEP PERMIT RENEWAL APPLICATION FORM NARRATIVE, Section 62-701.400, and APPENDIX F, Application to Operation Permit Renewal SO36-180572, submitted to the FDEP in June 1995. Page 21/40 of the Form has been revised to indicate that Items H.5.a(3)(a)-(d) and H.5.a(4) are N/C items and the complete reference to the original documentation that addresses the construction and operation of the surface impoundment is indicated via a footnote at the bottom of page

21/40 of the Form. Please refer to Attachment 1 of this response letter for revised pages of the Form.

Comment PART H.5.a(5): Please address 2 ft. free board in the leachate collection ponds [F.A.C. Rule 62-701.400(6)(b)].

Response:

WMIF will maintain a minimum of 2-ft free board in the leachate collection ponds to remain in accordance with Rule 62-701.400(6)(b), FAC. This will be achieved by means of, but not limited to, increasing the frequency and number of leachate disposal trucks or via direct disposal to the City of Fort Myers' wastewater treatment plant. Section 9(6) of the Narrative has been amended to address the requirement of Rule 62-701.400(6)(b), FAC. Please refer to Attachment 3 of this response letter for revised pages of the Narrative.

Comment PART I.1.g: Appendix N is regarding gas collection. Please furnish the correct reference or address public and private wells within a one-mile radius [F.A.C. 62-701.410(1)].

Response:

S2Li regrets providing an incorrect reference for the Appendix that contains all public and potable wells within one mile radius of the proposed landfill. Item I.1.g on page 25/40 of the Form has been revised to indicate that the well inventory is provided within Appendix O of the original permit application. Please refer to Attachment 1 for revised pages of the Form.

<u>Comment PART I.1.i</u>: Please furnish the correct reference regarding map showing all potable wells, community water supply wells, etc.

Response:

Acknowledged. A map showing all potable wells within 500' and all community water supply wells within 1000' of the waste storage and disposal areas is provided within Appendix O of the original permit application. Item I.1.i on page 25/40 of the Form has been revised to indicate the aforementioned reference. All revised pages of the Form are provided within Attachment 1 of this response letter. The well location map (Figure 1) has been revised to demonstrate the reduced expansion area and is provided within Attachment 8 of this response letter.

Comment PART L.5: Please describe the access control in detail.

Response:

The description of access control is provided within Section 13(5) of the Narrative, and the Operation and Contingency Plan (Appendix B). Unauthorized waste disposal and access to and use of the facility is and shall continue to be controlled by fencing, gates, or other barriers, as well as signs and facility personnel. Public access and receipt of wastes shall occur only when an attendant is on duty. Gates at all roadway access points are kept locked outside of normal working hours. All refuse traffic will be required to pass by the scale house to gain entry to active portions

Mr. Philip A. Barbaccia, Environmental Administrator

Florida Department of Environmental Protection

Page 8

of the landfill. Please refer to Attachment 3 for revised pages of the Narrative.

Comment PART M: The submitted groundwater monitoring plan has to be discussed in the background of the existing one. Please call Jeff Gould, P.G. of our office at (239) 332-6975, extension 156 to discuss the water quality issues.

Response: Acknowledged. A discussion of the existing and proposed groundwater monitoring plans and attendant water quality issues at the GCLF, with Jeff Gould, P.G., concluded that the proposed groundwater monitoring plan is acceptable as submitted and is undergoing final review and comment by the Department.

<u>Comment PART S</u>: Due to the maximum design height issue the closure and long-term care cost estimates were not reviewed.

Response: Acknowledged. As a result of the reduction in the proposed expansion area to 61-acres, WMIF has revised the closure cost estimates that were provided with the original submittal. Please refer to Attachment 5 of this response letter for the closure and long-term care cost estimates. Page 5/40 of the Form (Attachment 1) has also been revised to indicate the closing cost associated with the proposed Class III landfill expansion.

APPLICATION NARRATIVE

Comment Section 1: Introduction: Please describe when Parcel 1 was closed in this section.

Response: Parcel 1 was closed in September 1993. Section 1 (Introduction) of the Narrative has been amended to indicate the closing date of Parcel 1. Please refer to Attachment 3 of this response letter for revised pages of the Narrative.

Comment Section 6(f): Drawing 11 indicates the maximum design elevation 120' (NGVD). As stated in PART E.13 above, the applicant is required to submit a no objection letter from Lee County and reference to Florida Statue that allow the proposed maximum elevation.

Response: Acknowledged. Please refer to response to Item E.13 on page 3 of this response letter.

<u>Comment Section 6(15)</u>: Please delete the In-house Spotter Training from this section. Spotters shall have to complete publicly offered courses such as offered by the TREEO Center, etc., acceptable to the Department.

Response: Please refer to response to Item E.15 on page 4 of this response letter.

Comment Section 8: Performance Standards: It should be noted here that the exemption from secondary groundwater standards that the landfill site has qualified for in the past will be lost due to lateral expansion of the landfill footprint.

Response: Acknowledged. As discussed by telephone with Department water quality representatives, the exemption from the secondary groundwater standards will not apply to the lateral expansion of the landfill footprint and its associated monitoring system.

Comment Section 9(3): An interface liner between the existing closed Parcel 1 and the proposed expansion is required. A meeting would be required to discuss this issue.

Response: Acknowledged. The Department will be contacted in the near future to establish a meeting date and time.

Comment Section 9(4)(a): Leachate collection and removal system (LCRS): It should be noted here that the estimate does not take into account the effect of not using a natural or synthetic interface liner over the lateral/vertical expansion of the Class III landfill over Parcel 1. During the life of the disposal unit (e.g. 1st year, 2nd year, ... last year of operation), what % of the total amount of leachate produced will be collected within the LCRS? What % of leachate will be discharged outside of the lined LCRS?

Response: A leachate generation analysis, conducted over the entire expansion footprint of the disposal unit, is provided within Attachment 6 of this response letter. The fraction (%) of the total amount of leachate generated that will be collected within the lined LCRS, and the fraction (%) of total amount of leachate that will be discharged outside the lined LCRS is presented in Table 1 within Attachment 6. Table 1 and all supporting documents have been inserted in the permit application as Appendix S and referenced in the revised table of contents (Attachment 1 of this response letter).

Comment Section 12(1) and (2): Vertical Expansion of Landfills: Please see comment Section 9(3) above.

Response: Please refer to the response for Item B.24.

Comment Section 13(2): Operations Plan and Appendix B, c: The narrative states that the equipment operator may replace a spotter during times of reduced disposal activity. Equipment operators should not act as spotters under any circumstances. We have seen, on numerous occasions, that equipment operators do not function effectively as spotters.

Response: Acknowledged. WMIF wishes to clarify that only equipment operators, who have completed the requirements of a trained operator, as defined by Rule 62-701.320(15)(f), FAC, may perform the duties of a spotter during times of

reduced disposal activity. The text within the Operation Plan in Appendix B, part c has been amended to reflect the clarification. Please refer to Attachment 7 of this response letter for revised pages of the Operation and Contingency Plan, respectively.

Comment Section 13(9) and Appendix B,h: The narrative states that the decision to put in additional vertical or horizontal wells in the Parcel 1 expansion area will be based on how effectively landfill gas is collected after completion of filling activities. This decision should also be based on the number of off-site objectionable odor complaints confirmed at the facility. Due to odors created during operation, the installation of additional gas wells may be warranted prior to the completion of filling activities, as well as after.

Response: Acknowledged. WMIF will limit the extent of the proposed vertical expansion to within the sideslope portion of Parcel 1. As a result, the existing landfill gas collection system installed over the top of Parcel 1 will not be affected. WMIF may consider installing additional gas wells prior to completion of waste filling activities within Parcel 1 based on the number of off-site odor complaints received during operation of the GCLF. Sections 9(10) and 16(1) of the Narrative, and Appendix B, part h, have been revised to indicate WMIF's intended limit of vertical expansion. Please refer to Attachments 3 and 7 of the response letter for revised pages of the Narrative and Operation and Contingency Plans.

DRAWINGS

Comment 1: Please submit a drawing showing north-south cross sections through Parcel 1 and expansions.

Response: A north-south cross-section through Parcel 1 and proposed lateral expansion area is shown on Drawing 11 in Appendix C of the original permit application. WMIF has revised the title of each cross-section on Drawing 11 to clarify the orientation of each of the cross-sections. Please refer to Attachment 4 of this response letter for revised Engineering Drawings. All other engineering drawings that are revised as a result of WMIF's intent to limit the extent of vertical expansion to the sideslope portion of Parcel 1 have been provided in Attachment 4 of this response letter. An updated aerial photography (Drawing 3), dated 12-14-05, has also been provided in Attachment 4 of this response letter.

Comment 2: Drawings 4 and 5 do not have labels for roads, ditches, swales, and for areas north of Parcel 1, and east of proposed expansions. Please label the area north of Parcel 1 and south of expansion which will be used for the proposed expansion.

Response: Drawings 4, 5, and 6 have been revised to include labels pertaining to roads, ditches, swales, and for areas north of Parcel 1, and east of proposed expansions. Areas that lie north of Parcel 1 and south of

March 1, 2006 Mr. Philip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection Page 11

expansion that will be used for the proposed expansion have also been labeled to indicate the equipment maintenance building, existing scale house, proposed scale house, etc. Please refer to Attachment 4 of this response letter for revised Engineering Drawings.

<u>Comment 3</u>: Please note the symbols for contours in the legends of Drawings 4 and 5 are not consistent with the symbols on the drawings. Please review and correct them.

Acknowledged. The symbols for contours in the legends of Drawings 4 and 5 have been corrected to match with the symbols on the drawings. Please refer to Attachment 4 of this response letter for revised Engineering Drawings.

Please feel free to contact me at 407-475-9163 if you have any questions or require any additional information.

Sincerely,

Response:

S2L, incorporated

Robert E. Mackey, P.E. Principal Engineer

Florida Registration No. 40176

Enclosures

cc: John Wong – WMIF w/enc. Ray Chewning – WMIF w/enc.

ATTACHMENTS

- 1 Table of Contents and revised DIVISION 1 DEP Form 62-701.900(1) Application for Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility (changed pages)
- 2 Appendix R Leachate Generation Comparison over Closed Parcel 1
- 3 Revised DIVISION 2 Application Narrative (changed and repaginated pages)
- 4 Revised Engineering Drawings (Appendix C)
 - Drawings 1, 2A, 2B, 3, 4, 5, 6, 7, 8, and 11
- 5 Revised Closure Cost and Long-Term Care Estimates (Appendix J)
- 6 Appendix S Estimation of Leachate Generation within Lined LCRS
- 7 Revised Operation and Contingency Plan (Appendix B)
- 8 Revised Well Location Map (Figure 1 Appendix O)

GULF COAST CLASS III LANDFILL AND RECYCLING FACILITY 11990 STATE ROAD 82 EAST FORT MYERS, LEE COUNTY, FLORIDA

APPLICATION FOR PERMIT TO CONSTRUCT A CLASS III LANDFILL (CLOSED PARCEL 1 LATERAL AND VERTICAL EXPANSION)

Submitted to:

Florida Department of Environmental Protection South District

2295 Victoria Avenue, Suite 364 P.O. Box 2549 Fort Myers, Florida 33902

Applicant:



WASTE MANAGEMENT INC. OF FLORIDA

11990 STATE ROAD 82 EAST FORT MYERS, FLORIDA 33913 239-334-4119

Prepared by:



S2L, INCORPORATED

529 Versailles Drive, Suite 103 Maitland, Florida 32751

407-475-9163

Robert E. Mackey, P.F. Florida Registration No. 40176

Date: 9/14/05

SEP 29 2005



WASTE MANAGEMENT

2859 Paces Ferry Road Suite 1600 Atlanta, GA 30339 (770) 805-4130 Main

September 15, 2005

Mr. Ghousuddin Minhaj, P.E. **Florida Department of Environmental Protection** 2295 Victoria Avenue, Suite 364 P.O. Box 2549 Fort Myers, Florida 33902-2549

RE: Application to Construct a Class III Landfill

Gulf Coast Landfill - Closed Parcel 1 Lateral and Vertical Expansion

Fort Myers, Florida

Dear Mr. Minhaj:

Waste Management Inc. of Florida is pleased to enclose four (4) copies of an Application to Construct a Class III Landfill at the Gulf Coast Landfill in Lee County, Fort Myers, Florida.

This permit application has been prepared in accordance with applicable sections of *Chapter 62-701 Florida Administrative Code* (FAC) and provides the required facility information for FDEP review and approval.

In accordance with Rule 62-701.315(1)(c), FAC, a check in the amount of Six Thousand Dollars (\$6,000) is enclosed for the processing fee. If you have any questions or comments, please advise.

Sincerely,

Waste Management Inc. of Florida

R. David McConnell Vice President

Enclosure

SEP 29 2005



September 12, 2005

Mr. R. David McConnell, Vice President Waste Management Inc. of Florida 2859 Paces Ferry Road, Suite 1600 Atlanta, GA 30339

RE: Application to Construct a Class III Landfill

Gulf Coast Landfill - Closed Parcel 1 Lateral and Vertical Expansion

Fort Myers, Florida

Dear Mr. McConnell:

S2L, Incorporated (S2Li) is pleased to enclose an application to construct a lateral and vertical expansion of the Gulf Coast Class III Landfill in Lee County, Fort Myers, Florida. This permit application has been prepared in accordance with applicable sections of *Chapter 62-701*, *Florida Administrative Code* (FAC) and provides the required facility information for FDEP review and approval.

Please be advised that the permit application fee of Six Thousand Dollars (\$6,000) payable to the Florida Department of Environmental Protection will be required in accordance with Rule 62-701.315(1)(c), FAC.

We appreciate the opportunity to prepare this permit application. If there are any questions, please call me at 407-475-9163.

Sincerely.

S2L, Incorporated

Robert E. Mackey Brincipal Engineer

Florida Registration No. 40176

Enclosure

cc: John Wong - WMIF w/enc.

SEP 29 2005

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Figures:

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Figure 2 – Vicinity Map showing Land Use and Zoning Information

Figure 3 – Airport Location Map

Drawings:

Drawing 1 – Cover Sheet

Drawings 2A and 2B - Site Plan / Existing Topography (North and South)

Drawing 3 - Aerial Photograph

Drawing 4 - Phasing Plan 1/3

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Drawing 6 - Phasing Plan 3/3

Drawing 7 – Final Contours

Drawing 8 – Leachate Collection System Layout

Drawing 9 – Leachate Collection System Details (1 of 2)

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Drawing 11 - Landfill Cross-section and Details

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APPENDIX D – PROOF OF OWNERSHIP

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APPENDIX F – NOTICE OF APPLICATION

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APPENDIX H – TRAINING PLAN AND CERTIFICATES

APPENDIX I - HYDROGEOLOGICAL/GEOTECHNICAL INVESTIGATION

APPENDIX J – CLOSURE COST AND LONG-TERM CARE ESTIMATES

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DIVISION 1

FDEP SOLID WASTE MANAGEMENT FACILITY PERMIT APPLICATION FORM



Florida Department of Environmental Protection

DEP Form # 62-701.900(1) Form Title Solid Waste Management Facility Permit Effective Date 05-27-01

DEP Application No. 0/28933 - 015- \$4

(Filled by DEP)

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

APPLICATION INSTRUCTIONS AND FORMS

SEP 29 2005

INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes, (FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A minimum of four copies of the application shall be submitted to the Department's District Office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "not applicable" or "no substantial change". Information provided in support of the application shall be marked "submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

II. Application Parts Required for Construction and Operation Permits

- A. Landfills and Ash Monofills Submit parts A, B, D through T
- B. Asbestos Monofills Submit parts A, B, D, E, F, G, J, L, N, P through S, and T
- C. Industrial Solid Waste Facilities Submit parts A, B, D through T
- D. Non-Disposal Facilities Submit parts A,C,D,E,J,N,S and T

NOTE: Portions of some parts may not be applicable.

NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A,B,C and D type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

III. Application Parts Required for Closure Permits

- A. Landfills and Ash Monofills Submit parts A,B,M, O through T
- B. Asbestos Monofills Submit parts A, B, N, P through T
- C. Industrial Solid Waste Facilities Submit parts A, B, M through T
- D. Non-Disposal Facilities Submit parts A, C, N, S and T

NOTE: Portions of some parts may not be applicable.

IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.

SEP 29 2005

V. Application Codes

S - Submitted

LOCATION - Physical location of information in application

N/A - Not Applicable

N/C - No Substantial Change

VI. LISTING OF APPLICATION PARTS

PART A: GENERAL INFORMATION

PART B: DISPOSAL FACILITY GENERAL INFORMATION

PART C: NON-DISPOSAL FACILITY GENERAL INFORMATION

PART D: PROHIBITIONS

PART E: SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL

PART F: LANDFILL PERMIT REQUIREMENTS

PART G: GENERAL CRITERIA FOR LANDFILLS

PART H: LANDFILL CONSTRUCTION REQUIREMENTS

PART I: HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS

PART J: GEOTECHNICAL INVESTIGATION REQUIREMENTS

PART K: VERTICAL EXPANSION OF LANDFILLS

PART L: LANDFILL OPERATION REQUIREMENTS

PART M: WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS

PART N: SPECIAL WASTE HANDLING REQUIREMENTS

PART O: GAS MANAGEMENT SYSTEM REQUIREMENTS

PART P: LANDFILL CLOSURE REQUIREMENTS

PART Q: CLOSURE PROCEDURES

PART R: LONG TERM CARE REQUIREMENTS

PART S: FINANCIAL RESPONSIBILITY REQUIREMENTS

PART T: CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

Please Type or Print

A. GENERAL INFORMATION

1.	Type of facility (check all that apply):	
	<pre>[x] Disposal [] Class I Landfill</pre>	
	[] Non-Disposal [] Incinerator For Non-biomedical Waste [] Waste to Energy Without Power Plant Certification [] Other Describe:	
note:	Waste Processing Facilities should apply on Form 62-701.900(4), FAC; Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC; Compost Facilities should apply on Form 62-701.900(10), FAC; and C&D Disposal Facilities should apply on Form 62-701.900(6), FAC	
2.	<pre>Type of application: [X] Construction [] Operation [] Construction/Operation [] Closure</pre>	
3.	Classification of application: [x] New [] Substantial Modification [] Renewal [] Intermediate Modification [] Minor Modification	
4.	Facility name: Gulf Coast Class III Landfill and Recycling Facility	
5.	DEP ID number: 5236P02026 County: Lee	
6.	Facility location (main entrance): 11990 State Road 82 East, Fort Myers,	
	Florida 33913	
7.	Location coordinates:	
	Section: 36 Township: 44S Range: 25E	
	Latitude: 26 ° 36 ' 21 " Longitude: 81 ° 45 ' 40 "	
* The	e proposed Class III landfill is a lateral and vertical expansion to the existical expansion to the existical class I landfill over closed Parcel 1.	ng



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Provide brief description of disposal facility design and operations planned under this application: This application is being submitted to request a construction permit for a 61-acre lateral and vertical expansion of closed Parcel 1 (Class I landfill) with Class III waste. The proposed maximum design elevation will not exceed 120' National Geodetic Vertical Datum (NGVD). Construction of the 57-acre lateral expansion area will involve the building of a bottom liner and a leachate collection and removal system (LCRS). The 4-acre vertical expansion will involve the removal of final cover currently on the sidesipe of Parcel 1, as part of the landfill operation for installation of the proposed interface liner. 2. Facility sits supervisor: John W. Wong Title: Director of Operations Telephone: (239)455-8062 jwong@wm.com	В В.	For the proposed Class III Landfill DISPOSAL FACILITY GENERAL INFORMATION		
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installation of the proposed interface liner. Facility site supervisor: John W. Wong Title: Director of Operations Telephone: (239)455-8062				
Title: Director of Operations Telephone: (239)455-8062 jwong@wm.com E-Mail address (if available)				
Title: Director of Operations Telephone: (239)455-8062 jwong@wm.com		installation of the proposed interface liner.		
jwonq@wm.com E-Mail address (if available) acres. 4. Weighing scales used: [x] Yes [] No 5. Security to prevent unauthorized use: [x] Yes [] No 6. Charge for waste received: \$/yds³ 35.50 \$/ton 7. Surrounding land use, zoning: [x] Residential [x] Agricultural [] None [x] Commercial [] Other Describe: 8. Types of waste received: [] Residential [x] Shredded/cut tires [x] Commercial [x] Shredded/cut tires [x] Incinerator/WTE ash [x] Yard trash [] Treated biomedical [x] Septic tank [] Mater treatment sludge [x] Industrial [] Agricultural [] Domestic sludge [] Agricultural [] Domestic sludge [] Agricultural [] Domestic sludge [] Agricultural [] None [] None [] Agricultural [] Domestic sludge [] Agricultural [] Domestic sludge [] Agricultural [] Domestic sludge [] Agricultural [] None [] None [] Attendant: [x] Yes [] No 10. Attendant: [x] Yes [] No Trained operator: [x] Yes [] No 11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel is 61 acres. This includes 57 acres of lateral expansion and 4 acres of vertice expansion.	2.	Facility site supervisor: John W. Wong		
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4. Weighing scales used: [x] Yes [] No 5. Security to prevent unauthorized use: [x] Yes [] No 6. Charge for waste received: \$/yds³ 35.50 \$/ton 7. Surrounding land use, zoning: [x] Residential [x] Industrial [x] Agricultural [] None [x] Commercial [] Other Describe: 8. Types of waste received: [] Residential [x] C & D debris [x] Commercial [x] Shredded/cut tires [x] Commercial [x] Shredded/cut tires [1] Incinerator/WTE ash [x] Yard trash [1] Treated biomedical [] Septic tank [1] Water treatment sludge [x] Industrial [1] Agricultural [] Domestic sludge [1] Agricultural [] Domestic sludge [2] Asbestos [3] Other Describe: 9. Salvaging permitted: [x] Yes ** [] No 10. Attendant: [x] Yes [] No Trained operator: [x] Yes [] No 11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel is 61 acres. This includes 57 acres of lateral expansion and 4 acres of vertice expansion.		E-Mail address (if available)		
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6. Charge for waste received:\$/yds³ 35.50 \$/ton 7. Surrounding land use, zoning: [x] Residential	4.	Weighing scales used: [x] Yes [] No		
[x] Residential [x] Industrial [x] Agricultural [x] None [x] Commercial [x] Other Describe: [Residential [x] C & D debris [x] Commercial [x] Shredded/cut tires [x] Incinerator/WTE ash [x] Yard trash [x] Yard trash [x] Treated biomedical [x] Septic tank [x] Water treatment sludge [x] Industrial [x] Agricultural [x] Agricultural [x] Domestic sludge [x] Agricultural [x] Asbestos [x] Other Describe: 9. Salvaging permitted: [x] Yes ** [x] No 10. Attendant: [x] Yes [x] No [x] Number of spotters used: 2 12. Site located in: [x] Floodplain [x] Wetlands [x] Other Upland [x] Acres of vertice expansion.	5.	Security to prevent unauthorized use: [x] Yes [] No		
[x] Residential [x] Industrial [x] Agricultural [] None [x] Commercial [] Other Describe: [] Residential [x] Shreded/Cut tires [x] Commercial [x] Shreded/Cut tires [x] Incinerator/WTE ash [x] Yard trash [x] Treated biomedical [x] Septic tank [x] Water treatment sludge [x] Industrial [x] Agricultural [x] Agricultural [x] Appearson [x] Other Describe: [] Other Describe: 9. Salvaging permitted: [x] Yes ** [] No 10. Attendant: [x] Yes [] No Trained operator: [x] Yes [] No 11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel expansion.	6.	Charge for waste received:\$/yds³ 35.50 \$/ton		
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[x] Commercial [x] Shredded/cut tires [] Incinerator/WTE ash [x] Yard trash [] Treated biomedical [] Septic tank [] Water treatment sludge [x] Industrial [] Air treatment sludge [] Industrial sludge [] Agricultural [] Domestic sludge [x] Asbestos [] Other Describe: 9. Salvaging permitted: [x] Yes ** [] No 10. Attendant: [x] Yes [] No Trained operator: [x] Yes [] No 11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel is 61 acres. This includes 57 acres of lateral expansion and 4 acres of vertice expansion.	8.			
10. Attendant: [x] Yes [] No Trained operator: [x] Yes [] No 11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel is 61 acres. This includes 57 acres of lateral expansion and 4 acres of vertical expansion.		<pre>[x] Commercial</pre>		
11. Spotters: Yes [x] No [] Number of spotters used: 2 12. Site located in: [] Floodplain [] Wetlands [x] Other Upland * The total footprint area occupied by the proposed landfill expansion of closed Parcel is 61 acres. This includes 57 acres of lateral expansion and 4 acres of vertical expansion.	9.	Salvaging permitted: [x] Yes ** [] No		
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expansion.	* Th	e total footprint area occupied by the proposed landfill expansion of closed Parcel		
	is	61 acres. This includes 57 acres of lateral expansion and 4 acres of vertica		
** Salvaging is performed only by WMIF personnel.		nsion. Calvaging is performed only by WMIF personnel.		

13.	Property recorded as a Disposal Site in County Land Records: [x] Yes [] No			
14.	Days of operation: Monday-Saturday			
15.	Hours of operation: M-F 6:00 a.m 5:00 p.m.; Saturday 6:00 a.m 3:00 p.m.			
16.	Days Working Face covered: Weekly			
17.	Elevation of water table: 22.53 Ft. (NGVD 1929)			
18.	Number of monitoring wells: 19			
19.	Number of surface monitoring points: 1			
20.	Gas controls used: [x] Yes [] No Type controls: [x] Active [] Passive			
	Gas flaring: [x] Yes [] No Gas recovery: [] Yes [x] No			
21.	Landfill unit liner type: (Parcel 3 & proposed Parcel 1 lateral expansion)			
	[] Natural soils [] Single clay liner [x] Single geomembrane [y] Double geomembrane and composite [y] Single composite [y] Single composite [y] None - closed Parcel 1 [y] Slurry wall [y] Other Describe:			
22.	Leachate collection method:*			
	<pre>[x] Collection pipes</pre>			
23.	Leachate storage method:			
	[] Tanks [x] Surface impoundments [] Other Describe:			
24.	Leachate treatment method:			
	<pre>[x] Oxidation</pre>			

*Parcel 3 is a lined landfill with an active leachate collection system and removal system (LCRS). Closed Parcel 1 is an unlined Class I landfill without a leachate LCRS. The proposed lateral expansion of closed Parcel 1 landfill will be designed with a bottom liner and a LCRS as described in Division 2 - Section 9 of the permit application.

25.	Leachate disposal method:		
	[] Recirculated [] Pumped to WWTP [x] Transported to WWTP [] Discharged to surface water [] Injection well [] Percolation ponds [x] Evaporation [] Other		
26.	6. For leachate discharged to surface waters:		
	Name and Class of receiving water: N/A		
27.	Storm Water:		
	Collected: [x] Yes [] No		
	Type of treatment: Wet Detention/Retention		
	Name and Class of receiving water: 6-Mile Cypress Slough		
28.	Environmental Resources Permit (ERP) number or status: Please refer to		
	Division 2 - Section 13(10) for the stormwater management system design.		

under this application:					
Facility site supervisor:					
Title:Telephone: ()					
E-Mail address (if available)					
Site area: Facility acres; Property acres Security to prevent unauthorized use: [] Yes [] No					
Site located in: [] Floodplain [] Wetlands [] Other					
Days of operation:					
Hours of operation: Number of operating staff:					
Expected useful life: Years					
Weighing scales used: [] Yes [] No					
Normal processing rate:yd³/daytons/daygal/day					
Maximum processing rate:yd/daytons/daygal/daytons/daygal/day					
Charge for waste received:					
Storm Water Collected: [] Yes [] No					
Type of treatment:					
Name and Class of receiving water:					
Environmental Resources Permit (ERP) number or status:					
ENVIRONMENT RESOLUTION (ERR) HARBET OF Status.					
Final residue produced:					
% of normal processing rate % of maximum processing rate					
v or maximum processing rate					

Facility name: ____

_____County:____

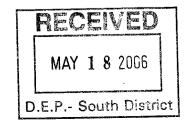
/ •	Estimated operati	ing costs:	>
,	Total cost/ton: \$	\$	Net cost/ton: \$

- 18. Provide a site plan, at a scale not greater than 200 feet to the inch, which shows the facility location and identifies the proposed waste and final residue storage areas, total acreage of the site, and any other features which are relevant to the prohibitions or location restrictions in Rule 62-701.300, FAC, such as water bodies or wetlands on or within 200 feet of the site, and potable water wells on or within 500 feet of the site.
- 19. Provide a description of how the waste and final residue will be managed to not be expected to cause violations of the Department's ground water, surface water or air standards or criteria
- 20. Provide an estimate of the maximum amount of waste and final residue that will be store on-site.
- 21. Provide a detailed description of the technology use at the facility and the functions of all processing equipment that will be utilized. The descriptions shall explain the flow of waste and residue through all the proposed unit operations and shall include: (1) regular facility operations as they are expected to occur; (2) procedures for start up operations, and scheduled and unscheduled shut down operations; (3) potential safety hazards and control methods, including fire detection and control; (4) a description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources; (5) a description and usage rate of any chemical or biological additives that will be used in the process; and (6) process flow diagrams for the facility operations.
- 22. Provide a description of the loading, unloading and processing areas.
- 23. Provide a description of the leachate control system that will be used to prevent discharge of leachate to the environment and mixing of leachate with stormwater. Note: Ground water monitoring may be required for the facility depending on the method of leachate control used.
- 24. Provide an operation plan for the facility which includes: (1) a description of general facility operations, the number of personnel responsible for the operations including their respective job descriptions, and the types of equipment that will be used at the facility; (2) procedures to ensure any unauthorized wastes received at the site will be properly managed; (3) a contingency plan to cover operation interruptions and emergencies such as fires, explosions, or natural disasters; (4) procedures to ensure operational records needed for the facility will be adequately prepared and maintained; and (5) procedures to ensure that the wastes and final residue will be managed to not be expected to cause pollution.
- 25. Provide a closure plan that describes the procedures that will be implemented when the facility closes including: (1) estimated time to complete closure; (2) procedures for removing and properly managing or disposing of all wastes and final residues; (3) notification of the Department upon ceasing operations and completion of final closure.

D. PROHIBITIONS (62-701.300, FAC)

<u>s</u>	LOCATION N/A N/O	2	
X	Div. 2 - Section 4	_ 1.	Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
et automorphism (x	2.	If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (16), FAC, then document this qualification(s).
	Div. 2 - Section 4	_ 3.	Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
	Div. 2 - Section 4	_ 4.	Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
<u> </u>	Div. 2 - Section 4	_ 5.	Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
X	Div. 2 - Section 4	_ 6.	Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
X	Div. 2 - Section 4	7.	Provide documentation that the facility will be in compliance with the Class I surface water restriction (62-701.300(7), FAC)
X	Div. 2 - Section 4	_ 8.	Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
X	Div. 2 - Section 4	_ 9.	Provide documentation that the facility will be in compliance with the special waste for waste-to-energy facilities restrictions; (62-701.300(9), FAC)
X	Div. 2 - Section 4	_ 10.	Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
_x	Div. 2 - Section 4	_ 11.	Provide documentation that the facility will be in compliance with the used oil restrictions; (62-701.300(11), FAC)

E.	SOLID WASTE MA	NAGE	MENT	FACILIT	Y PERM	IT REQUIREMENTS, GENERAL (62-701.320, FAC)
	LOCATION	N/A	N/C			
<u>x</u>			<u> </u>	1.	form,	copies, at minimum, of the completed application all supporting data and reports; 01.320(5)(a),FAC)
x	Herein		· · · · · · · · · · · · · · · · · · ·	2.	(signa	eering and/or professional certification sture, date and seal) provided on the applications of lengineering plans, reports and supporting mation for the application; (62-701.320(6),FAC)
<u>x</u>	Before Division	on 1		3.		er of transmittal to the Department; 01.320(7)(a),FAC)
<u>x</u>	Division 1			4.		oleted application form dated and signed by the cant; (62-701.320(7)(b),FAC)
<u>x</u>	Before Division	on 1		5.	or mor	t fee specified in Rule 62-701.315, FAC in check ney order, payable to the Department; 01.320(7)(c),FAC)
<u>x</u>	Division 2			6.	this intext properties of the plan,	gineering report addressing the requirements of rule and with the following format: a cover sheet, printed on 8 1/2 inch by 11 inch consecutively red pages, a table of contents or index, the body report and all appendices including an operation contingency plan, illustrative charts and graphs,
						ds or logs of tests and investigations, eering calculations; (62-701.320(7)(d),FAC)
D	Appendix B and ivision 2 - Sect		13	7.		tion Plan and Closure Plan; 01.320(7)(e)1,FAC)
<u>x</u>	Appendix B			8.	Conti	ngency Plan; (62-701.320(7)(e)2,FAC)
				9.	facil restr horiz	or drawings for the solid waste management ities in appropriate format (including sheet size ictions, cover sheet, legends, north arrow, ontal and vertical scales, elevations referenced VD 1929) showing; (62-702.320(7)(f),FAC)
<u>x</u>	App. C - Figu	re 1			a.	A regional map or plan with the project location;
<u>x</u>	App. C - Fig	2 & [rawir	ng 3	b.	A vicinity map or aerial photograph no more than 1 year old;
<u>x</u>	App. C - Draw	ing 1	.2	•	C.	A site plan showing all property boundaries certified by a registered Florida land surveyor;



<u>s</u>	LOCATION N/A N/C		PART E CONTINUED
	<u>x</u>		d. Other necessary details to support the engineering report.
<u>x</u>	Div. 2 - Section 6(7)(g) Appendix D	10.	Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g),FAC)
	x	11.	For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706,FS; (62-701.320(7)(h),FAC)
<u>x</u>	Div. 2 - Section 6(7)(i) Appendix E	12.	Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders or permit conditions relating to the operation of any solid waste management facility in this state; (62-701.320(7)(i),FAC)
<u>x</u>	Div. 2 - Section 6(8) Appendix F	13.	Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-702.320(8),FAC)
<u>x</u>	Div. 2 - Section 6(13) Appendix G	14.	Provide a description of how the requirements for airport safety will be achieved including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13),FAC)
_x	Div. 2 - Section 6(15) Appendix H	15.	Explain how the operator training requirements will be satisfied for the facility; (62-701.320(15), FAC)

- F. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)
- S LOCATION N/A N/C
- x App. C Figure 2

 1. Vicinity map or aerial photograph no more than 1 year old and of appropriate scale showing land use and local zoning within one mile of the landfill and of sufficient scale to show all homes or other structures, water bodies, and roads other significant features of the vicinity. All significant features shall be

the vicinity. All significant features shall be labeled; (62-701.330(3)(a),FAC)

- x App. C Figure 3 2. Vicinity map or aerial photograph no more than 1 year old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(b),FAC)
 - _____ 3. Plot plan with a scale not greater than 200 feet to the inch showing; (62-701.330(3)(c),FAC)
- x App. C Drawings 2A & 2B a. Dimensions;
 - App. C Drawings 2A & 2B b. Locations of proposed and existing water quality monitoring wells;
 - Div. 2 Section 7(3)(c) c. Locations of soil borings;
- x App. C Drawings 4-7 d. Proposed plan of trenching or disposal areas;
- x App. C Drawings 4-7 e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;
- x App. C Drawings 2A & 2B f. Any previously filled waste disposal areas;
- x App. C Drawing 3 g. Fencing or other measures to restrict access.
 - 4. Topographic maps with a scale not greater than 200 feet to the inch with 5-foot contour intervals showing; (62-701.330(3)(d), FAC):
 - App. C Drawings 4-7 a. Proposed fill areas;
- \times Div. 2 Section 7(3)(e)(4) b. Borrow areas;
 - App. C Drawing 3 c. Access roads;
 - c App. C Drawing 7 d. Grades required for proper drainage;
- x App. C Drawings 4-7 e. Cross sections of lifts;

<u>s</u>	LOCATION N/A N/C		PART F CONTINUED
	x	_	f. Special drainage devices if necessary;
<u>x</u>	App. C - Drawing 3	_	g. Fencing;
<u>x</u>	App. C - Drawings 2A & 2B		h. Equipment facilities.
		5.	A report on the landfill describing the following; (62-701.330(3)(e),FAC)
<u> x</u>	Div. 2 - Section 7(3)(e)1	_	a. The current and projected population and area to be served by the proposed site;
<u>x</u>	Div. 2 - Section 7(3)(e)2	_	 The anticipated type, annual quantity, and source of solid waste, expressed in tons;
<u>x</u>	Div. 2 - Section 7(3)(e)3	_	c. The anticipated facility life;
<u>x</u>	Div. 2 - Section 7(3)(e)4	-	d. The source and type of cover material used for the landfill.
	x*	6.	Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160, FAC; (62-701.330(3)(h), FAC)
<u>x</u>	Div. 2 - Section 7(3)(i)& Appendix J	7.	Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3)(i),FAC)
G.	GENERAL CRITERIA FOR LAND	DFILLS	S (62-701.340,FAC)
x	Div. 2 - Section 8(2)	1.	Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100-year floodplain where it will restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62-701.340(4)(b),FAC)
App	Div. 2 - Section 8(2) & c. C - Drawings 2A & 2B	2.	Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62-701.340(4)(c),FAC)
<u>x</u>	Div. 2 - Section 8(2)	3.	Describe what methods shall be taken to screen the landfill from public view where such screening can practically be provided; (62-701.340(4)(d),FAC)

^{*} Please refer to FDEP PERMIT RENEWAL APPLICATION NARRATIVE, SECTION 62-701.340 - GENERAL CRITERIA FOR LANDFILLS and APPENDIX E, Renewal Application No. SO36-267692, Response to FDEP Comments.

н.	LANDFILL CONSTRUCTION R	EQUIREM	ments (62-701	.400, FAC)
<u>s</u>	LOCATION N/A N/C				
<u>x</u>	App. C - Drawings 4-7	1.	solid close	waste dat pl	v the landfill shall be designed so that disposal units will be constructed and anned intervals throughout the design the landfill; (62-701.400(2),FAC)
		2.	Landf	ill lin	ner requirements; (62-701.400(3),FAC)
			a.		al construction requirements; 01.400(3)(a),FAC):
<u>x</u>	Div. 2 - Section 9(3)(a)			(1)	Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure;
<u>x</u>	Div. 2 - Section 9(3)(a) & Appendix I			(2)	Document foundation is adequate to prevent liner failure;
<u>x</u>	Div. 2 - Section 9(3)(a)			. (3)	Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;
	x			(4)	Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;
<u>x</u>	Div. 2 - Section 9(3)(a)			(5)	Installed to cover all surrounding earth which could come into contact with the waste or leachate.
			b.	Compos	site liners; (62-701.400(3)(b),FAC)
	<u>x</u>			(1)	Upper geomembrane thickness and properties;
	<u>x</u>			(2)	Design leachate head for primary LCRS including leachate recirculation if appropriate;
	<u>x</u>			(3)	Design thickness in accordance with Table A and number of lifts planned for lower soil component.



<u>s</u>	LOCATION N/A N/C	c.	Double	PART H CONTINUED e liners; (62-701.400(3)(c),FAC)
	<u>x</u>		(1)	Upper and lower geomembrane thicknesses and properties;
	x		(2)	Design leachate head for primary LCRS to limit the head to one foot above the liner;
	x	·	(3)	Lower geomembrane sub-base design;
	<u>x</u>		(4)	Leak detection and secondary leachate collection system minimum design criteria ($k \ge 10$ cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);
				ards for geosynthetic components; 01.400(3)(d),FAC)
<u>x</u>	Div. 2 - Section 9(3)(d) & Appendix K		(1)	Field seam test methods to ensure all field seams are at least 90 percent of the yield strength for the lining material;
_x	Div. 2 - Section 9(3)(d) & Appendix K		(2)	Geomembranes to be used shall pass a continuous spark test by the manufacturer;
<u>x</u>	Div. 2 - Section 9(3)(d) & Appendix K	,	(3)	Design of 24-inch-thick protective layer above upper geomembrane liner;
<u>x</u>	Div. 2 - Section 9(3)(d) & Appendix K			Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above 24-inch-thick protective layer.
x	Div. 2 - Section 9(3)(d) & Appendix K	. ((5)	HDPE geomembranes, if used, meet the specifications in GRI GM13;
	<u>x</u>	((6)	PVC geomembranes, if used, meet the specifications in PGI 1197;
	<u>x</u> ·		(7)	Interface shear strength testing results of the actual components which will be used in the liner system;
	<u>x</u>	((8)	Transmissivity testing results of geonets if they are used in the liner system;
	<u>x</u>	((9)	Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;

PART H CONTINUED

- x Div. 2 Section 9(3)(e) & Appendix L
- x Div. 2 Section 9(3)(e) & Appendix L
- x Div. 2 Section 9(3)(e) & Appendix L

- x Div. 2 Section 9(3)(e) & Appendix L
- x Div. 2 Section 9(3)(e) & Appendix L
- x Div. 2 Section 9(3)(e) & Appendix L
- ____ <u>x</u> ___

<u>x</u> ____

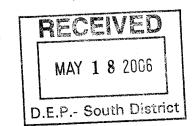
- e. Geosynthetic specification requirements; (62-701.400(3)(e),FAC)
 - (1) Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
 - (2) Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;
 - (3) Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and nondestructive seam testing, seam testing location, frequency, procedure, sample size and geomembrane repairs;
 - (4) Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembrane and procedures for lining system acceptance;
 - (5) Geotextile and geogrid specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
 - (6) Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
 - (7) Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials;
- f. Standards for soil components
 (62-710.400(3)(f),FAC):
 - (1) Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers;



<u>s</u>	LOCATION	N/A	N/C		PART H CONTINUED
		<u>x</u>	_	(2)	Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100 or an equivalent test method;
		_ <u>x</u> _		(3)	Procedures for testing in-situ soils to demonstrate they meet the specifications for soil liners;
				(4)	Specifications for soil component of liner including at a minimum:
		<u>x</u>	·		(a) Allowable particle size distribution, Atterberg limits, shrinkage limit;
		<u>x</u>			(b) Placement moisture and dry density criteria;
		<u>x</u>			(c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
		<u>x</u>			(d) Minimum thickness of soil liner;
		<u>x</u>		•	(e) Lift thickness;
		<u>x</u>			(f) Surface preparation (scarification);
		_ <u>x</u> _			(g) Type and percentage of clay mineral within the soil component;
	· · · · · · · · · · · · · · · · · · ·	<u>x</u>	_	(5)	Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field.
			3.	Leachate co (62-701.400	ollection and removal system (LCRS); 0(4),FAC)
•					primary and secondary LCRS requirements; 701.400(4)(a),FAC)
x	Div. 2 - Sect	ion 9(4) (b)	(1)	Constructed of materials chemically resistant to the waste and leachate;
_ x _	Div. 2 - Sect	ion 9(4) (b)	(2)	Have sufficient mechanical properties to prevent collapse under pressure;
x	Div. 2 - Sect	ion 9(4) (b)	(3)	Have granular material or synthetic geotextile to prevent clogging;
_x	Div. 2 - Sect	ion 9(4) (b)	(4)	Have method for testing and cleaning clogged pipes or contingent designs for rerouting leachate around failed areas;

	b.	Primary LCRS requirements; (62-701.400(4)(b),FAC)
x Div. 2 - Section 9(4)(b)		(1) Bottom 12 inches having hydraulic conductivity > 1 x 10 ⁻³ cm/sec;
x Div. 2 - Section 9(4)(b)		(2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;
x Div. 2 - Section 9(4)(b)		(3) Bottom slope design to accomodate for predicted settlement;
x Div. 2 - Section 9(4)(b)		(4) Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load and protection of geomembrane liner.
4.	Leach	hate recirculation; (62-701.400(5),FAC)
<u>x</u>	a.	Describe general procedures for recirculating leachate;
x	b.	Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;
<u>x</u>	C.	Describe procedures for preventing perched water conditions and gas buildup;
x ·	đ.	Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;
<u>x</u>	e.	Describe methods of gas management in accordance with Rule 62-701.530, FAC;
<u>x</u>	f.	If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover and provide documentation that irrigation does not contribute significantly to leachate

PART H CONTINUED



LOCATION

generation.

<u>s</u> <u>LOCATION</u> <u>N/A</u> <u>N/C</u>	5.			rage	tanks and leachate surface -701.400(6),FAC)
		a.			oundment requirements;
x Div. 2 - Section 9(6)(a)			(1)	botto	mentation that the design of the om liner will not be adversely sted by fluctuations of the ground
x Div. 2 - Section 9(6)(a)			(2)	inspe	gned in segments to allow for ection and repair as needed without cruption of service;
			(3)	Gener	cal design requirements;
<u>x*</u>				(a)	Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;
x*				(b)	Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;
x*				(c)	Lower geomembrane placed on subbase \geq 6 inches thick with $k \leq 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k \leq 1 \times 10^{-7}$ cm/sec;
<u>x*</u>				(d)	Design calculation to predict potential leakage through the upper liner;
x Div. 2 - Section 9(6)(b)3				(e)	Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;
<u>x*</u>			(4)		ription of procedures to prevent ft, if applicable;
x Div. 2 - Section 9(6)(b)(5	<u>5)</u>		(5)		gn calculations to demonstrate minimum feet of freeboard will be maintained;
x Div. 2 - Section 9(6)(b)	5		(6)		edures for controlling disease vectors off-site odors.

^{*}Please refer to FDEP PERMIT RENEWAL APPLICATION FORM NARRATIVE, Section 62-701.400, and APPENDIX F, Application to Renew Permit No.SO36-180572, submitted to the FDEP in June 1995.

)	LOCATION	<u>N/A</u>	<u>и/с</u>	b.		<pre>PART H CONTINUED -ground leachate storage tanks; 01.400(6)(c),FAC)</pre>
		x			(1)	Describe tank materials of construction and ensure foundation is sufficient to support tank;
		<u>x</u>			(2)	Describe procedures for cathodic protection if needed for the tank;
		<u>x</u>			(3)	Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
					(4)	Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
		<u> </u>			(5)	Describe design to remove and dispose of stormwater from the secondary containment system;
		<u>x</u>			(6)	Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling;
					(7)	Inspections, corrective action and reporting requirements;
_		_ <u>x</u> _				(a) Overfill prevention system weekly;
		X				(b) Exposed tank exteriors weekly;
		<u>x</u>				(c) Tank interiors when tank is drained or at least every three years;
		<u> </u>				(d) Procedures for immediate corrective action if failures detected;
*****		<u>x</u>				(e) Inspection reports available for department review.
				c.		ground leachate storage tanks; 01.400(6)(d),FAC)
		X			(1)	Describe materials of construction;
		<u> </u>			(2)	A double-walled tank design system to be used with the following requirements:

<u>s</u>	LOCATION	<u>N/A</u>	N/C			PART H CONTINUED
		<u>x</u>	-			(a) Interstitial space monitoring at least weekly;
		<u> </u>				(b) Corrosion protection provided for primary tank interior and external surface of outer shell;
		<u>x</u>				<pre>(c) Interior tank coatings compatible with stored leachate;</pre>
		<u>x</u>				(d) Cathodic protection inspected weekly and repaired as needed;
		<u>x</u>			(3)	Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling and provide for weekly inspections;
		<u>x</u>			(4)	Inspection reports available for department review.
		<u>x</u>	_	d.		edule provided for routine maintenance of G; (62-701.400(6)(e),FAC)
			6.			cems construction quality assurance (CQA); 00(7), FAC)
<u>x</u> D:	iv. 2-Section	9(7)	& App. K	a.	Provi	vide CQA Plan including:
_x D:	iv. 2-Section	9(7)	& App. K		(1)	Specifications and construction requirements for liner system;
_x D:	iv. 2-Section	9(7)	& App. K		(2)	Detailed description of quality control testing procedures and frequencies;
_x D:	iv. 2-Section	9(7)	& App. K		(3)	<pre>Identification of supervising professional engineer;</pre>
_x D:	iv. 2-Section	9(7)	& App. K		(4)	Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;
x_D:	iv. 2-Section	9(7)	& App. K		(5)	State qualifications of CQA professional engineer and support personnel;
<u>x</u> D:	iv. 2-Section	9(7)	& App. K		(6)	Description of CQA reporting forms and documents;

LOCATION N/A N/C

PART H CONTINUED

x Div. 2-Section 9(7) & App.	K b.	An independent laboratory experienced in the testing of geosynthetics to perform required testing;
,	7. Soil I	Liner CQA (62-701.400(8)FAC)
<u>x</u>	a.	Documentation that an adequate borrow source has been located with test results or description of the field exploration and laboratory testing program to define a suitable borrow source;
<u>x</u>	b.	Description of field test section construction and test methods to be implemented prior to liner installation;
<u>x</u>	c.	Description of field test methods including rejection criteria and corrective measures to insure proper liner installation.
	8. Su	rface water management systems; (62-701.400(9),FAC)
x Div. 2 - Section 9(9)	a.	Provide a copy of a Department permit for stormwater control or documentation that no such permit is required;
x Div. 2 - Section 9(9) & Div. 2 - Section 13(10)	b.	Design of surface water management system to isolate surface water from waste filled areas and to control stormwater run-off;
x Div. 2 - Section 9(9) & Div. 2 - Section 13(10)	с.	Details of stormwater control design including retention ponds, detention ponds, and drainage ways;
	9. Ga	s control systems; (62-701.400(10),FAC)
x Div. 2 - Section 9(10)	а.	Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;
<u>x</u>	do of bo	r landfills designed in ground water, provide cumentation that the landfill will provide a degree protection equivalent to landfills designed with ttom liners not in contact with ground water; 2-701.400(11), FAC)



I. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(1), FAC)

<u>s location n/a n/c</u>	1.		t a hydrogeological investigation and site report ding at least the following information:
x Div. 2-Section 10 & App. I		a.	Regional and site specific geology and hydrogeology;
x Div. 2-Section 10 & App. I		b.	Direction and rate of ground water and surface water flow including seasonal variations;
x Div. 2-Section 10 & App. I		c.	Background quality of ground water and surface water;
x Div. 2-Section 10 & App. I		d. .	Any on-site hydraulic connections between aquifers;
x Div. 2-Section 10 & App. I		e.	Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill;
x Div. 2-Section 10 & App. I		f.	Description of topography, soil types and surface water drainage systems;
x Div. 2-Section 10 & App. O		g.	Inventory of all public and private water wells within a one-mile radius of the landfill including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique and static water level;
x Div. 2-Section 10 & App. I		h.	Identify and locate any existing contaminated areas on the site;
x Div. 2-Section 10 & Fig 1. in Appendix O		i.	Include a map showing the locations of all potable wells within 500 feet, and all community water supply wells within 1000 feet, of the waste storage and disposal areas;
x Appendix I	2.	Report	signed, sealed and dated by PE or PG.

J. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(2), FAC)

S LOCATION N/A N/C

1.	Submit a geotechnical site investigation report
	defining the engineering properties of the site
	including at least the following:

x Div. 2-	-Section 11	& App.	I a.	Description of subsurface conditions including
				soil stratigraphy and ground water table
•				conditions;

- x Div. 2-Section 11 & App. I

 b. Investigate for the presence of muck, previously filled areas, soft ground, lineaments and sink holes;
- x Div. 2-Section 11 & App. I c. Estimates of average and maximum high water table across the site;
 - d. Foundation analysis including:
- x Div. 2-Section 11 & App. I (1) Foundation bearing capacity analysis;
- x Div. 2-Section 11 & App. I (2) Total and differential subgrade settlement analysis;
- x Div. 2-Section 11 & App. I (3) Slope stability analysis;
- x Div. 2-Section 11 & App. I

 e. Description of methods used in the investigation and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations and conclusions;
- x Div. 2-Section 11 & App. I
 f. An evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14 and 40 CFR 258.15.
- x Div. 2-Section 11 & App. I 2. Report signed, sealed and dated by PE or PG.



K. VERTICAL EXPANSION OF LANDFILLS (62-701.430, FAC)

S LOCATION N/A N/C		
x Div. 2 - Section 12(1) & Appendix R	1.	Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill or adversely affect the closure design of the existing landfill;
x Div. 2 - Section 12(2)	2.	Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c),FAC;
x Div.2-Section 12(2) & App. I	3.	Provide foundation and settlement analysis for the vertical expansion;
x Div.2-Section 12(2)& App. I	4.	Provide total settlement calculations demonstrating that the final elevations of the lining system, that gravity drainage, and that no other component of the design will be adversely affected;
x Div.2-Section 12(2) & App. I	5.	Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
x Div. 2 - Section 12(2)(c)	6.	Provide documentation to show the surface water

vertical expansion;

management system will not be adversely affected by the

Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.

x Div. 2 - Section 12(2)(d) 7.

L. LANDFILL OPERATION REQUIREMENTS (62-701.500, FAC)

x Div. 2 - Section 13(1) 1.	Provide documentation that landfill will have at least one trained operator during operation and at least or trained spotter at each working face; (62-701.500(1),FAC)				
2.		a landfill operation plan including procedures 62-701.500(2), FAC)			
x Div. 2-Section 13(2) & App. B		esignating responsible operating and aintenance personnel;			
x Div. 2-Section 13(2) & App. B	b. Co	ontingency operations for emergencies;			
x Div. 2-Section 13(2) & App. B		ontrolling types of waste received at the andfill;			
x Div. 2-Section 13(2) & App. B	d. We	eighing incoming waste;			
x Div. 2-Section 13(2) & App. B	e. Ve	ehicle traffic control and unloading;			
x Div. 2-Section 13(2) & App. B	f. Me	ethod and sequence of filling waste;			
x Div. 2-Section 13(2) & App. B	g. Wa	aste compaction and application of cover;			
x Div. 2-Section 13(2) & App. B		perations of gas, leachate, and stormwater ontrols;			
x Div. 2-Section 13(2) & App. B	i. Wa	ater quality monitoring.			
x Div.2-Sec. 13(2), 13(8) & App. B		aintaining and cleaning the leachate collection ystem;			
x Div. 2 - Section 13(3) 3.	to be us where va FDEP per	a description of the landfill operation record sed at the landfill; details as to location of arious operational records will be kept (i.e. rmit, engineering drawings, water quality, etc.) (62-701.500(3),FAC)			
x Div. 2 - Section 13(4) 4.	monthly	e the waste records that will be compiled and provided to the Department quarterly; .500(4),FAC)			
x Div. 2 - Section 13(5) 5.	Describe	e methods of access control; (62-701.500(5),FAC)			
x Div. 2 - Section 13(6) 6.	landfil	e load checking program to be implemented at the l to discourage disposal of unauthorized wastes landfill; (62-701.500(6),FAC)			
7.		e procedures for spreading and compacting waste landfill that include: (62-701.500(7),FAC)			
x Div. 2 - Section 13(7)(a)		aste layer thickness and compaction requencies;			

<u>s</u>	LOCATION	<u>N/A</u>	N/C			PART L CONTINUED
x	Div. 2 - Sect	ion 13	(7) (b)	b	•	Special considerations for first layer of waste placed above liner and leachate collection system;
X	Div. 2 - Sect	ion 13	(7) (c)	C	•	Slopes of cell working face and side grades above land surface, planned lift depths during operation;
_ <u>x</u>	Div. 2 - Sect	ion 13	(7) (d)	d		Maximum width of working face;
				е	•	Description of type of initial cover to be used at the facility that controls:
x	Div. 2 - Sect	ion 13	(7)(e)			(1) Disease vector breeding/animal attraction
_X	Div. 2 - Sect	ion 13	(7) (e)			(2) Fires
_x	Div. 2 - Sect	ion 13	(7)(e)			(3) Odors
X	Div. 2 - Sect	ion 13	(7) (e)			(4) Blowing litter
<u> </u>	Div. 2 - Sect	ion 13	(7) (e)			(5) Moisture infiltration
<u>x</u>	Div. 2 - Sect	ion 13	(7)(f)	f	•	Procedures for applying initial cover including minimum cover frequencies;
X	Div. 2 - Sect	ion 13	(7) (g)	g	•	Procedures for applying intermediate cover;
_ X	Div. 2 - Sect	ion 13	(7)(h)	h	•	Time frames for applying final cover;
<u> </u>	Div. 2 - Sect	ion 13	(7)(i)	i	•	Procedures for controlling scavenging and salvaging.
X	Div. 2 - Sect	ion 13	(7)(j)	Ċ	•	Description of litter policing methods;
_X	Div. 2 - Sect	ion 13	(7) (k)	k	•	Erosion control procedures.
			1			ibe operational procedures for leachate management ding; (62-701.500(8), FAC)
X	Div. 2 - Sect	ion 13	(8) (a)	a	•	Leachate level monitoring, sampling, analysis and data results submitted to the Department;
<u>x</u> [Div. 2 - Secti	on 13(8	8)(b)& (<u>h)</u> b	•	Operation and maintenance of leachate collection and removal system, and treatment as required;
_ <u>x</u>	Div. 2 - Sect	ion 13	(8) (c)	С	•	Procedures for managing leachate if it becomes regulated as a hazardous waste;
<u>x</u>	Div. 2 - Sect	ion 13	(8) (d)	d	•	Agreements for off-site discharge and treatment of leachate;
_ X	Div. 2 - Sect	ion 13	(8)(e)	е	•	Contingency plan for managing leachate during emergencies or equipment problems;

LOCATION N/A N/C		PART L CONTINUED
x Div. 2 - Section 13(8)(f)	f.	Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;
x Div. 2 - Section 13(8)(g)	g.	Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;
x Div. 2 - Section 13(8)(h)	h.	Procedures for water pressure cleaning or video inspecting leachate collection systems.
x Div. 2 - Section 13(9) 9.	shall requi	ribe how the landfill receiving degradable wastes implement a gas management system meeting the rements of Rule 62-701.530, FAC; 701.500(9), FAC)
x Div. 2 - Section 13(10) 10	landf the r	ribe procedures for operating and maintaining the fill stormwater management system to comply with requirements of Rule 62-701.400(9); 701.500(10), FAC)
11		oment and operation feature requirements; (01.500(11), FAC)
x Div. 2 - Section 13(11)(a)	a.	Sufficient equipment for excavating, spreading, compacting and covering waste;
x Div. 2 - Section 13(11)(b)	b.	Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;
x Div. 2 - Section 13(11)(c)	c.	Communications equipment;
x Div. 2 - Section 13(11)(d)	d.	Dust control methods;
x Div. 2 - Section 13(11)(e)	е.	Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
x Div. 2 - Section 13(11)(f)	f.	Litter control devices;
x Div. 2 - Section 13(11)(g)	g.	Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.
x Div. 2 - Section 13(12) 12	insid acces	ide a description of all-weather access road, de perimeter road and other roads necessary for ss which shall be provided at the landfill; 701.500(12), FAC)
1;		tional record keeping and reporting requirements; 701.500(13), FAC)

<u>s</u>	LOCATION N/A N/C		PART L CONTINUED
	Div. 2 - Section 13(13)(a)	a.	Records used for developing permit applications and supplemental information maintained for the design period of the landfill;
<u>x</u>	Div. 2 - Section 13(13)(b)	b.	Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;
	Div. 2 - Section 13(13)(c)	С.	Maintain annual estimates of the remaining life of constructed landfills and of other permitted areas not yet constructed and submit this estimate annually to the Department;
<u>x</u>	Div. 2 - Section 13(13)(d)	d.	Procedures for archiving and retrieving records which are more than five year old.

WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (62-701.510, FAC)

S LOCATION N/A N/C

- x Div. 2 Section 14(1)(a) 1. & Appendix I
- Water quality and leachate monitoring plan shall be submitted describing the proposed ground water, surface water and leachate monitoring systems and shall meet at least the following requirements;
- x Div. 2 Section 14(a) & Appendix I
- a. Based on the information obtained in the hydrogeological investigation and signed, dated and sealed by the PG or PE who prepared it; (62-701.510(2)(a),FAC)
- x Div. 2 Section 14 (b)&
 Appendix I
- b. All sampling and analysis preformed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b), FAC)
- c. Ground water monitoring requirements; (62-701.510(3),FAC)
- x Div. 2-Section 14(c) & App. I

x Div. 2-Section 14(c) & App. I

- (1) Detection wells located downgradient from and within 50 feet of disposal units;
- x Div. 2-Section 14(c) & App. I
- (2) Downgradient compliance wells as required;
- x Div. 2-Section 14(c) & App. I
- (3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
- x Div. 2-Section 14(c) & App. I
- (4) Location information for each monitoring well;

x Div. 2-Section 14(c) & App. I

x Div. 2-Section 14(c) & App. I

(5) Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells unless site specific conditions justify alternate well spacings;

- (6) Well screen locations properly selected;
 - (7) Procedures for properly abandoning monitoring wells;
 - (8) Detailed description of detection sensors if proposed.

<u>s</u>	LOCATION	<u>N/A</u>	N/C	d.		PART M CONTINUED ace water monitoring requirements; (01.510(4),FAC)
x	Div. 2-Section	14(d)			(1)	Location of and justification for all proposed surface water monitoring points;
X	Div. 2-Section	14(d)			(2)	Each monitoring location to be marked and its position determined by a registered Florida land surveyor;
X	Div. 2-Section	14(e)		е.		nate sampling locations proposed; (01.510(5), FAC)
				f.		al and routine sampling frequency and rements; (62-701.510(6), FAC)
X	Div. 2-Section	14(c)	& App. I		(1)	Initial background ground water and surface water sampling and analysis requirements;
X	Div. 2-Section	14(c)	& App. I		(2)	Routine leachate sampling and analysis requirements;
x	Div. 2-Section	14(c)	& App. I		(3)	Routine monitoring well sampling and analysis requirements;
x	Div. 2-Section	14(c)	& App. I		(4)	Routine surface water sampling and analysis requirements.
X	Div. 2-Section	14 (g)		g.	monit	ribe procedures for implementing evaluation foring, prevention measures and corrective on as required; (62-701.510(7),FAC)
X	Div. 2-Section	14(h)		h.		quality monitoring report requirements; 01.510(9), FAC)
X	Div. 2-Section	14(h)			(1)	Semi-annual report requirements;
_ X	Div. 2-Section	14(h)			(2)	Bi-annual report requirements signed, dated and sealed by PG or PE.

SPECIAL WASTE HANDLING REQUIREMENTS N. (62-701.520, FAC) LOCATION N/A N/C x Div. 2 - Section 15(1) 1. Describe procedures for managing motor vehicles; (62-701.520(1), FAC) Describe procedures for landfilling shredded waste; x Div. 2 - Section 15(2) 2. (62-701.520(2), FAC) \times Div. 2 - Section 15(3) 3. Describe procedures for asbestos waste disposal; (62-701.520(3), FAC) Describe procedures for disposal or management of \times Div. 2 - Section 15(4) contaminated soil; (62-701.520(4), FAC) x Div. 2 - Section 15(5) Describe procedures for disposal of biological wastes; 5. (62-701.520(5), FAC) GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530, FAC) 1. Provide the design for a gas management systems that will (62-701.530(1), FAC): x Div. 2 - Section 16(1) Be designed to prevent concentrations of a. combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary; x Div. 2 - Section 16(1) b. Be designed for site-specific conditions; x Div. 2 - Section 16(1) c. Be designed to reduce gas pressure in the interior of the landfill; Be designed to not interfere with the liner, x Div. 2 - Section 16(1) d. leachate control system or final cover. x Div. 2 - Section 16(2) 2. Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC): x Div. 2 - Section 16(3) 3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC): 4. Landfill gas recovery facilities; (62-701.530(5), FAC): Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied; Information required in Rule 62-701.600(4), FAC X b. supplied where relevant and practical; Estimate of current and expected gas generation __X_____ c.

methods provided;

rates and description of condensate disposal

s <u>location</u> <u>n/a</u> <u>n/c</u>			PART O CONTINUED
<u> </u>		d.	Description of procedures for condensate sampling, analyzing and data reporting provided;
x		е.	Closure plan provided describing methods to control gas after recovery facility ceases operation and any other requirements contained in Rule 62-701.400(10), FAC;
<u>x</u>		f.	Performance bond provided to cover closure costs if not already included in other landfill closure costs.
P. LANDFILL FINAL CLOSURE	REQUIRE	EMENTS	6 (62-701.600, FAC)
	1.	Closu	ure schedule requirements; (62-701.600(2),FAC)
x Div. 2 - Section 17(2)(a)		a.	Documentation that a written notice including a schedule for closure will be provided to the Department at least one year prior to final receipt of wastes;
x Div. 2 - Section 17(2)(b)		b.	Notice to user requirements within 120 days of final receipt of wastes;
x Div. 2 - Section 17(2)(c)		с.	Notice to public requirements within 10 days of final receipt of wastes.
	2.		ure permit general requirements; 701.600(3), FAC)
x Div. 2 - Section 17(3)		a.	Application submitted to Department at least 90 days prior to final receipt of wastes;
		b.	Closure plan shall include the following:
x Div. 2 - Section 17(3)			(1) Closure report;
x Div. 2 - Section 17(3)			(2) Closure design plan;
x Div. 2 - Section 17(3)			(3) Closure operation plan;
x Div. 2 - Section 17(3)			(4) Closure procedures;
x Div. 2 - Section 17(3)			(5) Plan for long term care;
x Div. 2 - Section 17(3)			(6) A demonstration that proof of financial responsibility for long term care will be provided.
	3.	Closu	ure report requirements; (62-701.600(4),FAC)
		a.	General information requirements;
x Div. 2 - Section 17(4)(a)			(1) Identification of landfill;

S LOCATION N/A N/C				PART P CONTINUED
x Div. 2 - Section 17(4)(a)			(2)	Location, description and vicinity map;
x Div. 2 - Section 17(4)(a)			(3)	Total acres of disposal areas and landfill property;
x Div. 2 - Section 17(4)(a)			(4)	Legal property description;
x Div. 2 - Section 17(4)(a)			(5)	History of landfill;
x Div. 2 - Section 17(4)(a)			(6)	Identification of types of waste disposed of at the landfill.
x Div. 2 - Section 17(4)(b)		b.	qualit	chnical investigation report and water ty monitoring plan required by Rule 1.330(3), FAC;
x Div. 2 - Section 17(4)(c)		c.	ident:	use information report indicating: ification of adjacent landowners; zoning; nt land uses; and roads, highways -of-way, or easements.
x Div. 2 - Section 17(4)(d)		d.	landf:	t on actual or potential gas migration at ills containing degradable wastes which allow migration of gas off the landfill rty;
x Div. 2 - Section 17(4)(e)		е.	landf: of geo and st concer	t assessing the effectiveness of the ill design and operation including results otechnical investigations, surface water torm water management, gas migration and nations, condition of existing cover, and e of waste disposed of at the landfill;
	4.			ign requirements to be included in the ign plan: (62-701.600(5),FAC)
x Div. 2 - Section 17(5)(a)		a.	Plan	sheet showing phases of site closing;
x Div. 2 - Section 17(5)(b)		b.		ngs showing existing topography and sed final grades;
x Div. 2 - Section 17(5)(c)		c.		sions to close units when they reach wed design dimensions;
x Div. 2 - Section 17(5)(d)		d.	Final	elevations before settlement;
x Div. 2 - Section 17(5)(e)		e.	down	slope design including benches, terraces, slope drainage ways, energy dissipators and ssion of expected precipitation effects;
		f.	Final	cover installation plans including:

 \underline{x} Div. 2 - Section 17(5)(f)(1) (1) CQA plan for installing and testing final cover;

S LOCATION N/A N/C

- \times Div. 2 Section 17(5)(f)(2)
- \times Div. 2 Section 17(5)(f)(3)
- x Div. 2 Section 17(5)(f)(4)
- \times Div. 2 Section 17(5)(f)(5)
- x Div. 2 Section 17(5)(g)(1)
- \times Div. 2 Section 17(5)(g)(2)
- \times Div. 2 Section 17(5)(g)(3)
- \times Div. 2 Section 17(5)(g)(4)
- x Div. 2 Section 17(5)(g)(5)
- \times Div. 2 Section 17(5)(g)(6)
- x Div. 2 Section 17(5)(h)
- x Div. 2 Section 17(5)(i)
- \times Div. 2 Section 17(5)(j)
- \times Div. 2 Section 17(5)(k)
- x Div. 2 Section 17(6)(a)
- x Div. 2 Section 17(6)(b)
- x Div. 2 Section 17(6)(c)
- x Div. 2 Section 17(6)(d)

PART P CONTINUED

- (2) Schedule for installing final cover after final receipt of waste;
- (3) Description of drought-resistant species to be used in the vegetative cover;
- (4) Top gradient design to maximize runoff and minimize erosion;
- (5) Provisions for cover material to be used for final cover maintenance.
- g. Final cover design requirements:
 - (1) Protective soil layer design;
 - (2) Barrier soil layer design;
 - (3) Erosion control vegetation;
 - (4) Geomembrane barrier layer design;
 - (5) Geosynthetic clay liner design if used;
 - (6) Stability analysis of the cover system and the disposed waste.
- h. Proposed method of stormwater control;
- Proposed method of access control;
- j. Description of proposed final use of the closed landfill, if any;
- k. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC.
- 5. Closure operation plan shall include: (62-701.600(6),FAC)
 - a. Detailed description of actions which will be taken to close the landfill;
 - b. Time schedule for completion of closing and long term care;
 - c. Describe proposed method for demonstrating financial responsibility;
 - d. Indicate any additional equipment and personnel needed to complete closure.

LOCATION N/A N/C

x Div. 2 - Section 17(6)(e)

x Div. 2 - Section 17(6)(f)

x Div. 2 - Section 17(7) 6.

PART P CONTINUED

- e. Development and implementation of the water quality monitoring plan required in Rule 62-701.510, FAC.
- f. Development and implementation of gas management system required in Rule 62-701.530, FAC.
- Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(7),FAC)

Q. CLOSURE PROCEDURES (62-701.610, FAC)

S LOCATION N/A N/C

- x Div. 2 Section 18(2) 1. Survey monuments; (62-701.610(2), FAC)
- x Div. 2 Section 18(3) 2. Final survey report; (62-701.610(3), FAC)
- x Div. 2 Section 18(4) 3. Certification of closure construction completion; (62-701.610(4), FAC)
- x Div. 2 Section 18(5) 4. Declaration to the public; (62-701.610(5), FAC)
- <u>x Div. 2 Section 18(6)</u> 5. Official date of closing; (62-701.610(6), FAC)
- x Div. 2 Section 18(7) 6. Use of closed landfill areas; (62-701.610(7), FAC)
- x Div. 2 Section 18(8) 7. Relocation of wastes; (62-701.610(8), FAC)

R. LONG TERM CARE REQUIREMENTS (62-701.620, FAC)

- x Div. 2 Section 19(5)

 1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)
- x Div. 2 Section 19(6) 2. Right of property access requirements; (62-701.620(6),FAC)
- x Div. 2 Section 19(7) 3. Successors of interest requirements; (62-701.620(7), FAC)
- x Div. 2 Section 19(9) 4. Requirements for replacement of monitoring devices; (62-701.620(9), FAC)
- x Div. 2 Section 19(10) 5. Completion of long term care signed and sealed by professional engineer (62-701.620(10), FAC).

S. FINANCIAL RESPONSIBILITY REQUIREMENTS (62-701.630, FAC)

- x Div. 2 Section 20(2)
 & Appendix J
 1. Provide cost estimates for closing, long term care, and corrective action costs estimated by a PE for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3)&(7), FAC).
- x Div. 2 Section 20(3)

 2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4)&(8), FAC).
- x Div. 2 Section 20(5)

 3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5), (6), &(9), FAC).

CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

1	Applicant:
- .	Appricant.

2.

Applicant:	
The undersigned applicant or authorized	representative of Waste Management Inc. of
	statements made in this form and attached
information are an application for a <u>Cl</u> the Florida Department of Environmental in this application is true, correct and and belief. Further, the undersigned ag 403, Florida Statutes, and all rules and	ass III Landfill Construction Permit from Protection and certifies that the information complete to the best of his/her knowledge rees to comply with the provisions of Chapter regulations of the Department. It is erable, and the Department will be notified
Signature of Applicant or Agent	2859 Paces Ferry Road, Suite 1600 Mailing Address
R. David McConnell, Vice President Name and Title (please type)	Atlanta, GA 30339 City, State, Zip Code
<pre>dmcconnell@wm.com E-Mail address (if available)</pre>	(770) 805-3345 Telephone Number Date: 2/24/2006
Attach letter of authorization if agent corporate officer.	is not a governmental official, owner, or
Professional Engineer registered in Flor Sections 403.707 and 403.7075, Florida S	ida (or Public Officer if authorized under statutes):
This is to certify that the engineering facility have been designed/examined by principles applicable to such facilities facility, when properly maintained and estatutes of the State of Florida and rul undersigned will provide the applicant we maintenance and operation of the facility	me and found to conform to engineering In my professional judgment, this perated, will comply with all applicable es of the Department. It is agreed that the with a set of instructions of proper
Signature	S2L, Incorporated 531 Versailles Drive, Suite 202 Mailing Address
Robert E. Mackey, Principal Engineer Name and Title (please type)	Maitland, Florida 32751 City, State, Zip Code
	<pre>bmackey@s2li.com E-Mail address (if available)</pre>
Florida Registration Number (please affix seal)	(407) 475-9163 Telephone Number
- •	Date: 2/23/06

DEP FORM 62-701.900(1) Effective 05-27-01

DIVISION 2 APPLICATION NARRATIVE

1. INTRODUCTION

This report complies with the requirements of Chapter 62-701, Florida Administrative Code (FAC), and has been prepared for the permit application to construct a lateral and vertical expansion of Parcel 1 (closed Class I) landfill with Class III waste. The facility is located at 11990 S.R. 82 East, Fort Myers, Florida, and is currently operating under two separate permits, No. 0128933-007-SO/T3 (Vertical Expansion on the Closed Parcel 2) and No. 0128933-013-SO/T3 (Valley-Fill Expansion between Parcels 2 and 3). Access to the facility is via the entrance gate located on S.R. 82. It is WMIF's intent to limit the extent of the proposed vertical expansion to include only the north side slope of Parcel 1. As a result, the revised area of lateral and vertical expansion has been reduced from 77-acres (from the original application) to 61 acres. The proposed 61-acre expansion is comprised of approximately 57 acres of lateral and 4 acres of vertical expansion over the unlined Class I closed Parcel 1 landfill (closed in September 1993). It is estimated that the proposed 61-acre expansion will create almost 5.2 million C.Y. of waste disposal capacity to help serve the waste disposal needs within Southwest Florida.

Included herein are responses to the sections of the Chapter that apply to this application. Among the responses included are the engineering drawings, an operation plan, and a description of the final closure. Other parts of the Chapter are also addressed as necessary to fully describe the continuing operation and closure of the Gulf Coast Landfill (GCLF).

2. INTENT (62-701.100)

This permit application conforms to the intent of Chapter 62-701, FAC by documenting compliance with the established standards for the construction, operation, and closure of solid waste management facilities.

3. **APPLICABILITY (62-701.220)**

The GCLF is a solid waste management facility subject to the requirements of Chapter 62-701, FAC. The proposed Class III disposal area will be operated and closed in accordance with the aforementioned Rule requirements for Class III landfills.

4. **PROHIBITIONS (62-701.300)**

The current Class III Valley-Fill Landfill has operated and will continue to operate in conformance with all prohibitions listed in Rule 62-701.300, FAC, and such operations are performed to protect the environment through FDEP approved procedures. Once permitted by FDEP, the proposed Class III landfill expansion of Parcel 1 will also comply with these prohibitions. Construction of the proposed expansion areas and waste disposal operations will not commence until FDEP has issued the appropriate permits for the proposed expansion.

The GCLF complies with other prohibitions regarding the proper disposal of waste. These prohibitions include:

- No existing or approved community potable water wells are present within 1,000 feet.
- The landfill is not located in a dewatered pit.
- The landfill is not located in a flood prone area.
- Waste will not be disposed in a natural or artificial body of water, including ground water.
- Waste will not be disposed within 200 feet of a body of water that flows off-site.
- Waste will not be disposed within the right of way of a public highway, road, or alley.
- There are three (3) existing water supply wells at the GCLF. One well is located within the proposed lateral expansion area. WMIF proposes to abandon this well prior to the construction of the landfill, as per Rule 62-701.510(3)(d)5, FAC. However, the on-site water supply wells are not used for drinking water. Bottled water is supplied for that purpose.

The proposed Parcel 1 landfill expansion will comply with the following prohibitions:

- No Class I waste will be accepted.
- No waste will be burned on site.
- Hazardous waste will not knowingly be accepted for disposal.
- PCB contaminated waste will not knowingly be accepted for disposal.

- Untreated or treated biohazardous or biomedical waste will not knowingly be accepted for disposal.
- The site is not within 3,000 feet of a Class I surface water.
- Liquid waste will not knowingly be accepted for disposal.
- Neither oily waste nor commingled oily waste will knowingly be accepted for disposal.
- GCLF is not a waste-to-energy facility.
- Lead-acid batteries, used oil, white goods, and whole waste tires will not knowingly be accepted for disposal.

Solid waste will not be stored in tanks, or indoors. GCLF will continue to be operated to comply with all the applicable prohibitions listed in Rule 62-701.300, FAC.

WMIF has registered its yard waste processing facility using Form 62-709.320(7)(a), to comply with the Department's criteria. The facility will continue its yard waste processing within the setbacks specified in Rule 62-701.300(12)(a)(b) and (c), FAC.

5. <u>ALTERNATE PROCEDURES (62-701.310)</u>

GCLF is not seeking an alternate procedure per Rule 62-701.310, FAC.

6. <u>SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS</u> (62-701.320)

(1). <u>Permit requirements</u>

The GCLF is operating under two separate Class III permits, No. 0128933-007-SO/T3 (Vertical Expansion on the Closed Parcel 2) and No. 0128933-013-SO/T3 (Valley-Fill Expansion between Parcels 2 and 3). A copy of the existing permits, along with a list of all permits associated with the Class III Landfill, is provided in Appendix A of this permit application.

As a result of the 2004 hurricane season, the airspace within the existing Class III landfills has been significantly depleted. The development of a new Class III disposal area will address this lack of airspace.

(2). <u>Exemptions</u>

WMIF is not seeking an exemption with this permit application.

(3). <u>Irresponsible applicant</u>

Please refer to Section 6(7)(i) of this permit application for a summary of enforcement actions involving WMIF and the GCLF.

(4). Modification of permit

WMIF is not applying for a permit modification of its existing Operation permit; therefore, this section is not applicable.

(5). <u>Permit application</u>

Four (4) copies of this construction permit application, engineering plans and reports, and all supporting information for the proposed expansion have been submitted to the FDEP South District office.

(6). Engineer of record and professional certification

All engineering plans, reports, and information supporting the application have been signed, sealed, and dated by a professional engineer as required by Rule 62-701.320(6), FAC.

(7). Application content and format

- (a). The letters of transmittal are provided at the beginning of Division I.
- (b). The completed, signed, and sealed DEP Form 62-701.900(1) is provided in Division 1.
- (c). A check for Six Thousand Dollars (\$6,000), as required by Rule 62-701.315, FAC is provided within this application.
- (d). An engineering report, addressing the requirements of Rule 62-701.320(7), FAC is provided in this Division.
- (e). Appendices are provided within the engineering report (Division 2), and are listed in the table of contents.
- (f). The engineering drawings are provided in Appendix C and include a regional map (Figure 1), current vicinity map showing land use and zoning within one mile of the landfill (Figure 2), airport location map (Figure 3), cover sheet (Drawing 1), site plan and existing topography (Drawings 2A and 2B), aerial photograph flown 12-14-05 (Drawing 3), phasing plans (Drawings 4, 5, and 6), proposed final contours (Drawing 7), proposed leachate management plans, layouts, and details (Drawings 8, 9, and 10), landfill cross-sections and details (Drawing 11), and a property boundary survey (Drawing 12). No changes have been made to the property boundary since the original release of this drawing made by Ink Engineering Inc. in 2000.
- (g). The GCLF property is owned by Gulf Disposal, Inc., a wholly owned subsidiary of Waste Management Inc. of Florida. Proof of property ownership, as required by Rule 62-701.320(7) (g), FAC, is provided in Appendix D.
- (h). The GCLF is not owned by a County; therefore; this Rule does not apply.

(i). A summary of FDEP enforcement activities involving WMIF is provided in Appendix E. Please note that no enforcement actions have been taken against WMIF at the GCLF.

(8). Notice of application

Appendix F provides a public notice for a Class III landfill construction permit that will be published upon FDEP approval. Upon receipt of FDEP's Notice of Intent and in accordance with the requirements of Rule 62-701.320(8)(a), FAC, a Notice of Application will be published in a newspaper of general circulation in the area where the GCLF operates (Rule 62-110.106, FAC). Proof of publication will subsequently be provided to the FDEP South District Office.

(9). Permits for construction, modification, operation, and closure

This report has been prepared to construct a lateral and vertical expansion of closed Parcel 1 with Class III waste in accordance with Chapters 62-4 and 62-701, FAC.

(10). Permit renewals

WMIF is not applying for a permit renewal; therefore, this Rule does not apply.

(11). Permit transfers

WMIF is not applying for a permit transfer; therefore, this Rule does not apply

(12). <u>Identification number</u>

WMIF acknowledges that the FDEP will assign an identification number to each solid waste management facility that receives a permit.

(13). Airport safety

A map showing the location of the closest airport is provided as Figure 3 in Appendix C. WMIF acknowledges that the proposed Class III landfill is within 5 miles (greater than 10,000-feet) of the Southwest Florida International Airport. Copies of the notifications required by Rule 62-701.320(13)(c), FAC are provided in Appendix G of this application.

(14). Other permits

WMIF acknowledges the requirements of this Rule.

(15). Operator training

The facility will be operated with the assistance of trained operators and spotters in accordance with Rule 62-701.320(15), FAC. WMIF utilizes an In-House Training Plan for spotters, which was approved by FDEP on November 4, 2004. WMIF proposes to utilize two (2) spotters in checking each waste load brought into the facility, with the understanding that they will be adequate to monitor the waste loads at a receiving rate in excess of 2,000 tons per day. A copy of the training plan along with employee certificates for each spotter employed at the GCLF are provided within Appendix H. WMIF's operators responsible for the facility have completed the 24-hour initial training requirements for Class III facility operations and will complete the 16 hours of continuing education requirements every three years, as required by Rule. In addition to courses offered by the TREEO Center, Waste Management frequently employs Chris Kohl Training and Consulting Services to train new operators or to assist in fulfilling continuing education requirements. The hours of training required are identical to the hours for courses provided by the TREEO Center. A listing of the courses that may be used for the training of new facility personnel, or complying with the continuing education requirements for existing personnel, was downloaded from the TREEO website and is included in Appendix H. Subsequently, copies of current operator training certificates are also provided within Appendix H.

7. <u>LANDFILL PERMIT REQUIREMENTS</u> (62-701.330)

(1). Applicability

WMIF is applying for a lateral and vertical expansion of the closed Parcel 1 Class I landfill with Class III waste. This application is in compliance with the requirements of Rule 62-701.330, FAC.

(2). Term of permit

WMIF acknowledges that the time period for permits shall be no longer than five years from the date of issuance by the FDEP.

(3). Permit applications

- (a). The engineering drawings, provided in Appendix C, include a regional map (Figure 1) and a current vicinity map showing land use and zoning within one mile of the landfill (Figure 2).
- (b). A current vicinity map showing the only airport located within five miles of the landfill is provided in Appendix C, Figure 3.
- (c). The location of soil borings within the existing Parcel 1 footprint area were established during a soil survey conducted by Ardaman & Associates and Harland Engineering Laboratory in 1981. The results of this survey have been submitted to the Department in the past and are still valid. Please refer to Exhibits 1-4, Application for Renewal and Modification of the Gulf Coast Landfill Permit No. S036-53385, submitted to the Department of Environmental Regulation (DER) in March 1982. Additional soil borings within the lateral expansion area of Parcel 1 were established in a soil survey conducted by The Colinas Group, Inc., and boring locations and results have been provided in the hydrogeological

investigation report. Please refer to Section 7(3)(f) and Appendix I of this permit application for further discussion.

- (d). The engineering drawings in Appendix C also include a cover sheet (Drawing 1), site plan showing all property boundaries and existing topography (Drawings 2A and 2B), aerial photograph flown on 12-14-05 (Drawing 3), phasing plans (Drawings 4, 5, and 6), proposed final contours (Drawing 7), proposed leachate management plans and details (Drawings 8, 9, and 10), landfill cross-sections and details (Drawing 11), and a property boundary survey (Drawing 12). No changes have been made to the property boundary since the original release of this drawing made by Ink Engineering Inc. in 2000.
- (e). 1. It is anticipated that Class III waste will be accepted at the GCLF Valley-Fill until late 2007 and at the proposed Parcel 1 expansion area until 2014. The estimated current and five-year projected populations are 1,672,500 and 1,974,678, respectively, which include Lee, Collier, Charlotte, Manatee, and Sarasota Counties. The anticipated Class III waste acceptance rate at the site is 2,400 tons per day or 748,800 tons per year. However, the actual tonnages may vary with market conditions.
 - 2. It is anticipated that the waste that will be accepted at the GCLF (Class III) will include C&D, yard trash, shredded/cut tires, asbestos, carpet, glass, plastic, furniture (other than appliances), commercial wastes, and industrial wastes.

Specifically, WMIF proposes to accept the following waste types for disposal within the Class III landfill:

- Construction and Demolition Debris (C&D)
- Yard Trash
- Shredded/Cut Tires
- Asbestos

- Carpet
- Glass
- Plastic
- Furniture
- Commercial Wastes from stores, offices, restaurants, and warehouses
 (excluding manufacturing activities). Such wastes may include outdated
 paper products, outdated non-treated and treated wood products,
 cardboard material, outdated metal products, empty plastic and metal
 containers, and mobile homes.
- Industrial Wastes (non-hazardous), which may include paper, wood, plastic, Styrofoam, metals, dredging material without liquids that has been tested for parameters of concern as addressed in FAC, Chapter 62-777, water treatment plant lime sludges without liquids, reject material from C&D recyclers and Class III MRFs that has been properly monitored to preclude the presence of Class I material.
- Agricultural Farm Plastics.
- Clean soil that meets the commercial SCTL (Soil Cleanup Target Levels)
 Standards, as defined within FAC Chapter 62-777, Table II.
- Any other material with the prior approval of the Department.

GCLF (Class III) shall NOT knowingly accept the following waste for disposal:

- Vehicles, vessels, or containers that once contained fuel;
- WWTP sand filter material;
- Ash from yard trash incinerators;
- Reject from C&D recyclers and Class III MRFs, with commingled Class I material;
- · Untested dredging material; and
- Brown goods, including small appliances, electronic goods, and CRTs.
- Shredded/Precut waste

- 3. With the anticipated incoming volume of waste, it is estimated that the life of the facility will be approximately 8-10 years.
- 4. Cover soils that will be used at the landfill include sands and silts obtained from various off-site borrow sources, depending on availability and price. No borrow areas are shown on the topographic map.
- (f). A hydrogeological/geotechnical investigation report of the lateral expansion area, required by Rule 62-701.410, FAC, was conducted by The Colinas Group, Inc. to demonstrate that the underlying geological formations or other subsurface features are able to support the solid overburdening waste at closed Parcel 1. Based on this report, the vertical expansion may be filled to at least an elevation of 120' National Geodetic Vertical Datum (NGVD), with the underlying geology providing adequate support within the expansion area. The results of hydrogeological and geotechnical investigations, conducted by The Colinas Group, Inc., are provided in Appendix I of this permit application.
- (g). The groundwater quality monitoring plan, required by Rule 62-701.510, FAC, has been developed and updated, and is submitted in Appendix I of this permit application. This plan shall not be changed during the operation, closure, and post-closure periods without prior Department approval. Abandonment of groundwater monitoring wells will be in accordance with Rule 62-701.510(3)(d)5, FAC. WMIF will sample leachate collected within the expansion area in accordance with Rule 62-701.510, FAC. Please refer to Section 14 of this division for a description on the leachate monitoring methods proposed at GCLF.
- (h). The approved laboratory to conduct water quality monitoring in accordance with Chapter 62-160, FAC at the GCLF is STL Laboratories, 4955 Yarrow Street, Arvada, Colorado. STL-Denver is an FDEP-approved, National Environmental Laboratory Accreditation Program (NELAP) certified analytical laboratory, DOH ID No. 87667. Evidence of the laboratory has been submitted to the Department in the past and is still valid. Please refer to FDEP PERMIT

RENEWAL APPLICATION NARRATIVE, SECTION 62-701.340 - GENERAL CRITERIA FOR LANDFILLS and APPENDIX E, Renewal Application No. SO36-267692, Response to FDEP Comments.

- (i). Closure cost estimates for the proposed expansion of closed Parcel 1, and updated long-term care estimates for the entire facility (Parcels 1, 2 and 3) are provided in Appendix J of this permit application. Proof of financial assurance will be in accordance with Rule 62-701.330(3)(i), FAC, and will be submitted upon Departmental approval of these cost estimates.
- (j). An operation plan, which includes a contingency plan, has been developed in accordance with Rule 62-701.330(3)(j), FAC, and is provided in Appendix B of this permit application.

8. GENERAL CRITERIA FOR LANDFILLS (62-701.340)

(1). <u>Performance standards</u>

The proposed Class III landfill will be operated, maintained, and monitored to control the movement of waste or waste constituents into the environment. Applicable water quality standards and criteria have historically been met at the edge of the zone of discharge and will continue to be met. WMIF understands that the exemption from the secondary groundwater standards will not apply to the lateral expansion of the landfill footprint and its associated monitoring system.

(2). Location requirements

The proposed Class III landfill is not located in the 100-year flood plain and complies with the location requirements of Rule 62-701.340(4)(b), FAC. A 100-year flood plain map was provided to the Department in the past and is still valid. Please refer to Exhibit 7, Application for Renewal and Modification of the Gulf Coast Landfill Permit No. S036-53385, submitted to the DER in March 1982.

The proposed landfill will not exceed EL. 120' NGVD, as discussed in Section 7(3)(f). WMIF will employ visual screening methods similar to those employed at closed Parcel 1, Parcels 2 and 3. The minimum horizontal separation to the property line is greater than 100', as shown on Drawings 2A & 2B, located in Appendix C.

9. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400)

(1). Minimum design standards

WMIF acknowledges that FDEP may impose more stringent requirements than those outlined in Rule 62-701.400, FAC, as necessary to protect the environment and the public health and safety due to site specific conditions and types of wastes to be disposed. In meeting the construction design standards of this Rule, this application provides reasonable assurance that the performance standards of Rule 62-701.340(1), FAC, will be met.

(2). Planned construction and closure

The proposed Class III landfill will be designed such that it is constructed and closed at planned intervals throughout the design period of the landfill. Please refer to phasing plans (Drawings 4-7) in Appendix C of this permit application.

(3). <u>Landfill liner requirements</u>

(a). The total expansion area is comprised of approximately 61 acres, of which approximately 57 acres consists of a lateral expansion of Parcel 1 (closed Class I landfill) with Class III waste. Although Class III landfills may be exempted from the requirements of Rules 62-701.400(3) and (4), FAC, WMIF is proposing to construct a bottom liner system comprised of a single 60-mil high density polyethylene (HDPE) geomembrane and overlying composite drainage net (CDN). The geomembrane will meet the specifications contained in method GRI GM13.

Tests on the bottom liner will be performed in accordance with Rule 62-701.400(3)(d)7 & 8, FAC. WMIF will submit the test results and a Certificate of Construction Completion (CCC) to FDEP upon completion of landfill construction.

The landfill base will be sloped at a minimum of 2% toward the nearest leachate collection lateral. To accommodate for predicted landfill settlement of 1" for every 6.66 ft. of waste placed, the leachate collection laterals have been designed to have, at a minimum, 0.35% slope at post settlement. It is WMIF's understanding that the underlying soil hydrology is adequate to prevent differential settlement of the landfill and to prevent liner failure.

The seasonal high water table is estimated to be between el. 21.5' and el. 22' NGVD based on the hydrogeological/geotechnical investigation provided in Appendix I of this permit application. The bottom liner will be constructed between el. 22' (at the sump location) and 30' NGVD. It is anticipated that the bottom liner system will not be adversely impacted with fluctuations in the groundwater; therefore, the requirements of Rule 62-701.400(3)(a)(3), FAC are not applicable.

The existing ground elevation ranges between el. 22' and el. 27.5' NGVD. The bottom liner system will be constructed between el. 22' and el. 30' NGVD to adequately cover all surrounding earth which would come in contact with the waste or leachate.

- (b). This section of the Rule is not applicable at the proposed landfill.
- (c). This section of the Rule is not applicable at the proposed landfill.
- (d). WMIF will ensure that the first layer of waste placed above the liner and the leachate collection and removal system (LCRS) will be a minimum of four feet in compacted thickness and will consist of selected waste containing no large

rigid objects that may damage the liner or the LCRS. WMIF will follow all the necessary precautions to protect the liner and LCRS during its installation and operation. A liner Construction Quality Assurance (CQA) Plan that meets the requirements of Rule 62-701.400, FAC is provided in Appendix K.

(e). Please refer to Appendix L for material specifications related to geomembrane, geocomposite, and geotextile, as required by Rule 62-701.400(3)(e), FAC.

(4). Leachate collection and removal system

- (a). Although Class III landfills may be exempted from the requirements of Rule 62-701.400 (4), FAC, WMIF is proposing to design, construct, and maintain a LCRS within the lateral expansion area of Parcel 1 in accordance with Rule 62-701.400(4)(a) and (b), FAC. Hydrologic Evaluation of Landfill Performance (HELP) Model was used to estimate the amount of leachate expected to be generated during the life of the landfill. The leachate collection system has been designed to effectively manage the leachate, and the leachate quantities have been estimated using the HELP Model. Please refer to Appendix M for HELP Model results and calculations performed in designing the LCRS.
- (b). The drainage layer of the LCRS will be comprised of a composite drainage net (CDN) with a permeability of 10 cm/sec., and overlain with a 2-ft sand layer, as required by Rule 62-701.400(4)(b), FAC. The CDN shall consist of a non-woven geotextile bonded to one side of a geonet. The geonet is comprised of HDPE material, which is chemically compatible with the leachate from a typical sanitary landfill; and inert to commonly encountered chemicals, hydrocarbons, mildew, and rot resistant. The transmissivity of the CDN will be based on the maximum load acting upon it and will meet or exceed the flow under load of a granular material. The CDN will be installed to minimize damage to the geomembrane liner. Please refer to Appendix L for material specifications for the CDN.

The primary method of leachate collection will be via collection pipes, located within interceptor trenches. Each interceptor trench will be comprised of HDPE geomembrane, CDN, gravel, and leachate collection pipe, as shown in Drawing 8 of Appendix C. The landfill base will be sloped at a minimum of 2% toward the nearest leachate collection lateral. The leachate collection laterals will be constructed of 6" HDPE pipe, at a maximum slope of 0.86%, and typically spaced 97' to 124' apart. The leachate collection header will be constructed of 6" HDPE pipe at a minimum slope of 0.35%. The post settlement bottom slope has been designed at a minimum of 0.35% to accommodate for predicted landfill settlement of one inch for every 6.66 ft. of waste placed. The collection pipes will have sufficient mechanical strength to prevent collapse under pressure.

Leachate cleanouts will be installed at every lateral and header pipe intersection to test and clean clogged pipes. A total of eight (8) leachate collection sumps will be installed within the perimeter of the lateral expansion area. The leachate containment layer at each sump location will be comprised of two (2) 8-oz. non-woven geotextile, 60-mil HDPE geomembrane, and geosynthetic clay liner (GCL). Leachate collected within each sump will be pumped to two (2) leachate pump stations and then to the on-site oxidation ponds. Please refer to Drawings 8, 9, and 10, in Appendix C, for pipe layout, sump and pump station locations, cleanouts, and details of the proposed LCRS.

(5). Leachate recirculation

WMIF is not proposing to recirculate leachate; therefore, this section is not applicable to this permit application.

(6). Leachate storage tanks and leachate surface impoundments

(a). The GCLF is a solid waste management facility subject to the requirements of Rule 62-701.400(6), FAC. The proposed Class III disposal area

will be operated and closed in accordance with the aforementioned Rule requirements for Class III landfills.

(b)3. WMIF currently utilizes three (3) surface impoundments to store leachate that is collected from closed Parcel 3 (closed Class I lined landfill). The design of these surface impoundments has already met the requirements outlined in Rule 62-701.400(6), FAC, including the daily inspection requirements and notification and corrective action requirements if leakage rates exceed calculations. If the daily checks indicate the upper liner is leaking at a rate greater than the design calculations, the Department will be notified by WMIF. If the leakage rate results in the flooding of the leak detection and collection system, WMIF will empty the surface impoundment and repair the liner system.

(b)5. WMIF will maintain a minimum of 2-ft free board in the leachate collection ponds to remain in accordance with Rule 62-701.400(6)(b), FAC. This will be achieved by means of, but not limited to, increasing the frequency and number of leachate disposal trucks or via direct disposal to the City of Fort Myers' wastewater treatment plant.

Information pertaining to the design and daily operation of the existing leachate impoundments has been provided to the FDEP in the past and remains valid. Please refer to FDEP PERMIT RENEWAL APPLICATION FORM NARRATIVE, Section 62-701.400, and APPENDIX F, Application to Operation Permit Renewal SO36-180572, submitted to the FDEP in June 1995.

(b)6. WMIF will continue to apply and maintain weekly cover in order to minimize adverse environmental, safety, or health effects such as those resulting from unauthorized wastes, blowing litter, odors, or fires. An active gas collection control system is in operation within Parcel 1. It is anticipated that off-site odors will not be a concern during the proposed expansion of Parcel 1. Parcel 1 is an old landfill in which the waste has already decayed or partially decayed and is not expected to produce any significant odor problem. WMIF will limit the extent of

the proposed vertical expansion to the closed north sideslope of Parcel 1, thereby reducing the impact to the existing landfill gas collection system installed on top of Parcel 1. Locations of existing vertical gas extraction wells over Parcel 1 are provided in Appendix N.

- (c) WMIF does not utilize above ground leachate storage tanks at the GCLF; therefore, this section is not applicable to this permit application.
- (d) WMIF does not utilize above underground leachate storage tanks at the GCLF; therefore, this section is not applicable to this permit application.

(7). <u>Liner systems Construction Quality Assurance (CQA)</u>

A liner system CQA plan has been developed in accordance with Rule 62-701.400(7), FAC, to assist in achieving continuous compliance with the liner construction requirements. Please refer to Appendix K of this permit application for the liner CQA plan and technical specifications. All geosynthetic material testing shall be performed by a GAI certified laboratory.

(8). Soil liner CQA

Soil Liner CQA is not applicable to this permit application.

(9). Surface water management systems

The stormwater management system design complies with the requirements of Rule 62-701.400(9), FAC. An application (#36-0247969-001) for a stormwater permit has been submitted to Florida Department of Environmental Protection's Environmental Resource Permit (FDEP-ERP) Division for review. WMIF will utilize external soil terrace swales with side slopes of 2:1, rather than the reverse sloping method of controlling stormwater. This method of constructing stormwater terrace swales has been previously approved by

the FDEP for the Parcel 2 (Class III Valley-Fill) landfill. Details of the stormwater design are discussed in Section 13(10) of this division.

(10) Gas control systems

The closed Parcel 1 currently operates a permitted active vertical gas control system. A summary of the existing gas collection system and the locations of the existing gas extraction wells over Parcel 1 are provided in Appendix N.

WMIF proposes to strip away the cap over the closed sideslope of Parcel 1 before placement of Class III waste. However, the vertical expansion will be limited to the closed north sideslope of Parcel 1, thereby not affecting the existing landfill gas management system installed on top of Parcel 1. Therefore, no additional gas collection wells are being proposed on top of Parcel 1.

(11). Landfills in groundwater

The GCLF is not situated in groundwater; therefore, Rule 62-701.400(11), FAC, is not applicable.

10. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410)

A hydrogeological investigation for the proposed lateral expansion area of Parcel 1 has been performed by The Colinas Group, Inc., as required by Rule 62-701.410, FAC. A signed, sealed, and dated copy of the report is provided in Appendix I of this permit application for FDEP's review. A signed, sealed, and dated hydrogeological investigation for the rest of the facility was submitted to the Department in the past and is still valid. Please refer to Exhibits 1-4, Application for Renewal and Modification of the Gulf Coast Landfill Permit No. S036-53385, submitted to the Department of Environmental Regulation (DER) in March 1982.

In conformance with Rule 62-701.410(1)(b), FAC, an inventory of all the public and private water wells within a one-mile radius of the proposed Class III landfill is provided in Appendix O

of this permit application. The inventory includes all available information provided by the Lee County Division of Natural Resources.

There are no existing or approved community potable water wells present within 1,000 ft. of the property. There are three (3) existing water supply wells at the GCLF (Class III) site. One well is located within the proposed lateral expansion area and will be abandoned prior to the construction of the landfill, as per Rule 62-701.510(3)(d)5, FAC. The other two wells are not within 500 feet of the proposed lateral expansion area. The on-site water supply wells are not used for drinking water. Bottled water is supplied for that purpose. The locations of all wells within one mile of the property, as provided by the Southwest Florida Water Management District, are shown in Figure 1 located in Appendix O.

11. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.420)

A geotechnical investigation for the proposed lateral expansion area of Parcel 1 was performed by The Colinas Group, Inc. The report meets the requirements of Rule 62-701.420, FAC and includes a foundation analysis, settlement analysis, and a slope stability analysis. Please refer to Appendix I for a signed, sealed, and dated copy of the geotechnical report. Based on the report, a settlement of one inch over 6.66 ft. of waste placed is anticipated in the expansion areas. The slope stability analysis yielded a factor of safety of 1.683.

A geotechnical study for the rest of the facility was conducted by Jammal & Associates, Inc. in December 1988, and includes an evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14 and 40 CFR 258.15. This report is on file with the Department and is still valid. Please refer to FDEP PERMIT APPLICATION NARRATIVE, SECTION 11 and APPENDIX J, Application for Construction Permit No. 0128933-005-SC/T3.

12. <u>VERTICAL EXPANSION OF LANDFILLS (62-701.430)</u>

(1). Applicability

This permit application has been prepared for a lateral and vertical expansion of closed Parcel 1 (Class I landfill) with Class III waste. Therefore, the requirements of this Rule are applicable.

It is anticipated that the vertical expansion will not result in leachate leakage from the existing landfills or adverse impacts to the closure designs of the existing landfills.

The existing cap over closed Parcel 1 consists of, from top to bottom, 12 inches of vegetation/soil cover, 18 inches of a barrier layer ($k = 4x10^{-6}$ cm/sec), and a 6 inch initial cover soil layer. WMIF is proposing to install an interface liner between the closed unlined Class I landfill and the proposed Class III vertical expansion. The interface liner will consist of a single 60-mil high density polyethylene (HDPE) geomembrane that will be installed on the north side slope of Parcel 1. During the construction of the bottom liner system within phases 4 and 5 of the lateral expansion area, WMIF will install the geomembrane component of the bottom liner system to the top of Parcel 1 north side slope, instead of terminating it at the bottom of the side slope. The geomembrane will be supported by an anchor trench on the top of the side slope, as shown in Drawing 10 of Appendix C. The drainage layer on top of the interface liner will be comprised of sand with a permeability of 1 x 10^{-3} cm/sec, and will be chemically resistant to the waste and leachate. The liner bedding will consist of at least 2-feet of soil between the liner and the waste material. The proposed interface liner and anchor trench details are provided in Drawing 10 of Appendix C.

The leachate generated within the drainage layer of the interface liner will be collected by means of 4" ADS® or equivalent corrugated perforated HDPE pipes with polyester sock to minimize soil intrusion. Based on the hydrologic evaluation landfill performance (HELP) model and Giroud's head over liner equation, the collection pipes will be installed at a maximum distance of 94' in order to limit the head over the interface liner to less than one (1) foot. The proposed pipes will be required for the control of leachate head for a relatively short period of time (less than 36 months) between filling of the interface area and landfill closure above the interface liner portion of the landfill. Based on application of the HELP model, once final cover is installed over the sideslope, the

leachate impingement rate over the interface liner reduces drastically to trace amounts, thereby eliminating the need for the proposed leachate collection pipes to maintain head at less than one foot. Please refer to Appendix T for the HELP model results and Giroud's head over liner equation.

WMIF is also proposing to install two (2) additional 6" HDPE perforated leachate collection laterals at the bottom of the north side slope and within the lined expansion area of Parcel 1. These laterals will gravity drain the additional leachate that is generated from the drainage layer of the interface liner to 6" HDPE non-perforated leachate collection header pipes. The base grades shown on Drawing 8 in Appendix C have been revised since the original submittal to accommodate the additional 6" perforated HDPE leachate collection laterals and 6" solid HDPE leachate collection header pipes.

As discussed in Section 9(3) of the Narrative, the perforated 6" leachate collection laterals will be designed with a maximum slope of 0.86% and typically spaced between 97' and 124' apart from the nearest lateral, as shown on Drawing 8 in Appendix C. The 6" non-perforated HDPE leachate collection header pipes will be designed to have a minimum post settlement slope of 0.35%.

An active landfill gas (LFG) collection system is installed on Parcel 1 that will continue to be operated during the proposed expansion and during the post-closure period of the entire Gulf Coast Landfill. The vertical LFG extraction wells, W-21, W-22, W-23, and W-24, installed on top of Parcel 1, have an adequate radius of influence to collect gas that may accumulate beneath the interface liner that will be installed on the north side slope of Parcel 1. Therefore, WMIF is not proposing to install additional gas collection piping to vent gas from underneath the interface liner.

After reaching the final grades (shown on Drawing 7 in Appendix C), disturbed portions of Parcel 1 will be closed using a final cover system of either a geosynthetic clay liner (GCL) or a 50-mil linear low density polyethylene (LLDPE) Super GripNet geomembrane. The use of the proposed final cover is expected to reduce the amount of leachate generated in Parcel 1. For the interim period between when this barrier layer is

removed and the new proposed barrier layer is installed, the infiltration into the waste pile may be expected to be greater than currently experienced. Precipitation that falls within the active area will not be allowed to run off into the storm water management system, while that not falling directly into the active area will continue to be released into the storm water system. For the much longer period after the new GCL or LLDPE Super GripNet geomembrane barrier layer has been placed, infiltration into the waste pile should decrease dramatically in comparison to the rate associated with the currently constructed closure. The proposed GCL barrier layer option provides a hydraulic conductivity of less than 5 x 10⁻⁹ cm/sec, providing a much more effective barrier to infiltration (with LLDPE barrier providing less infiltration). The performance of HELP Model runs provided in Appendix R of this permit application indicates that the proposed landfill closure will significantly reduce leachate generation in comparison to the current installed landfill cap. Details of the proposed final cover system are provided in Section 17(5)(g) of this permit application.

It is WMIF's understanding that the vertical expansion of Parcel 1 would cause no significant threat to the environment based on the following reasons.

- Consistent with the current operations in Parcel 2 Valley-fill Landfill (Class III), this expansion area would only receive Class III waste after the waste has been inspected and approved by an operator and/or spotter trained in accordance with the requirements of Rule 62-701.320(15), FAC.
- The attached hydrogeological and geotechnical report demonstrate that the geology underlying Parcel 1 (closed Class I landfill) is sufficient to support the proposed overburden. Please refer to Appendix I of this permit application for a copy of the report.
- Class III waste is non-putrescible and will decay slowly. This results in a leachate
 with modest concentrations of compounds from the decomposition process during the
 operational period of the landfill.

- The proposed final cover system is far less permeable than the cover system currently in-place over closed Parcel 1.
- Parcel 1 is an old landfill in which the waste has already decayed or partially decayed. This old waste should impede the downward movement of percolated stormwater.
- The proposed groundwater monitoring system is capable of monitoring the groundwater conditions at the landfill.

(2). Construction requirements

- (a). A signed, sealed, and dated foundation analysis, performed by Hanecki Consulting Engineers, Inc., is provided within the Hydrogeological/Geotechnical Investigation Report. Please refer to Appendix I of this permit application. Based on the settlement analysis, a settlement of one inch for every 6.66 ft. of waste placed is anticipated in the vertical areas. A factor of safety of 1.683 was yielded from the slope stability analysis.
- (b). As discussed in subpart (1) of this section, WMIF is proposing to install a single 60-mil HDPE geomembrane between the closed unlined Class I landfill and the proposed Class III landfill. Settlement of the old waste over Parcel 1 should not adversely impact the proposed closure of this area.
- (c). The proposed stormwater management system design for the lateral and vertical expansion of Parcel 1 is provided to FDEP-ERP for review under a separate cover. This design meets the requirements listed in Rule 62-701.400(9), FAC.
- (d). As described in subpart (1) of this section, WMIF is proposing to install a single 60-mil HDPE geomembrane between the closed unlined Class I landfill and the proposed Class III landfill. An active landfill gas (LFG) collection system is installed on Parcel 1 that will continue to be operated during the vertical expansion of

Parcel 1, and during the post-closure period of the landfill. The vertical LFG extraction wells, W-21, W-22, W-23, and W-24, installed on top of Parcel 1, have an adequate radius of influence to collect gas that may accumulate beneath the interface liner that will be installed on the north sideslope of Parcel 1. Therefore, WMIF is not proposing to install additional gas collection piping to vent gas from the interface liner. WMIF will follow the gas control procedures as described in Section 9(10) of this Division.

13. LANDFILL OPERATION REQUIREMENTS (62-701.500)

(1). Operating personnel

Waste Management Inc. of Florida and S2L, Incorporated, acknowledge Rule 62-701.500(1), FAC, which states, "All Class I and Class III landfills shall have at least one trained operator at the landfill during all times when the landfill receives waste. Trained operators are those who have satisfied the requirements of Rule 62-701.320(15), FAC. All Class I and Class III landfills shall have at least one spotter at each working face at all times when the landfill receives waste to detect unauthorized wastes." The proposed landfill will be operated with the assistance of trained operators and spotters in accordance with Rule 62-701.320(15), FAC.

(2). Operation plan

An operation plan for the facility is provided in Appendix B of this permit application. It includes the following:

- a. Designation of persons responsible for operation and maintenance of the facility;
- b. Contingency operations, alternate waste handling and disposal methods in case of emergency such as a fire, natural disaster, or equipment failure;

- c. Controlling the type of waste received at the site. The plan specifies inspection procedures, number and location of spotters for each working face, and procedures to be followed if prohibited wastes are discovered;
- d. Weighing incoming waste;
- e. Vehicle traffic control and unloading;
- f. Method and sequence of filling waste;
- g. Waste compaction and application of cover;
- h. Operations of gas, leachate, and stormwater controls;
- i. Water quality monitoring; and
- j. Maintaining and cleaning the leachate collection system.

The contingency plan is contained within the operation plan.

(3). Operating record

WMIF will maintain all operating records that include reports, analytical results, demonstrations, notifications required by Chapter 62-701, all FDEP issued construction, operation and closure permits, including all modifications to those permits, engineering drawings and supporting information, and training records. These records will be kept at the proposed administrative building (shown on Drawing 2A, located in Appendix C) at all times and made available for inspection at reasonable times to Department personnel.

(4). Waste records

All solid waste entering the GCLF (Class III) will be weighed and logged as it is received. WMIF maintains a record of the total tonnage of Class III waste received per day, and will estimate the amount of each type of waste listed under 62-701.500(4)(b), FAC. This information will be submitted to the Department quarterly.

(5). Control of access

Unauthorized waste disposal and access to and use of the facility shall be controlled by fencing, gates, or other barriers, as well as signs and facility personnel. Public access and receipt of wastes shall occur only when an attendant is on duty. Gates at all roadway access points are kept locked outside of normal working hours. All refuse traffic will be required to pass by the scalehouse to gain entry to active portions of the landfill.

(6). Monitoring of waste

a. Load checking program

A load-checking program will be implemented at the facility to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The program will consist of the following minimum requirements:

- i. WMIF will examine at least three random loads of solid waste delivered to the Class III landfill each week. The waste collection vehicle drivers selected by the inspector shall be directed to discharge their loads at a designated location segregated from the active working face within the landfill. A detailed inspection of the discharged material will be made for any unauthorized wastes.
- ii. If unauthorized wastes are found, WMIF will contact the generator, hauler, or other party responsible for shipping the waste

to the landfill to determine the identity of the waste sources, and arrange for the removal of the subject waste from the site.

b. <u>Handling hazardous wastes</u>

If any regulated hazardous wastes are identified by random load checking, or are otherwise discovered through routine working face inspections to be improperly deposited at the landfill, WMIF will promptly notify the FDEP, the person responsible for shipping the wastes to the landfill, and the generator of the wastes, if known. After notifying the FDEP, WMIF will follow the Department's instructions to properly handle any hazardous wastes found. The area where the wastes are deposited will immediately be cordoned off from public access. If the generator or hauler cannot be identified, WMIF will assure responsive cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

c. <u>Recording inspection results</u>

Information and observations resulting from each random inspection will be recorded in writing and retained at the site for at least three years. The recorded information shall include: the date and time of the inspection; the names of the hauling firm and the driver of the vehicle; the vehicle license plate number; the source of the waste, as stated by the driver; and observations made by the inspector during the detailed inspection. The written record shall be signed by the inspector.

(7). Waste handling requirements

a. Solid waste at the GCLF Class III site shall be spread in layers and compacted using suitable heavy equipment. Bulky materials which are not easily compacted shall be worked into other materials as much as practical.

- b. WMIF is proposing to install a 60-mil HDPE geomembrane bottom liner system and a LCRS within the lateral expansion area of Parcel 1. WMIF will ensure that the first layer of waste placed above the liner and LCRS will be a minimum of four feet in compacted thickness and consist of selected waste containing no large rigid objects that may damage the liner or LCRS.
- c. Solid waste shall be formed into cells to construct horizontal lifts. The working face of the cell, and side grades above land surface, shall be at a slope no greater than three feet horizontal to one-foot vertical rise. Lift depth will depend on specific operations, daily volume of waste, width of the working face, and good safety practices.
- d. The proposed working face shall accommodate vehicles discharging waste, minimizing the exposed area, and avoiding unnecessary use of cover material.
- e. Initial cover shall consist of soil that may be mixed with composted or uncomposted mulch, as has been approved by the Department, and shall be applied and maintained at the Class III landfill in order to minimize any adverse environmental, safety, or health effects such as those resulting from birds, blowing litter, odors, disease vectors, or fires.
- f. The minimum frequency for applying cover is at the end of each work week.
- g. The Class III landfill will be filled to design dimensions and elevations and then closed in accordance with the requirements of this rule. Since the Class III landfill is designed to be constructed in phases, the phases will receive intermediate cover 12" in thickness, in addition to the 6" initial cover, if subsequent filling will not occur for six months or longer.

- h. Final cover will be placed over the entire surface of each completed solid waste disposal unit or units within 180 days after the final waste deposit or within the time frame set forth in the approved closure plan.
- i. Uncontrolled and unauthorized scavenging shall not be permitted.
- j. A litter policing operation shall be employed to keep litter from leaving the working area of the landfill. Litter outside the working area shall most often be picked up within 24 hours.
- k. Erosion control measures shall be employed to correct any erosion that would expose waste allowing for moisture infiltration or cause a malfunction of the storm water management system.

(8). Leachate management

Currently, the facility is collecting leachate only from the closed Class I landfill within Parcel 3. WMIF is proposing to install a 60-mil HDPE geomembrane and geocomposite bottom liner system and a LCRS within the lateral expansion area of Parcel 1. Leachate collected within this area will be pumped to the on-site leachate oxidation ponds for further treatment, as described in Section 9(4) of this Division. Please refer to Drawings 8, 9, and 10, in Appendix C, for the pipe layout, sump and pump station locations, cleanouts, and details of the proposed LCRS. WMIF will continue to meet the requirements of Rule 62-701.500(8), FAC, as stated below:

- a. The landfill operator is responsible for leachate level monitoring, sampling, analysis of the landfill leachate, and for providing copies of the leachate analysis to the Department.
- b. The landfill operator is responsible for the operation of the LCRS and for maintaining the system as designed for the design period of the landfill. Leachate will be collected and treated as necessary to meet surface and groundwater

quality standards of Rule 62-701.510, FAC. The proposed LCRS has been designed with leachate cleanouts at the intersection of each collection lateral and header pipe. The cleanouts will serve as a means of maintaining the LCRS during pipe clogging and cleaning.

- c. If the leachate is classified as hazardous waste, it will be managed in accordance with Rule 62-730, FAC.
- d. Leachate will be treated in the three (3) on-site oxidation ponds. The leachate will be aerated and disposed of through evaporation. The leak detection/collection system is checked on a daily basis when the GCLF is in operation. WMIF does not propose to discharge leachate to an off-site treatment plant at this time.
- e. The leachate oxidation ponds are designed to handle increased quantities of leachate from the expansion area as well as rainfall which would occur during a storm event. During emergencies, unscheduled shut down, and annual maintenance of the leachate management system, the leachate will be transported to the City's Wastewater Treatment Plant until conditions become favorable for on-site treatment.
- f. The quantity of leachate collected by the LCRS will be recorded by a flow meter installed within the pump stations. Flow measurements will be taken weekly and converted to gallons per day.
- g. A recording rain gauge is installed and will be operated and maintained to record precipitation at the landfill. Precipitation records are and will continue to be maintained and used by the facility to compare with leachate generation rates.
- h. The proposed LCRS within the lateral expansion area of Parcel 1 will be cleaned or inspected by video recording after construction but prior to initial

placement of wastes. WMIF will provide the results of the leachate collection system cleanings or inspections to the FDEP upon request.

(9). Gas monitoring

A gas monitoring plan is currently in place at the GCLF that covers the perimeter of Parcels 1, 2, and 3. WMIF is proposing to augment this plan by adding gas monitoring wells along the perimeter of the lateral expansion area of Parcel 1. Please refer to Drawings 2A and 2B, located in Appendix C, for locations of existing and proposed gas monitoring wells. Existing monitoring wells that will be affected as a result of the proposed lateral expansion will be abandoned in accordance with Rule 62-701.510(3)(d), FAC. WMIF will continue to utilize the existing gas monitoring wells that are unaffected by the expansion and will submit quarterly sampling results to FDEP.

(10). Stormwater management system

Stormwater control within the active portion of the landfill will be achieved by limiting stormwater flow off the working face and grading all other areas away from the working face areas so that stormwater will drain to a ditch at the landfill base. All stormwater runoff will be drained from the landfill side slope and routed to either the perimeter ditch that surrounds the landfill area or discharged directly into a stormwater basin. Stormwater swales and access roads will be constructed to control the flow of runoff from the landfill. Once water is collected in the stormwater swales, it will flow to structures that will extend from the stormwater swales, down the sideslope, to a stormwater basin.

A stormwater collection system will be constructed along the perimeter of the lateral expansion area of Parcel 1 prior to waste placement. When the landfill is completed, any stormwater drainage that runs off the final cover cap will run into the stormwater swales and then into the stormwater basins. A series of permanent swales and structures to control the flow of runoff from the finished and capped landfill will be utilized. These swales and structures will assist in protecting against erosion damage to the landfill final cover. WMIF is proposing to construct external soil terrace swales with side slopes of

2:1, rather than the reverse sloping method of controlling stormwater within the proposed Parcel 1 expansion area. A permit modification application (#36-0247969-001) of the existing stormwater permit is being provided to FDEP for review under a separate cover.

(11). Equipment and operation features

a. WMIF will utilize and maintain adequate equipment based on incoming waste for operation of the GCLF (Class III). Substitutions and additions or reductions to the existing equipment may occur over the life of the project. Equipment will increase as dictated by the following: types and volume of wastes received, need for additional access roads, final cover application, etc. If additional equipment is ever needed, it is readily available from other company operations and by local rental should any anomalous situation dictate the requirement for such equipment.

Routine maintenance and cleaning will be performed as necessary to keep the equipment in good operating order. Landfill equipment may be washed on top of lined areas of the proposed lateral expansion area of Parcel 1 utilizing high pressure/low volume washing equipment.

- b. If a required piece of equipment breaks down, it will be repaired on-site, or sent to a service facility for repairs. If the required equipment will be out of service for an extended period of time and backup equipment is not available on-site, it can be rented from equipment suppliers and be available at the site within 24 hours of breakdown.
- c. Communication equipment at GCLF (Class III) consists of telephone service for outside communications and portable radios for communication between company vehicles and equipment.

d. Dust will be controlled in landfilling areas at GCLF (Class III) by establishing vegetative cover on final cover slopes and on areas which will not be active for extended periods of time.

Entrance, perimeter, and access roads have been paved to a point beyond the scale house that will help minimize dust on the highway. Dust within the landfill will be addressed by periodic watering as necessary. Stormwater basins may be used as a source of water for dust control.

e. The chance of fire occurring at a properly run landfill is minimal. Fire protection procedures may include maintaining soil stockpiles in the vicinity of the working face. The initial cover used in the landfill operation provides an effective firewall.

Should a fire occur at the landfill, the application of soil will be used to cut off the flow of oxygen into the burning area. A water truck is also available as additional fire fighting equipment.

Appropriate fire extinguishers will be carried on the equipment at all times and can be used to control any small equipment fire that may occur.

- f. A litter policing operation will be employed to minimize litter from leaving the working face of the landfill. Litter is also to be policed on-site daily. Portable fences will be used, where necessary, to control blowing litter in the active landfilling areas. Litter is policed in the immediate vicinity of the landfill, as necessary, to control any problems which may arise from blowing debris from trucks traveling to the landfill. Litter outside the working area will be picked up, generally within 24 hours.
- g. Signs are utilized, where necessary, to inform the public of important information concerning GCLF (Class III). Signs are currently in place near the entrance of the landfill to provide information concerning the name of the

operating authority, traffic flow, operating hours, and restrictions or conditions of disposal.

(12). Roads

- a. Access roads will be built to allow vehicular access to the proposed filling area even during inclement weather conditions. Access roads will be maintained and repaired as necessary to allow safe vehicle operation.
- b. The inside perimeter road, and other on-site roads, will be built and maintained to allow access to monitoring devices and stormwater controls and for landfill inspections and fire-fighting.

(13). Recordkeeping

- a. All information used to develop or support the permit application and any supplemental information submitted to comply with the requirements specified in Chapter 62-701 FAC, which pertain to operation of the landfill, will be kept at the facility throughout the design period. In addition, records pertaining to the operation of the landfill will also be kept for the design period of the landfill. Records more than five years old that are archived will be made available for inspection, if requested, within seven days.
- b. All monitoring records will include the following information:
 - i. calibration and maintenance records;
 - ii. original chart recordings for continuous monitoring instrumentation; and
 - iii. copies of reports required by permit.

These records will be retained for at least ten years.

Note: Background water quality records will be kept for the design period of the landfill.

- c. An annual estimate of the remaining site life and capacity of the existing landfill for both the constructed and non-constructed permitted areas will be maintained. This estimate will be based on a summary of the heights, lengths, and widths of solid waste disposal. The estimate will be made and reported annually to FDEP.
- d. Records that are more than five years old will be archived, but made available to the Department for inspection by the landfill operator within seven days.

14. WATER QUALITY AND LEACHATE MANAGEMENT REQUIREMENTS (62-701.510)

(1). (a) (b) & (c). The water quality monitoring plan has been developed and updated and meets the requirements of Rule 62-701.510, FAC. The proposed revision to the groundwater monitoring plan includes the addition of seven (7) new monitoring wells, of which six (6) will serve as down-gradient compliance wells, situated along the western and part of the northern margin of the waste disposal area; and one (1) background monitoring well located on the eastern margin (up-gradient of the waste disposal area). The number and locations of wells provides for a 500-ft. well spacing interval along the down-gradient margin of the landfill. Landfill detection monitoring wells will be located roughly 50 feet from and normal to the edge of waste. Please refer to Appendix I for a detailed explanation of the proposed groundwater monitoring plan. The groundwater monitoring plan will not be changed during the operation, closure, and post-closure periods without prior Department approval. Abandonment of groundwater monitoring wells, if necessary, will be in accordance with Rule 62-701.510(3)(d)5, FAC. WMIF does not propose to use detection sensors with their groundwater monitoring wells.

- (d). WMIF proposes one (1) surface monitoring point within the proposed stormwater detention pond (Pond #1) before discharging it to adjacent wetland area. This monitoring point will be constructed and installed in accordance with Rule 62-701.510(4), FAC, and its location will be determined by a registered Florida land surveyor, as required by Rule 62-701.510(4)(2), FAC.
- (e). No changes to the existing leachate monitoring procedures are proposed with this permit application. The leachate produced within the lateral expansion area of Parcel 1 will be pumped to the existing leachate oxidation ponds. WMIF will continue to analyze leachate samples from the on-site oxidation ponds for the parameters listed in Rule 62-701.510(7)(c) and (d), FAC on an annual basis, as required by Rule 62-701.510(5)(c), FAC.
- (f). A detailed description of the initial and routine sampling frequency and requirements is provided in Appendix I.
- (g). WMIF will follow the evaluation monitoring, prevention measure, and corrective actions, if required, in accordance with Rule 62-701.510(7), FAC.
- (h). WMIF will continue to submit the semi-annual and biennial monitoring reports to the Department as required by Rule 62-701.510(9) and (10), FAC.

15. SPECIAL WASTE HANDLING (62-701.520)

(1). Motor vehicles

Motor vehicles will not be accepted for disposal at the proposed Class III landfill.

(2). Landfilling shredded waste

GCLF will not carry out any shredding operations over the Class III landfill, so this rule does not apply. WMIF may utilize shredded yard waste as a component of its cover

system, but will only do so in strict accordance with State of Florida requirements, and if pre-approved by the FDEP South District Office. Yard waste shredding occurs on an adjacent property owned by WMIF and is registered separately from the GCLF.

(3). Asbestos waste disposal

- a. Asbestos-containing waste materials will be accepted for disposal at the Class III landfill. Each active waste disposal site that receives asbestos-containing waste material from a source covered under the National Emission Standards for Asbestos, 40 CFR Part 61, Subpart M, will meet the requirements of 40 CFR Part 61,154.
- b. The waste generator will make arrangements with the landfill operator before disposal of such regulated asbestos-containing waste materials in the Class III landfill, and inform the operator of the quantity of the waste and the scheduled date the shipment will arrive at the landfill.
- c. The landfill operator will direct the waste transporter to the designated disposal location. The disposal location will be recorded in accordance with 40 CFR Part 61.154, and a record of the asbestos location will be maintained.

(4). Contaminated soil

Contaminated soil will not be accepted for disposal at the Class III landfill, therefore, this rule does not apply. However, WMIF is proposing to accept clean soil that meets the commercial SCTL (Soil Cleanup Target Levels) identified in Chapter 62-777, FAC, Table II.

(5). <u>Biological waste disposal</u>

Biological waste will not be accepted for disposal at the Class III landfill, and this rule does not apply.

16. GAS MANAGEMENT SYSTEMS (62-701.530)

1. <u>Design requirements</u>

An active gas collection system is currently in place over closed Parcel 1, which has been:

- Designed to prevent concentrations of combustible gases from exceeding 25% of the LEL in structures and 100% of the LEL at the property boundary;
- Designed for site-specific conditions;
- Designed to reduce gas pressure in the interior of the landfill;
- Designed to not interfere with the liner, leachate control system, or final cover.

Please refer to Appendix N for locations of the existing gas extraction wells and header pipes. WMIF will install a gas management system over the lateral expansion area of Parcel 1 in accordance with Rule 62-701.530(1)(a), FAC. Details of the gas management system will be provided to FDEP for review prior to its installation.

WMIF proposes to strip away the cap over the closed portion of Parcel 1 as a component of routine operations, before placement of Class III waste. However, WMIF is limiting the extent of the proposed vertical expansion to the north sideslope of Parcel 1 and will not conflict with the existing landfill gas collection wells installed on top of Parcel 1. As a result, no additional gas collection wells are being proposed to be installed over the existing Parcel 1 footprint.

2. <u>Monitoring requirements</u>

A gas monitoring plan is currently in place at the GCLF that covers the perimeter of Parcels 1, 2, and 3 and meets the requirements of Rule 62-701.530(2), FAC. WMIF is proposing to augment this plan by adding monitoring wells along the

perimeter of the lateral expansion area of Parcel 1. The proposed monitoring wells will be monitored quarterly to measure concentrations of combustible gases within each ambient monitoring point inside on-site structures and every soil monitoring probe located along the property boundary. Please refer to Drawings 2A and 2B, located in Appendix C, for locations of existing and proposed landfill gas monitoring wells.

Existing monitoring wells that will be affected as a result of the proposed lateral expansion will be abandoned in accordance with Rule 62-701.510(3)(d), FAC. WMIF will continue using the existing gas monitoring wells that are unaffected by the expansion and submit quarterly sampling results to FDEP.

3. <u>Construction and control requirements</u>

a. Gas Remediation Plan

If methane levels exceed allowable limits specified in Chapter 62-701, FAC, immediate steps will be taken to ensure protection of human health and to notify the FDEP. Following detection, a remediation plan will be developed for FDEP approval and subsequent implementation within 7 days of detection, as specified in 62-701.

b. Odor Remediation Plan

If gas concentrations cause objectionable odors beyond the landfill property boundary, WMIF will implement a routine odor-monitoring program to determine the time and extent of any off-site odors. Following detection, a remediation plan will be developed for FDEP approval and subsequent implementation within 30 days of detection.

4. Closure requirements

WMIF is not applying for a closure, so this section does not apply.

5. <u>Landfill gas recovery facilities</u>

The GCLF will not operate as a gas recovery facility, therefore, this section does not apply.

17. LANDFILL FINAL CLOSURE (62-701,600)

(1). Applicability

The GCLF is a closed Class I and active Class III landfill, which has received waste after January 6, 1993. WMIF is currently applying for a lateral and vertical expansion of Parcel 1 with Class III waste. The maximum elevation of the proposed landfill will not exceed EL. 120' NGVD, as shown on Drawing 7 in Appendix C.

(2). Closure schedule

- a. A written notice and a schedule for closure of the Class III landfill will be provided to the Department at least one year prior to the projected date when wastes will no longer be accepted or when the disposal units are expected to reach design dimensions. The closure schedule shall become an addendum to the landfill permit. If unforeseen circumstances do not allow the one-year notification, notice will be provided as soon as the need to close the facility becomes apparent.
- b. Notice and advice to users: At least 120 days prior to the date when wastes will no longer be accepted at the landfill, WMIF will advise users of the intent to close the landfill, the location of alternative disposal facilities, and the name of the person responsible for closing the landfill. Signs will be posted at the entrance

and maintained throughout the closing period. If unforeseen circumstances do not allow the 120-day notice, notice will be provided as soon as the need to close the facility becomes apparent.

c. Notice to the public: Within 10 days prior to the date when wastes will no longer be accepted at the Class III landfill, WMIF will publish a notice of the closing in the legal section of a paper in general circulation in the county. Proof of publication will be provided to the Department within seven days of publication.

(3). Closure permit requirements

WMIF will submit an application to the Department for final closure of the proposed Class III landfill at least 90 days before the date when wastes will no longer be accepted. The application for a permit will include a closure plan, which includes the following:

- a. A closure report
- b. A closure design plan
- c. A closure operation plan
- d. Closure procedures
- e. A plan for long-term care
- f. A demonstration that proof of financial responsibility for long-term care will be provided.

(4). <u>Closure report</u>

A report on final closure will address the following requirements:

- a. General landfill information including location, description and vicinity map; total acres of disposal areas and landfill property; legal property description; history of landfill; and identification of waste disposed of at the landfill.
- b. The geotechnical investigation report and water quality monitoring plan.

- c. Land use information.
- d. A report on gas migration including monitoring points.
- e. An assessment of the effectiveness of the landfill design and operation and its effect on the adjacent ground and surface waters.

(5). Closure design

The closure design plan will consist of engineering plans and a report on closing procedures, which apply to closing during operation, final closing, and monitoring during the long-term care period. The closure design plan will include the following:

- a. A plan sheet showing phases of site closing.
- b. Drawings showing existing topography (Drawing 2A and 2B) and proposed final grades (Drawing 7) are provided in Appendix C of this application.
- c. The Class III landfill will be filled to design dimensions and elevations and then closed in accordance with the requirements of Chapter 62-701, FAC. Since the Class III landfill is designed to be constructed in phases, the phases will receive intermediate cover if subsequent filling will not occur for six months or longer.
- d. The final elevations before settlement, shown on Drawing 7 in Appendix C, are based upon the capability of the foundation to support the total weight of the landfill.
- e. The side slopes of the Class III landfill are three feet horizontal to one foot vertical rise. The final cover incorporates swales to control the stormwater and direct it to down slope drainage-ways. Energy dissipaters will be provided as required, as well as access for maintenance equipment. The vegetation to be used

will be well suited for the climate conditions at the site and will prevent erosion of the earthen material.

- f. The final cover design minimizes infiltration of rainfall and subsequent generation of leachate.
 - 1. The final cover will be installed and tested in accordance with a construction quality assurance plan which meets the requirements of Rules 62-701.600(7) and (8), FAC.
 - 2. Final cover will be placed over the entire surface of each completed solid waste disposal unit or units within 180 days after the final waste deposit, or within the time frame set forth in the approved closure plan.
 - 3. The final cover is intended to be a moisture infiltration seal, therefore vegetational species planted will be drought resistant and such that the roots will not penetrate the seal and thus provide a channel for moisture infiltration.
 - 4. Top gradients of final cover on landfill areas will be graded to maximize runoff and minimize erosion, considering total fill height and expected subsidence caused by decomposing waste, and will be designed to prevent ponding or low spots.
 - 5. The closure design plan will describe provisions for cover material for the long-term care erosion control, filling areas of subsidence or other depressions, maintaining berms, and general maintenance of the facility, and specify the anticipated source and amount of material necessary for proper closure of the landfill.

- g. Final cover design
 - 1. The protective soil layer design will be 24-inches thick and composed of, from top to bottom, 6-inches of soil/organic soil mixture to support vegetation growth and 18-inches of protective drainage soil.
 - 2. The final cover design will consist of either a combination of a 50-mil LLDPE Super GripNet geomembrane and an 8-oz non-woven geotextile or a combination of GCL and composite drainage net (CDN) on the top and sideslopes of the landfill. Both the aforementioned final cover system options have received FDEP approval for use in the past. Adjacent panels of the liner are to overlap a minimum of 12 inches. Penetrations through the GCL required due to stormwater pipes and inlets will be sealed with the use of powdered bentonite. Penetrations through the LLDPE geomembrane shall be sealed using boots. The liner bedding will consist of at least 6" of soil between the liner and the waste material. A cross-section of the proposed final cover options is provided on Drawing 11 in Appendix C.
 - 3. The erosion control vegetation will be Bahia grass supported by a soil/organic soil mixture. Fines from the yard waste mulching process may be used to increase the organic content of the soil. The vegetation will limit erosion and soil loss, and will be maintained over the closure period.
 - 4. As discussed earlier, WMIF is proposing a combination of a textured 50-mil LLDPE Super GripNet geomembrane and geotextile in its landfill final cover design.
 - 5. WMIF is proposing a GCL/CDN combination as an alternative barrier layer in the final cover system, as discussed in subpart 2 above.

- 6. The slope stability analysis of the cover system and disposed waste for the GCL is provided in Appendix P of this permit application. An evaluation of the slope stability analysis of the LLDPE Super GripNet geotextile cover system is provided in Appendix Q of this permit application.
- h. Stormwater structures will be constructed as the phases receive final cover. These structures prevent stormwater from entering the waste filled areas as required under 62-25.
- i. Access to the GCLF site is controlled through the use of fencing and other natural barriers. Access will be restricted until the landfill is stabilized and there is no evidence that the landfill is being used as an unauthorized disposal site.
- j. Potential end use options are currently being investigated. An end use plan will be developed based on the viable options identified.
- k. The existing gas management system is discussed in Section 16 of this narrative, and complies with Rule 62-701.530, FAC.

(6). Closure operation plan

a. The placement of final cover will commence in phases once the proposed expansion of Parcel 1 is complete and design elevations are reached. Each closed area will be vegetated to prevent erosion; the vegetation will be maintained during the post closure period. Stormwater control structures such as berms and down slope pipes will also be constructed as the phases receive final cover. All of the stormwater structures will remain and be maintained during the post closure period. The groundwater and gas monitoring systems will also remain and be maintained during the closure period. Additional gas extraction wells will be installed, if required. Existing fencing will be maintained throughout the closure

period in order to provide site security. Selected access roads will also be maintained following closure to facilitate site monitoring.

- b. Final cover will be placed over the entire surface of each completed solid waste disposal unit or units within 180 days after the final waste deposit, or within the time frame set forth in the approved closure plan. The proposed expansion will have an estimated remaining service life of about 8-10 years. The post-closure care period will continue for 30 years.
- c. Financial responsibility for the long-term monitoring and maintenance will be demonstrated using an Insurance Certificate for the post-closure care amount. Please refer to Appendix J for the long-term care estimates based on the proposed landfill expansion.
- d. The landfill will be closed by an outside contractor employing its own personnel and equipment.
- e. The water quality monitoring plan for the proposed lateral expansion of Parcel 1, required by Rule 62-701.510, FAC, has been developed and updated, and is submitted in Appendix I of this permit application. This plan shall not be changed during the operation, closure, and post-closure periods without prior Department approval.
- f. The gas monitoring program required by Rule 62-701.530, FAC, has already been developed and will continue to be used during the post-closure care period. WMIF is proposing to augment this plan by adding monitoring wells along the perimeter of the lateral expansion area of Parcel 1. Locations of existing and proposed gas monitoring wells are provided in Drawings 2A and 2B of Appendix C.
- g. Any additional equipment or personnel needed to complete closure of the landfill will be indicated, if necessary.

(7). <u>Temporary closure</u>

- a. No delay is planned prior to the placement of final cover.
- b. Should the placement of final cover be delayed for unforeseen reasons, the landfill will be temporarily closed in accordance with a closure plan approved by the Department by placing 18" of intermediate cover on the top. All publicly visible areas will be vegetated, and odors and disease vectors will be controlled. A schedule for closure, a demonstration of financial responsibility, and a demonstration that the delay in final closure will not cause or contribute to any significant releases into the environment will be provided in the closure plan.
- c. Mining is not planned at the GCLF.

18. <u>CLOSURE PROCEDURES (62-701.610)</u>

(1). <u>Closing inspections</u>

The Department will specify in the closure permit which closing activities must be inspected and approved by the Department before proceeding.

(2). Survey monuments

Survey monuments are not required, because the proposed final elevation is greater than 20 feet above the natural land surface.

(3). <u>Final survey report</u>

Since the proposed Class III landfill will be at an elevation higher than 20 feet above the ground surface, a final survey will be conducted after closure by a registered land surveyor or by aerial mapping techniques. Contours will be shown at no more than five-foot intervals. The survey will be included in the closure report submitted by WMIF.

(4). Certification of closure construction completion

A certification of closure construction will be submitted by a registered engineer, independent of the contractor, upon completion of closure. All substantial deviations from the permitted closure plan will be noted.

(5). Declaration to the public

Following inspection and approval by the Department, WMIF will file a public declaration in the deed records at the county clerk's office. The declaration will include a legal description of the property and a site plan specifying the area filled with solid waste. The declaration will also include a notice to any future owner or user of the site that they should consult with the Department prior to activities that might disturb the final cover, monitoring system, or other control structures. A certified copy of the declaration will be filed with the Department.

(6). Official date of closing

Upon receipt of the final survey, certification of closure construction, and the public declaration, the Department will acknowledge the receipt of these materials in writing within 30 days. The date of this letter will be the official date of closing to be used to determine the long-term care period.

(7). Use of closed landfill areas

The GCLF acknowledges that the Department retains regulatory control over any activities that may affect the integrity of the closed landfill. The Department will be consulted prior to conducting activities at the closed landfill.

(8). Relocation of waste

The GCLF does not plan to relocate waste from one point to another within the footprint of the same solid waste disposal without prior consent from the Department.

19. **LONG-TERM CARE (62-701.620)**

(1). Long-term care period

Since the proposed lateral and vertical expansion at the GCLF will receive waste after January 6, 1993, WMIF will continue to monitor and maintain the integrity and effectiveness of the final cover and appurtenances in accordance with the approved closure plan for 30 years from the date of closing.

(2). Long-term care permit

Long-term care will be conducted in accordance with a closure permit. The permits will be issued for a duration of 10 years unless the owner requests a shorter duration.

(3). Reduced long-term care period

WMIF may apply to the district office of the Department for a reduction in the long-term care period if reasonable assurance is provided that there is no threat to human health or the environment.

(4). <u>Modified groundwater monitoring plan</u>

WMIF may apply through the Department district office for a modification to the groundwater monitoring plan to delete parameter(s) from the required monitoring list. In that case, WMIF will demonstrate that the parameter(s) proposed for removal have never been detected in the groundwater or leachate during the active life of the landfill.

(5). Gas collection and monitoring

The gas collection and monitoring system will be maintained for the long-term care period of the landfill. Any permit modifications to reduce the long-term care schedule will be obtained through the Department.

(6). Right of property access

WMIF will maintain a right to use and access to the landfill property in order to inspect, monitor, and maintain the site.

(7). Successors of interest

Any person who acquires rights or ownership of a permitted landfill will be subject to all of the requirements of the permit for the facility and will provide proof of financial responsibility to the Department. Any lease or transfer of the property will include conditions to delineate the following:

- a. The previous owner is responsible for closure and will maintain proof of financial responsibility until the person acquiring ownership establishes proof of financial responsibility with the Department.
- b. Responsibility for monitoring, maintenance, and correction of problems.
- c. Mineral rights and rights to recoverable materials or landfill gases. A Department permit will be required if any on-site operations involve disturbing the closed landfill.

(8). Transfer of permit

Any transfer of the permit will be in accordance with Rule 62-4.120, FAC, and this Rule.

(9). Replacement of monitoring devices

If a monitoring well or device required by the monitoring plan fails or is destroyed, WMIF will notify the Department immediately in writing. The device will be replaced within 60 days unless the Department notifies WMIF in writing.

(10). Completion of long-term care

Following the long-term care period, the owner will notify the Department through a certification by a professional engineer verifying the long-term care is complete in accordance with the closure plan and a copy of this certification has been placed in the operating record.

20. FINANCIAL ASSURANCE (62-701.630)

(1). Applicability

- a. Method of financial assurance As a condition of the current GCLF Class III permit, WMIF utilizes an Insurance Certificate as a method of financial assurance.
- b. Proof of financial assurance A proof of financial assurance will be provided upon Departmental approval of the closure cost and long-term care estimates provided in Appendix J of this permit application.
- c. Corrective action program The GCLF is not required to undertake any corrective action programs at this time.

(2). Cost estimate for closure

a. For the purposes of financial assurance, WMIF estimated the point during operation when closing the landfill would be most expensive. For long-term care,

an annual cost was estimated and multiplied by 30 years. The closure cost for the most expensive final cover barrier layer option and long-term care estimates for the entire site are provided in Appendix J of this permit application. These estimates will be updated annually by a professional engineer for a third party performing the work, on a per unit basis, with the source of estimates indicated.

- b. Closure costs have been based on the nature of the wastes disposed at the site and include estimates for all of the construction materials required for the closure design.
- c. Long-term care costs include land surface care, landfill gas management/monitoring and groundwater monitoring, and any other costs of compliance. WMIF has developed long-term care costs for the entire landfill, including the proposed lateral and vertical expansion of Parcel 1, existing Class III landfills over Parcels 2 and 3, and closed Parcel 3 (Class I landfill). Please refer to Appendix J for this estimate.
- d. All cost estimates are prepared and submitted on Form 62-701.900(28).
- e. WMIF will keep the latest closure cost estimates at the facility.

(3). Annual cost adjustments for closure

- a. WMIF will submit to the Department an annual cost adjustment statement certified by a professional engineer listing closing and long-term care costs separately.
- b. WMIF will revise the closure cost estimate for inflation and changes in the closing and long-term care plan annually, according to the methods described in 62-701.630, FAC. The revised estimates will be used as comparison against the value of the financial assurance mechanism.

c. Any changes to the closure plan for the landfill will bring about a revision

in the cost estimate.

d. If the value of the funding mechanism is less than the total amount of the

current closure cost estimate, WMIF will revise the funding mechanism to reflect

the new estimate within the time frames outlined in 40 CFR Part 264, Subpart H.

(4). Landfill management escrow account

The GCLF does not propose to use an escrow account as proof of financial assurance.

(5). Alternate proof of financial assurance

WMIF is not proposing an alternate proof of financial assurance with this permit

modification.

a. WMIF will continue to establish proof of financial assurance using an

insurance certificate, if necessary. This proof will be submitted on the forms

provided by the Department in accordance with Paragraphs (b) and (c) of this

subsection.

b. 40 CFR Part 264 Subpart H will be followed as financial requirements

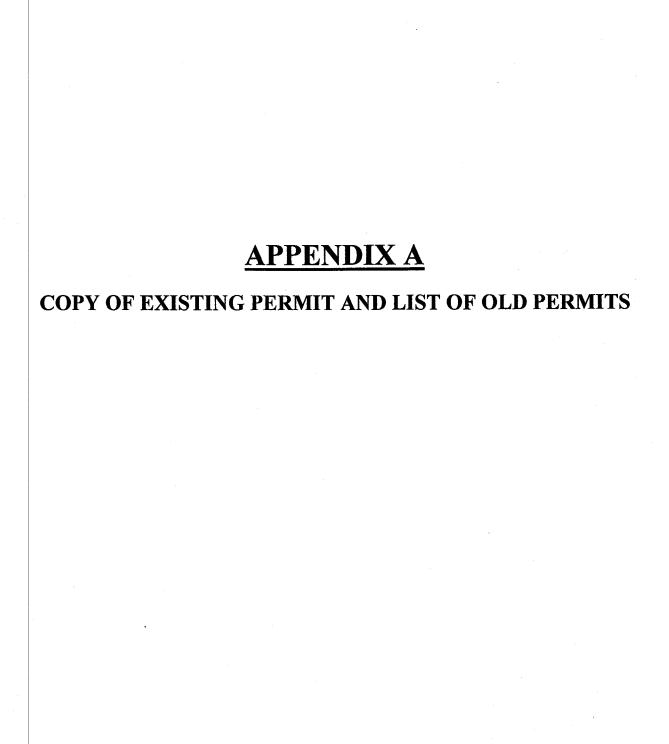
except where specifically noted otherwise in Chapter 62-701, FAC.

c. Form 62-701.900(5) will be used when submitting proof of financial

assurance. A Certificate of Insurance is the current method used to provide proof

of financial assurance.

* * * * *



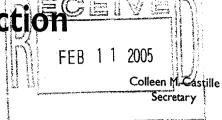


Jeb Bush Governor

Department of

Environmental Protection

South District P.O. Box 2549 Fort Myers, Florida 33902-2549



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL NO. 7004 0750 0003 9120 4448 RETURN RECEIPT REQUESTED

In the Matter of an Application for Permit by:

Waste Management Inc. of Florida c/o Charles J. Campagna, Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339 Re: Lee County - SW

Gulf Coast Class III Landfill and Recycling Facility – Expansion

(Valley-Fill between Closed Parcels 2 and 3)

DEP Permit No. 0128933-013-SO/T3

Southwest Coast EMA

Enclosed is Permit No. 0128933-013-SO/T3 to operate a Class III Landfill Expansion, specifically identified as Gulf Coast Class III Landfill and Recycling Facility – Expansion (Valley-Fill between Gulf Coast Class I Landfill Closed Parcels 2 and 3), located at 11990 State Road 82 East, City of Fort Myers in Lee County Florida, issued under Sections 403.061, 403.087 and 403.707 of the Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Rules 62-4, 62-25, 62-160, 62-302, 62-522, 62-701.

NOTICE OF RIGHTS

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Gulf Coast Class III Landfill and Recycling Facility – Expansion DEP File No. 0128933-013-SO/T3 Page 2 of 4

Petitions by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of receipt of such notice or within fourteen (14) days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of such notice.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the Department permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department action;
- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301 of the Florida Administrative Code.

Gulf Coast Class III Landfill and Recycling Facility – Expansion DEP File No. 0128933-013-SO/T3 Page 3 of 4

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation. The election may be accomplished by filing with the Department a mediation agreement with all parties to the proceeding (i.e., the applicant, the Department, and any person who has filed a timely and sufficient petition for a hearing). The agreement must contain all the information required by Rule 28-106.404. The agreement must be received by the Clerk in the Office of General Counsel of the Department at 3900 commonwealth boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within ten (10) days after the deadline for filing a petition, as set forth above. Choosing mediation will not adversely affect the right to a hearing, if mediation does not result in a settlement.

As provided in Section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 for holding an administrative hearing and issuing a final order. Unless otherwise agreed by the parties, the mediation must be concluded within sixty (60) days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons seeking to protect their substantial interests that would be affected by such a modified final decision must file their petitions within fourteen (14) days of receipt of this notice, or they shall be deemed to have waived their right to a proceeding under Sections 120.569 and 120.57. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition, this order will not be effective until further order of the Department.

Any party to the order has the right to seek judicial review of the order under Section 120.68 of the Florida Statutes, by filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the

Gulf Coast Class III Landfill and Recycling Facility – Expansion DEP File No. 0128933-013-SO/T3 Page 4 of 4

appropriate district court of appeal. The notice of appeal must be filed within thirty (30) days from the date when the final order is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart Acting Director of District Management

CERTIFICATE OF SERVICE

The undersigned dul	y designated deputy agency Clerk h	ereby certifies that this
NOTICE OF PERMIT ISSU	ANCE and all coniec were mailed	hafara the along of huninger and
Sebruary 9	, 2005, to the listed persons.	before the close of business on
(7)	, ====, to the inocod persons.	

FILING AND ACKNOWLEDGEMENT FILED on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

Enclosures
JMI/GAM/se

Copies with enclosures furnished to:

The Honorable Douglas R. St. Cerny, Chairman, Lee County BOCC The Honorable Jim Humphrey, Mayor

John W. Wong, WMIF

Robert E. Mackey, P.E.

Lindsey Sampson, Lee County

Richard Tedder, DEP

Chris McGuire, OGC DEP

Jack Chisolm, OGC DEP

Tor Bejnar, DEP

Jeff Gould, DEP

Jack D. Myers, DEP

Bill Krumbholz, DEP



Department of Environmental Protection

Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Colleen M. Castille Secretary

PERMITTEE:

Waste Management Inc. of Florida c/o Charles J. Campagna, Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339 GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

County: Lee

Latitude: 26° 36' 21" Longitude: 81° 45' 40" EMA: Southwest Coast

Section/Township/Range: 36/44S/25E
Project: Gulf Coast Class III Landfill and

Recycling Facility – Expansion

(Valley-Fill between Gulf Coast Class I Landfill Closed Parcels 2 and 3)

This Permit is issued pursuant to Sections 403.061, 403.087 and 403.707, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-25, 62-160, 62-302, 62-522, and 62-701. The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To operate a Class III Landfill Expansion to an existing Class III Landfill, specifically identified as Gulf Coast Class III Landfill and Recycling Facility – Expansion (Valley-Fill between Gulf Coast Class I Landfill Closed Parcels 2 and 3) located at 11990 State Road 82 East, City of Fort Myers in Lee County, Florida.

The Permit is subject to the following fifteen (15) General and seventeen (17) Specific Conditions. A copy of the approved application package is enclosed for your records.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this Permit are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The Permittee is placed on notice that the Department will review this Permit periodically and may initiate enforcement action for any violation of these conditions.

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026 Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

GENERAL CONDITIONS:

- 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) F.S., the issuance of this Permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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 acknowledgement 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 or plant life, or property caused by the construction or operation of this permitted source or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
- 6. Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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 credential or other documents as may be required by law, and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under the conditions of the Permit;

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

GENERAL CONDITIONS:

- (b) Inspect the facility, equipment, practices, or operations regulated or required under this Permit; and
- (c) Sample or monitor 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 provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
- 11. This Permit is transferable only upon Department approval in accordance with

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

GENERAL CONDITIONS:

Rules 62-4.120 and 62-730.300, F.A.C, 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 or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This Permit also constitutes:
 - (a) Determination of Best Available Control Technology (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
 - (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (d) Compliance with New Source Performance Standards
- 14. The Permittee shall comply with the following:
 - (a) Upon request, the Permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.
 - (b) The Permittee shall hold 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) required by this Permit, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

GENERAL CONDITIONS:

15. When requested by the Department, the Permittee shall, within a reasonable time, furnish any information required by law, which is needed to determine compliance with the Permit. If the Permittee becomes aware the 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 corrected promptly.

SPECIFIC CONDITIONS:

- 1. A copy of the Operation Plan from the Permit application package, approved by the Department, shall be kept at the disposal facility, shall be accessible to facility operator(s) and made available for inspection by the Department staff. All activities at the facility shall be performed in accordance with this Plan. The Plan shall be updated as operations change and the Department shall be notified of changes.
- 2. A minimum of two (2) trained spotters shall be present at the working face whenever waste is being received. The spotters shall be stationed where they can thoroughly inspect each shipment of waste for prohibited materials.
- 3. The facility is allowed to receive the following types of waste:
 - (a) Construction and Demolition (C&D) Debris
 - (b) Yard Trash
 - (c) Shredded/Cut Tires
 - (d) Asbestos
 - (e) Carpet
 - (f) Glass
 - (g) Plastic
 - (h) Furniture
 - (i) Commercial Wastes, which may include:

outdated paper products, outdated non-treated and treated wood products, cardboard materials, outdated metal products, empty plastic and metal containers, and mobile homes.

(j) Industrial Wastes (non-hazardous), which may include:

paper, wood, plastic, Styrofoam, metals, dredging material without liquids that has been tested for parameters of concern as addressed in Rule 62-777, F.A.C.,

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

GENERAL CONDITIONS:

water treatment plan lime sludges without liquids; reject from C&D debris recyclers and Class III Material Recovery facilities that has been properly monitored to preclude the presence of Class I material.

- (k) Agricultural Farm Plastics
- (l) Any other material with the prior approval of the Department
- 4. The facility **shall not** receive the following waste for disposal:
 - (a) Vehicles, vessels or containers that once contained fuel;
 - (b) WWTP sand filter material;
 - (c) Ash from yard trash incinerators, except with prior approval from the Department;
 - (d) Reject from C&D debris recyclers and Class III material recovery facilities, which includes Class I material mixed with the reject;
 - (e) Untested dredging material;
 - (f) Brown goods, including small appliances, electronic goods, and cathode ray tubes.
- 5. Permittee is not allowed to process any wood that has been treated or painted into mulch.
- 6. Prohibited material shall be removed from the waste stream and placed in secure areas for disposal or recycling at a facility authorized by the Department to receive such waste. Empty receptacles or containers, which were used for hazardous material or waste, shall be removed from the transport vehicle prior to dumping, or immediately after dumping, and placed into a secure container for proper disposal. However, empty C&D debris containers can be disposed of at this landfill.
- 7. If any hazardous waste is identified before or after unloading, the operator shall notify the Department before redirecting/rejecting/reloading/removing the waste, and follow the instructions from the Department. The operator, whenever possible, shall record the name of the person responsible for shipping the waste to the landfill, the generator of the waste and particulars of transport vehicle. The area where the waste is unloaded shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator is responsible for cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

SPECIFIC CONDITIONS:

- 8. The facility shall be operated to control objectionable odors in accordance with the methods described in the Operation Plan and pursuant to F.A.C. Rule 701.530(3)(b).
- 9. Initial cover (6 inches) on the disposed waste and intermediate cover (minimum 12 inches), in addition to the initial cover, shall consist of soil only. Any alternative material, including soil blend, shall need the prior approval of the Department.
- 10. Geosynthetic clay liner of the proposed final cover shall be placed on a protective 6-inch soil layer (bedding material). The top 24-inch-thick protective soil layer on the geosynthetic clay liner shall consist of 18-inch-thick sand drainage layer and 6-inch-thick topsoil layer over it.
- 11. Reasonable precautions pursuant to F.A.C. Rule 62-296.320(4)(c) shall be taken to control fugitive particulate at the site including truck loading and unloading, truck traffic, and all material processing and disposal activities.
- 12. The Permittee shall record in tons-per-day the amount of solid waste received and shall estimate the amount of waste listed below:
 - (i) commercial waste, (ii) agricultural waste, (iii) industrial waste, (iv) yard trash, (v) construction and demolition debris, (vi) water treatment plant lime sludge, (vii) shredded/cut tires.
 - Waste Reports shall be compiled monthly, using the enclosed model (format); categories 1 through 5, and copies shall be provided to the Department quarterly.
- 13. The Permittee shall maintain an annual estimate of the remaining life and capacity in cubic yards of the landfill and report annually to the Department.
- 14. All records and data relating to the physical operation of the facility shall be made available for inspection by the Department staff. The facility shall be open for inspection by the Department employees during normal hours of operation.
- 15. The current groundwater monitoring system for the Gulf Coast Landfill site shall be capable of covering the proposed facility.
- 16. The Permittee shall comply with Permit(s) issued by Air Resource Management Section of the Department.

Mr. Charles J. Campagna Gulf Coast Class III Landfill and Recycling Facility – Expansion GMS ID No. 5236P02026

Permit/Certification No. 0128933-013-SO/T3

Date of Issue: February 9, 2005 Expiration Date: February 9, 2010

SPECIFIC CONDITIONS:

17. The Permittee shall submit updated closure and long-term care cost estimates or an inflation adjustment statement on DEP Form No. 62-701.900(28), between January 1 and March 1 every year to the FDEP District office in Fort Myers. Financial Assurance documents (insurance bond, certificate, etc.) corresponding to the submitted cost estimates or statements shall be submitted to the FDEP office in Tallahassee to the following address:

Solid Waste Financial Coordinator Florida Department of Environmental Protection 2600 Blair Stone Road, Mail Station 4565 Tallahassee, Florida 32399-2400

The above conditions do not exempt the Permittee from complying with requirements of other Federal, State, municipal, county or regional pollution control rules, regulations, ordinances, or codes.

This Permit is issued for a period of five (5) years and expires February 9, 2010. If a renewal is desired, the Permittee shall apply for a renewal by submitting the appropriate application form along with the appropriate fee, sixty (60) days prior to the expiration date.

Should you need further information regarding the above, please call Ghous Minhaj, Solid Waste Permitting Engineer, at (239) 332-6975, extension 185.

Note: In the event of an emergency, the Permittee shall contact the Department by calling (850) 413-9911 or toll free at (800) 320-0519. During normal business hours, the Permittee shall call (239) 332-6975.

Sincerely,

Jon M. Iglehart

Acting Director of

District Management

Enclosure JMI/GAM/se

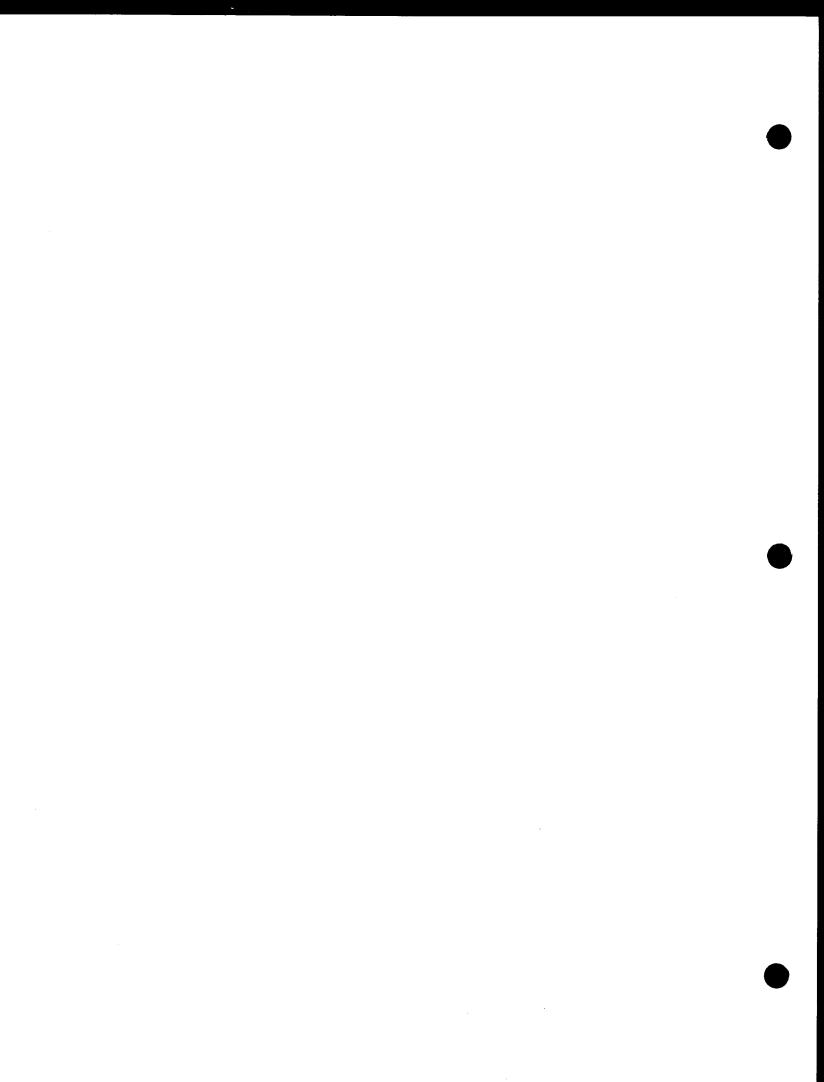
FDEP Quarterly Reporting Form - Gulf Coast Sanitary Landfill Landfill Disposal and Recycling Tonnages 1 page 2001

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Salbage XXI Tion	76.25						4.35	5.51	20.97	20.99		30.47	237.23
Continued Domolitics	3821 9	36	*	*	_	3	3937.52	4918,34	4632.2	4698.66	45/	ਲ –	50834.94
Special Waste-Studge, etc.	572.81						251.6	459.84	260.85	234.14	_	_1	4561.81
Total Calegory 1	4566.42	7	12973.44	22594.65	5219.14	4202.3	4302.08	5488.96	5013.93	0150.66	23333.02	15677.82	115911.8
Category 2	שנישל חב	1920.61	3754.65	3193.89	2961.45	3781.21	2796.38	3856.65	1060.22	3501.54	3054.71	2493.29	39317.65
Total Category 2	2634.05	1		1	2961.45	3781.21	2796.38	3856.65	4060.22	3501.54	3054.71	2493.29	39317.65
Calegory 3	07.4% 7.8	8712 16	9262.45	6221.42	10139.63	9810.12	10038.28	10008.71	9404.92	6593.77	5486.96	7637.42	105061.6
Westa-to-Erleity-Asir- Total Calendry 3	9745.78			6221.42		9810.12	10038.28	10008.71	9404.92	8593,77	5486.96	7637.42	105061.6
Calegory 4				512	166.4	9.68	104.55		:	345.23	. 775.54	331.6	2324.92
Muich/supp-Daily-cover.	0	°	0	512	166.4	9.68	104.55	0	0	345.23	775.54	331.6	2324.92
Category 5 Mulch Given Away			26.49	21.69	61.76	2517.03	1856.85	33.81	32.90	32.42		35.5	4618.45
Mulch Sent out for Fuel Mulch/suppl. Intermediate cover Mulch Ised in Tonsol/Frosion Clrl	209.1				397.3	55.76	216.07	•			:		878.23
Total Category 5	209.1	0	26.49	21,69	459.06	2572.79	2072.92	33.81	32.9	32.42	0	35.5	5496.08
Total Lined Disposal (1 + 3 + 4)	14312.2	14312.2 13101.57	22235.89	29328.07	15525.17	14102.02	14444.91	15497.67	14418.85	17089.66	29595.52	23646.84	223298.4
Total Recycled (4 + 5)	209.1	0	26.49	533.69	625.46	2662.39	2177.47	33.81	32.9	377.65	775.54	367.1	7821.6

All solid waste passing over landfill scales and going directly to the lined disposal unit working face for disposal.
 All solid waste passing over landfill scales and going to a special waste storage (or disposal) area.
 Processed special waste going back into the disposal unit for disposal.
 Processed special waste going back into the lined disposal unit for recycling purposes.
 Processed special waste recycled outside the lined disposal unit.

Note: Mulch used as supplemental intermediate cover has been moved into catogory 5 because intermediate cover is removed before placing additional waste and/or final This material should not be considered placed for final lined disposal but can be considered as recycled material.





Department of Environmental Protection

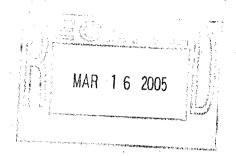
Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

Colleen M. Castille Secretary

March 14, 2005

CERTIFIED MAIL NO. 7004 1160 0000 5510 3421 RETURN RECEIPT REQUESTED

Waste Management Inc. of Florida c/o Charles Campagna, Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339



Re:

Lee County - SW

Gulf Coast Sanitary Landfill
(Class I) Parcel 3 East Cell

Closure Permit No. 0128933-011-SF

Closure Certification Southwest Coast EMA

Dear Mr. Campagna:

The Department hereby acknowledges receipt of the following with respect to the closure of Parcel 3 East Cell of the Gulf Coast Sanitary Landfill (Class I) along with the letter dated October 8, 2004 from John Wong, District Manager, Waste Management Inc. of Florida.

- 1) Certification of Construction Completion (C.C.C.) [Completed DEP Form 62-701.900(2)]
- 2) Certified copy of Final Cover Documentation prepared by Ardaman & Associates, Inc.
- 3) Certified Record (As-built) Drawing (Parcel 3, Special Purpose Limited Topography Survey Sheet 1 of 1) prepared by Ink Engineering, Inc.

The Department also received a Certified Clarification, dated November 23, 2004 by Ardaman & Associates to the Deviation from Plans (Closure Permit) noted on the C.C.C. This clarification was regarding:

i. The non-construction of final cover for the eastern side slope and approximately two acres of the top, adjacent to it, because the proposed Class III landfill expansion (valley-fill between the closed Parcels 2 and 3) will overlap onto these areas.

"More Protection, Less Process"

Waste Management Inc. of FL March 14, 2005 Page 2

ii. The Leachate Collection and Removal System
Modification, which was included in the Construction
Permit Application (No. 0128933-012-SC/T3) for the
Class III Expansion.

A copy of Appendix E (Certification of Construction Completion with Exhibit A, B, and C), with respect to the leachate removal system modification included in the Operation Permit Application (No. 0128933-013-SO/T3) has been added to the subject Parcel 3 Closure Permit file.

The Department found the above-mentioned documents to be satisfactory and hereby approves the closure of Parcel 3 of the Gulf Coast Sanitary Class I Landfill. An approved copy of the submitted documents is enclosed for your records.

It is to be noted that this closure pertains to the Class I Parcel 3 landfill only. The final closure of the entire site of the Gulf Coast Sanitary Landfill Facility shall take place after the facility ceases receiving any kind of waste.

Should you need further information, please call Ghous Minhaj, Solid Waste Permitting Engineer, at (239) 332-6975, extension 185.

Sincerely,

Philip A. Barbaccia

Environmental Administrator

Enclosure PAB/GAM/rcd

cc: Raymond Dever, P.E., SCS Engineers
David Penoyer, P.E., SCS Engineers
Samuel Levin, P.E., S2L, Inc.
Robert E. Mackey, P.E., S2L, Inc.
Gary Drew, P.E., Ardaman & Associates, Inc.
John W. Wong, District Manager
Richard Tedder, DEP, (w/ enclosure)
Chris McGuire, OGC DEP
Jack Chisolm, OGC DEP
Tor Bejnar, DEP
Jeff Gould, DEP
Jack D. Myers, DEP
Bill Krumbholz, DEP
Mara Nasca, DEP



Department of Environmental Protection

Colleen M. Castille Secretary



South District P.O. Box 2549 Fort Myers, Florida 33902-2549

July 13, 2004

Waste Management Inc. of Florida c/o Charles Campagna, Area Vice President 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339

Re:

Lee County - SW

Gulf Coast Class III Landfill and

Recycling Facility

Permit No. 0128933-007-SO/T3

DEP ID No. WACS 00076728 Recovery of Recyclable Materials

from Waste Stream

Minor Modification to Operation Permit

Application No. 0128933-009-SO/MM

Southwest Coast EMA

Dear Mr. Campagna:

The Department hereby approves inclusion of Recovery of Recyclables from the Waste Stream in the operation activity of the subject facility as a Minor Modification to Operation Permit No. 0128933-007-SO/T3. The application letter dated October 17, 2003, requesting a permit modification, and supporting data were submitted by your consultant, Globex Engineering & Development. An approved copy of the submittal is enclosed for your records.

This letter shall be attached to Operation Permit No. 0128933-007-SO/T3, as it becomes a part of that Permit. All the other conditions of the Permit, including the earlier modifications, remain the same.

Should you need further information, please call Ghous Minhaj, Solid Waste Permitting Engineer, at (239) 332-6975, extension 185.

Philip A. Barbaccia

Environmental Administrator

Enclosures PAB/GAM/se

cc:

Brenda Ann Smith Clark, P.E. (w/enclosure)

John Wong, Gulf Coast Landfill/WMI of Florida

Melanie Thomason, Gulf Coast Landfill/WMI of Florida

Richard Tedder, DEP

Chris McGuire, OGC DEP

Jack Chisolm, OGC DEP

Jeff Gould, DEP

Bill Krumbholz, DEP



Department of Environmental Protection



Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

David B. Struhs Secretary

January 15, 2004

RECEIVED

JAN 2 6 2004 She

CERTIFIED MAIL NO. 7003 1010 0004 1396 9017 RETURN RECEIPT REQUESTED

Waste Management Inc. of Florida c/o Charles Campagna 2859 Paces Ferry Road, Suite 1600 Atlanta, Georgia 30339

Re:

Lee County - SW

Gulf Coast Class III Landfill Permit No. 0128933-007-SO Alternate Initial Covers Minor Modification to Permit

Application No. 0128933-010-SO/MM

Southwest Coast EMA

Dear Mr. Campagna:

The Department hereby approves your request regarding the use of three alternate initial covers comprising:

- 1. 50 percent mulch and 50 percent soil, referred to as the Mulch/Soil Blend
- 2. 75 percent compost and 25 percent soil, referred to as the Compost/Soil Blend
- 3. 100 percent compost material, referred to as the Compost Material

As the waste stream may contain gypsum wallboard, which has a potential of generating sulfur gases in the presence of moisture, there is a certain possibility that the waste gypsum wallboard will absorb moisture retained by the mulch and compost covering it and generate gases causing objectionable odors beyond the landfill property boundary. If the facility fails to control objectionable odors, the above approval will be withdrawn, because the facility is required to comply with Specific Condition No. 7 of the Operation Permit regarding odor control, which is in accordance with Florida Administrative Code (F.A.C.) Rule 62-701.530(b).

Gulf Coast Class III Landfill Application No. 0128933-010-SO/MM January 15, 2004 Page 2

The requested use of the Alternate Initial Covers is approved as a Minor Modification to the current Operation Permit with the following Specific Conditions:

- 1. The materials should be nonflammable. The alternative material should limit oxygen flow into the waste and impede the spread of fire at the landfill.
- 2. (a) The proposed use of the Compost/Soil Blend is acceptable as an alternative cover if the compost can be demonstrated, at minimum, to have reached the semi-mature state in accordance with F.A.C. Rule 62-709.550(3)(b).
 - (b) The proposed use of Compost Material as an alternative cover is acceptable if it can be demonstrated that the compost has reached the mature stage in accordance with F.A.C. Rule 62-709.550(3)(a).

The Permittee shall submit compost maturity analysis report quarterly.

Please attach this letter to Operation Permit No. 0128933-007-SO/T3, as it becomes a part of that Permit. All other Specific Conditions of the Operation Permit remain the same. An approved copy of the submittal is enclosed for your records.

Should you need further information, please call Ghous Minhaj, Solid Waste Permitting Engineer, at (239) 332-6975, extension 185.

Sincerely.

Philip A. Barbaccia

Environmental Administrator

na Bon

Enclosure PAB/GAM/se

cc: Brenda Ann Smith Clark, P.E. (w/enclosure)
John Wong, Waste Management Inc. of Florida
Dan Erni, Waste Management Inc. of Florida
Richard Tedder, DEP
Bill Krumbholz, DEP
Jeff Gould, DEP
Jack D. Myers, DEP



WASTE MANAGEMENT

2859 Paces Ferry Road Suite 1600 Atlanta, GA 30339 (770) 805-4130

December 12, 2003

Mr. Philip Barbaccia, Environmental Administrator Florida Department of Environmental Protection P.O. Box 2549 Fort Myers, FL 33902-2549

RE: Gulf Coast Class III Landfill

Request for Minor Modification Alternative Initial (Weekly) Cover



Dear Mr. Barbaccia:

Attached is a document prepared by Globex Engineering and Development requesting a modification to the current initial (weekly) cover requirements at the Gulf Coast Class III Landfill. As required by regulation, please also find attached a check for \$250 payable to the Department for the processing of this permit modification request.

Please contact Dan Erni of my staff at (239) 334-4115 ext. 217 or via email at derni@wm.com if you have any questions regarding this correspondence.

Sincerely,

Waste Management Inc. of Florida

Charles J. Campagna Area Vice President

Attachment

cc: John Wong, Waste Management

Dan Erni, P.E., Waste Management

Brenda Ann Smith Clark, P.E., Globex Engineering and Development

RECEIVED

DEC 15 2003



3 December 2003

Ghous Minhaj, P.E. Florida Department of Environmental Protection 2295 Victoria Avenue, Suite 364 Ft. Myers, Florida 33901

Subject: Request for Minor Modification
Alternative Initial (Weekly) Cover
Gulf Coast Class III Landfill, Ft. Myers, Florida

Dear Mr. Minhaj:

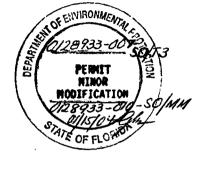
On behalf of Waste Management Inc. of Florida (WMIF), Globex Engineering & Development (Globex) is requesting a minor modification to the construction and operations permit for the Solid Waste Disposal Unit (Class III Landfill) and Recycling Facility at the Gulf Coast Landfill site, located in Ft. Myers, Florida, herein referred to as the Class III Landfill. The Class III Landfill at the Gulf Coast Landfill facility is currently operating under FDEP Operation Permit No. 0128933-007-SO/T3. WMIF is requesting approval for the use of an alternative initial cover in addition to the covers currently permitted for use at the subject facility. At a Class III landfill, the initial cover is applied on a weekly basis. This letter provides the following information: (i) a description of the proposed initial cover material; (ii) a discussion of the definitions and compliance of the proposed material with the requirements of Rule 62-701 of the Florida Administrative Code (FAC); and (iii) conclusion.

Material Description

In addition to the permitted initial cover material, WMIF is proposing several additional alternative initial cover materials. The proposed alternative initial cover materials include: (i) a soil blend material that will consist of a mixture of 50 percent mulch from a yard waste processing operation, and 50 percent soil, herein referred to as mulch/soil blend; (ii) a soil blend material that will consist of 75 percent compost and 25 percent soil, herein referred to as compost/soil blend; and (iii) a 100 percent compost material, herein referred to as compost material.

The materials, either the mulch/soil blend or the compost/soil blend will be mixed in place on that portion of landfill receiving weekly cover. The compost material does not require mixture. Material application consists of a 6-inch thick layer for initial cover.

1416/F030478



Mr. Ghous Minhaj 3 December 2003 Page 2

Regulatory Compliance

The definition of initial cover as presented in Rule 62-701.200(53) FAC is as follows:

"Initial cover" means a 6-inch layer of compacted earth, used to cover an area of solid waste before placement of additional waste, intermediate cover, or final cover. The term also includes other material or thickness, approved by the Department, that minimized disease vector breeding, animal attraction, and moisture infiltration, minimizes fire potential, prevents blowing litter, controls odors, and improves landfill appearance.

The proposed mulch/soil blend, compost/soil blend and compost material will meet all of the Florida Department of the Environment (FDEP) requirements for initial cover. The mulch/soil blend, compost/soil blend, and compost material will produce an initial cover that provides a good barrier against disease vector breeding. These materials are not a food source and therefore will not attract vectors.

The mulch/soil material, while mainly composed of small wood fragments has a gradation representative of coarse gravel with fine, medium, and coarse sand. This means the soil material will fill the voids of the mulch material to minimize moisture infiltration. In addition, the mulch tends to retain moisture, which will also minimize moisture infiltration. The compost material, while mainly composed of small wood fragments, has a gradation representative of fine gravel with fine, medium, and coarse sand. This means the compost/soil blend material and the compost material will minimize moisture infiltration in a manner similar to the soil material currently permitted as initial cover.

Due to the ability of these materials to absorb moisture, they will also work well at minimizing the fire potential. Once the mulch is mixed in place as the soil blend material, the chances of fire will be minimal. Chances of fire with the compost/soil blend and compost material are also minimal. These materials exhibit insulating properties and will therefore work well in smothering a fire, if necessary.

The proposed mulch/soil blend, compost/soil blend and compost material will all prevent blowing litter when applied in a compacted layer six inches in thickness for initial cover. Mulch and compost are known to absorb odor and degrade volatile organic compounds. This will aid in minimizing odors associated with landfill gases

Mr. Ghous Minhaj 3 December 2003 Page 3

potentially emanating from those areas receiving initial cover material. The proposed mulch/soil blend, compost/soil blend and compost material will also aid in preventing wind erosion, water erosion, and waste erosion. All of these factors will contribute to maintaining an acceptable landfill appearance.

Conclusion 005/323-005-SC

One site currently permitted by FDEP to use similar alternative cover materials include the Central Sanitary Landfill and Recycling Center (CSLRC) in Pompano Beach (Permit No. SO 06-282656). The CSLRC is permitted by FDEP to use a mixture of mulch and soils for intermediate and final cover material. There are no mixture requirements identified. A copy of the applicable section of the FDEP permit for the CSLRC is presented in Attachment A.

A check for \$250 to cover the Minor Modification Application fee is submitted under separate cover. Should you have any questions regarding the information presented in this letter, please do not hesitate to contact the undersigned.

Sincerely,

Porenda annAmith Clark

Brenda Ann Smith Clark, P.E. 3 December 201 Project Director

Attachments

ATTACHMENT A CSLRC PERMIT

RECEIVED

DEC 15 2003

D.E.P. - South District



DEP Form 62-701.900(2) (attached as Exhibit G) and contacts the Department to arrange for an inspection of the newly constructed areas in accordance with Rule 62-701.320(9)(a), F.A.C.

Class I Landfill Operation

- 14. On or before January 31 of each year, the permittee shall submit an annual elevation survey of the site that is prepared by a land surveyor registered in the State of Florida. This survey shall clearly show the horizontal and vertical dimensions of the landfilled areas. Along with this survey, the permittee shall estimate the remaining life and capacity in cubic yards of the existing constructed landfill. The annual estimate shall be based upon a summary of the heights, lengths, and widths of the solid waste disposal facility.
- 15. Pursuant to Rule 62-701.500(4), F.A.C., the permittee shall weigh all solid waste that is received for disposal and record the solid waste in tons per day. The amount of solid waste received shall be estimated for the following types of wastes listed in Rule 62-701.500(4)(b), F.A.C. Waste reports shall be compiled monthly and submitted to the Department quarterly. A copy of the report shall be sent to the Division Solid Waste Program Administrator and the Southeast District Solid Waste Program.
- 16.) The permittee shall comply with waste handling and cover requirements in accordance with Rule 62-701.500(7), F.A.C. The minimum frequency for applying initial cover is daily at this landfill or as authorized with the usage of Alternative Daily Cover. A half-and-half mixture of composted yard trash and clean soil may be used as initial cover, and a mixture of mulch and soils may be utilized for intermediate, and final cover material.
 - 17. The solidification system at the facility to treat waste streams containing free liquids is authorized as previously approved in Permit No. SO06-282656, DEP file No. SO06-305412 as follows:
 - a. The solidification system shall be located over an area with intermediate cover within the lined disposal area of CDSL 3. Fly ash, Kiln dust, and fine aggregate are the additives to mix with the waste for solidification. These additives will be stored adjacent to the solidification mixing boxes within the lined disposal area of CDSL 3 and shall be diked and tarped to eliminate dust and prevent discharge into surface waters;
 - b. The solidification waste stream shall be tested using the paint filter test (Method 9095) to confirm no free liquids are present. Waste stream acceptable for landfilling shall be taken to the landfill working face for disposal;
 - c. The off loading of a liquid waste at the process area shall be in a manner that will prevent spillage outside the solidification boxes:
 - d. Only non-hazardous industrial process wastes and other non-hazardous wastes such as municipal wastewater treatment sludges, grease trap wastes, and truck and car wash sludges are to be treated for solidification; and
 - e. Best management practices must be followed during the entire treatment process.
 - 18. Stormwater shall meet the water quality standards as established in Chapter 62-302, F.A.C., at the point of discharge from the stormwater management system into waters of the State.
- 19. Leachate shall not be discharged into the stormwater management system. Stormwater or other surface water which comes into contact with or mixes with the landfilled solid waste or leachate shall be considered leachate and is subject to the requirements of Rules 62-701.500(8) and 62-701.510(5), F.A.C.
- 20. Leachate shall be transported to a facility permitted to receive leachate. The permittee shall provide a copy, to the Southeast District Solid Waste Section, of a written contract or agreement including amendments from any facility that accepts leachate from this landfill within 30 days of execution of the contract.

RECEIVED

DEP Form 62-1,201(5) Effective August 10, 1994

Page 9 of 15

DEC 15 2003

Central

CITY OF FORT MYERS PRETREATED GROUNDWATER DISCHARGE PERMIT

PERMIT No. CFMC-01/06

In accordance with the provisions of City Ordinance 3238:

Operator/Owner Name:

Gulf Coast Sanitary Landfill

Location Address:

P.O. Box 7314 Route 82

Fort Myers, FL. 33911

Phone:

239-334-4119

Fax: 239-334-8065

President/General Manager;

Mr. John Wong

is hereby authorized to discharge hauled pretreated groundwater from Gulf Coast Sanitary Landfill's leachate evaporation **pond** (#3) into the City of Fort Myers' sewer system via Crews Environmental Services' facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with all pretreatment regulations, standards or requirements under Federal, State or local laws, including any such regulations, standards, requirements or laws that may become effective during the term of this permit.

Noncompliance with the terms and conditions of this permit shall constitute a violation of the City of Fort Myers' Ordinance 3238 and all discharging operations shall be halted. It will be the responsibility of Gulf Coast Sanitary Landfill to ensure that all requirements of this permit are enforced.

This permit shall become effective on **April 15, 2005** and shall **expire** at midnight on **April 15, 2006**.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after the expiration date an application must be filed for re-issuance of this permit in accordance with the requirements of Section 26-118, paragraph (l) a minimum of 30 days prior to the expiration date.

Date: APRIL 5TH Zoos

Henri Lafenetre

Industrial Pretreatment Officer

Page 1 of 4

Section 1 - DISCHARGE REQUIREMENTS:

A. The discharge of all hauled wastes must be performed at the following area:

CREWS ENVIRONMENTAL'S DESIGNATED DUMP STATION. Discharge to the City of Fort Myers' sewer system at any other location is prohibited.

A UNLOADING LOG will be maintained at dumpsite by Crews Environmental. It will be maintained daily and made available for inspection and collection.

The following information shall be logged:

- 1- Date
- 2- Time
- 3- Vehicle Number
- 4- Tank Capacity/Gals.
- 5- Name/Driver
- **B.** The actual discharge may only be performed MONDAY through SATURDAY, 7:00 a.m. to 7:00 p.m. excluding holidays.

The MAXIMUM total discharge allowed per/day will be 60,000/gals. The discharge fee will be \$7.03 per 1000/gals of discharge for the first 5,000 gals. This fee includes utility sewer charge of \$6.68 per 1000/gals and administrative costs of \$.35 per 1000/gals for recording, monitoring, sampling and billing. Any gallons in excess of 5,000gallons will be billed at \$8.44 per 1000/gals.which includes an administrative cost of \$.35 per 1000/gals.

Section 2- SPECIFIC LIMITATIONS:

- <u>A</u>. Any waste that may cause pass through of pollutants or interference with the wastewater treatment plant operations or that violates Federal, State or local restrictions shall not be discharged to the wastewater treatment plant. The permittee is responsible for any discharge violations by designated waste hauler.
- **B.** The permittee is **prohibited** from discharging wastes with the following characteristics:
 - Having a pH lower than 6.0 or higher than 10.0;
 - Containing fats, wax, grease or oils of petroleum origin, whether emulsified or not, in excess of (100) mg/l or containing substances which may solidify or become viscous at temperatures between 32 degrees F. and 140 degrees F;
 - Containing any gasoline, benzene, fuel oil or other flammable or explosive liquids, solids or gases;
 - Containing toxic pollutants or odor causing substances.

C. The permittee is prohibited from discharging wastes which exceed the following limitations:

Maximum Concentration
Composite Sample

	Composite Sample
<u>PARAMETER</u>	Mg/L
Aluminum	23.20
Antimony (Sb)	0.50
Arsenic (As) (Grab)	1.54
Barium (Ba)	2.50
Boron(B)	1.00
Cadmium (Cd)	1.60
Chloride (Cl)	390.00
Chromium-total (Cr)	4.41
Cobalt (Co)	5.00
Copper (Cu)	0.67
Cyanide (Cn) (Grab)	0.034
Iron (Fe)	25.48
Lead (Pb)	1.72
Manganese (Mn)	0.50
Mercury (Hg)	0.0008
Nickel (Ni)	0.084
Selenium (Se)	0.25
Silver (Ag)	0.73
Titanium (Ti)	1.00
Zinc (Zn)	3.18
MBAS	5.00
Oil and Grease (Grab)	100.00/400.00max
Molybdenum	0.20
BOD	300.00 */6200.00 max
COD	600.00 */3100.00 max
TSS	300.00 */2600.00max
Total Nitrogen (TKN)	30.00 */302.00max
Total Phosphorus	10.00 */257.00max

^{*} Concentrations <u>above this amount</u> are subject to a surcharge fee in accordance with the City of Fort Myers' high strength wastewater control charge schedule and other rate resolutions and ordinances that are applicable.

BOD: \$16.82 per 100/lbs. **COD**: \$8.41 per 100/lbs **T.S.S**. \$11.47 per 100/lbs

<u>Total Nitrogen</u>: \$105.92 per 100/lbs. <u>Total Phosphorus</u>: \$309.97 per 100/lbs

D. Designated hauling area is LEACHATE POND # 3.

E. SPECIAL REQUIREMENTS:

- 1. A copy of the most recent sampling data (less than 30 days) of pond #3 shall be submitted prior to any hauling event.
- 2. A one-week notice is requested prior to any hauling event. The Pretreatment Office will be notified at 461-7112.
- 3. Copies of all **SCALE WEIGH SHEETS** for leachate hauling vehicles shall be retained and **submitted upon request** to the pretreatment office.
- 4. All disposal fees shall be calculated monthly and submitted to Gulf Coast Sanitary Landfill.
- 5. Leachate sampling of pond #3 shall be done quarterly (1/4) starting in April, July, October and January. Results for the following parameters shall be submitted to the pretreatment office upon receipt:
 - BOD, COD, TSS, Total Nitrogen, Total Phos, Copper, Iron, Zinc, Mercury & Molybdenum.
- 6. All records and reports shall be maintained and readily available for three years.

Supplemental Information for Appendix A

Following is a list of other Permits issued to the Gulf Coast Recycling and Disposal Facility:

Permit No.	Date of Issue	Description
0128933-013-SO/T3	February 9, 2005	To operate and close a Class III Landfill Expansion (Valley-Fill between closed Parcels 2 and 3)
0128933-012-SC/T3	August 16, 2004	To construct a Class III Landfill Expansion (Valley-Fill between closed Parcels 2 and 3)
0128933-008-SO/MM	May 23, 2003	Minor Modification to Operation Permit No. 0128933-007-SO/T3 to include Phases 1b & 2
0128933-007-SO/T3	December 4, 2002	To operate a Class III Landfill Expansion (Vertical Expansion of closed Parcel 2)
0128933-002-SO/MM	May 10, 2001	Minor modification to Operation Permit No. 0128933-001-SO

APPENDIX B OPERATION AND CONTINGENCY PLAN





Mr. Phillip A. Barbaccia, Environmental Administrator Florida Department of Environmental Protection South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

RE: Gulf Coast Class III Landfill & Recycling Facility
Permit Application No. 0128933-015-SC/T3
Supplement to the revised Operation Plan submitted in response
to Request for Additional Information (RAI) No. 2 dated March 27, 2006,
and received by DEP on April 18, 2006, regarding final cover

Dear Mr. Barbaccia:

On behalf of Waste Management Inc. of Florida (WMIF), S2L, Incorporated (S2Li) is pleased to provide this letter to confirm WMIF's intent for the final closure of the above referenced site. Final cover will be placed over the entire Class III landfill within 180 days after the final waste deposit.

Further, please be advised that the Class III landfill has been designed to be constructed in phases. WMIF understands that the phases must receive intermediate cover of a minimum 12" in thickness, in addition to the 6" initial cover, if subsequent filling will not occur for six months or longer.

Please feel free to contact me at 407-475-9163 should you have any questions or require any additional information.

Sincerely,

S2L, Incorporated

Robert E. Mackey, P.E., Principal Engineer

Florida Registration 40. 40176

cc: John Wong – WMIF Ray Chewning – WMIF

JUL 19 2006 D.E.P. - South District

OPERATION AND CONTINGENCY PLAN

The Landfill Operation Plan, which describes the detailed instructions for the daily operation of the landfill, will be kept at the landfill facility and will be easily accessible to the landfill operators. The plan will be revised as necessary to reflect changes in operational procedures.

- a. The day-to-day operations of the site are directed by the District Manager. The District Manager is assigned to the site and is responsible for site personnel attendance and performance. As such, he routinely directs the daily activities of the operations manager, coordinates scale-house attendant, landfill equipment operators, and other support personnel.
- b. Contingency operations include emergencies such as fire, natural disasters, and equipment failure. Waste will not normally be delivered to the site during emergency conditions; however, the following procedures will be initiated at the onset of a major storm which may cause an emergency:
 - Initial (weekly) cover will be applied to all exposed refuse.
 - All landfill equipment will be parked near natural windscreens, earthen mounds or tree areas.
 - All lightweight signs and equipment will be collected and stored in a secure area.
 - Work will begin only in dry areas when operations are resumed; refuse materials will not be deposited in standing water.



Fire protection facilities on site consist of soil stockpiles in the vicinity of the working face. The initial cover used in the landfill operation provides an effective firewall. Instructions on fire fighting procedures will be routinely provided for site personnel. Should fire occur at GCLF, the application of additional cover will be used to cut off the flow of oxygen into the burning area. The local fire department will be contacted to assist GCLF personnel and equipment, if necessary. Appropriate fire extinguishers will be carried on the equipment at all times. The nearest fire department is located at a distance of 1.7 miles. Its address and phone number is as follows:

Lehigh Acres Fire Department 308 Gunnery Road S Lehigh Acres, FL 33991 Phone: 239-368-1555

Additionally, the FDEP Solid Waste staff shall be notified in the event of a fire. Applicable phone numbers are as follows:

Normal Hours 239-332-6975 (1st attempt) Toll Free 800-320-0519 (2nd attempt) Tallahassee Office 850-245-8705 (3rd attempt)

c. Acceptable types of refuse for the landfill typically will consist of agricultural, asbestos, commercial, and C&D debris, yard trash, waste tires, and non-hazardous special waste. Liquids shall not be accepted for disposal. No hazardous waste as defined in Rule 62-701.300(4), FAC shall be disposed at the GCLF. A detailed list of acceptable and unacceptable types of refuse for the landfill is discussed in Section 7 of the Application Narrative. A minimum of two (2) spotters will be stationed at the working face at all times when the landfill receives waste to detect unauthorized wastes. The spotters will be stationed such that they can thoroughly inspect each shipment of waste for prohibited materials. During times of reduced disposal activities, WMIF may use an excavator with thumb and a spotter/equipment operator for the monitoring of waste disposal at the working face. If

unauthorized wastes are found, WMIF will contact the generator, hauler, or other party responsible for shipping the waste to the landfill to determine the identity of the waste sources and arrange for the removal of the subject waste from the site. If hazardous waste is detected before or after unloading, FDEP will be contacted before moving, reloading, redirecting, or rejecting the hazardous waste.

- d. All solid waste entering the GCLF will be weighed using the truck scale located near the entrance to the site. Tare weights of the trucks will be determined as the emptied vehicle leaves the site. Tare weights for waste haulers that regularly visit the site will be recorded so that they do not need to be weighed each time they leave the site unless specifically required by contract or to meet facility needs.
- e. Traffic to and from the site is controlled by fencing, gates, and/or other barriers, as well as signs and facility personnel. Gates at all roadway points are kept locked outside of normal working hours. All refuse traffic will be required to pass by the scale house to gain entry to active portions of the landfill.
- f. Solid waste will be placed into cells to construct horizontal lifts. Lift depth may vary depending on specific conditions, daily volume of waste, width of working face, and good safety practices. Filling at the GCLF will be performed in accordance with the phasing plans shown on Drawings 4-6 in Appendix C. GCLF will continue to be filled in lifts across the area until final grade is reached.
- g. Solid waste at the GCLF Class III site shall be spread in layers and compacted using suitable heavy equipment. Bulky materials that are not easily compacted shall be worked into other materials as much as practical. A 6-inch thick weekly soil cover will be placed on top of the waste at the end of each week's operation in order to mitigate blowing litter. The working face, however, may be covered with a temporary cover, such as a tarpaulin to minimize blowing litter from the working face during off hours of operation.

h. Operations of gas, leachate, and stormwater controls.

Gas Controls - A gas monitoring plan is currently in place at the GCLF that covers the perimeter of Parcels 1, 2, and 3. WMIF is proposing to install monitoring wells around the perimeter of the proposed lateral expansion area of Parcel 1. Please refer to Drawings 2A and 2B in Appendix C of this permit application for locations of existing and proposed gas monitoring wells. Existing monitoring wells that will be affected as a result of the proposed lateral expansion will be abandoned in accordance with Rule 62-701.510(3)(d) FAC. WMIF will continue using existing gas monitoring wells that are unaffected by the expansion and submit quarterly sampling results to FDEP. After the completion of filling activities within the lateral expansion area, the vertical gas collection wells over Parcel 1 (closed Class I landfill) will be evaluated as to their ability to effectively collect landfill gas generated. If, based on monitoring of landfill gas, the vertical wells over Parcel 1 are found to be insufficient to control gas generation; additional vertical gas extraction wells or horizontal gas collection trenches may be installed within areas of Parcel 1 as necessary to effectively control landfill gas emissions. WMIF may also consider installing additional gas wells prior to completion of waste filling activities within Parcel 1 based on the number of offsite odor complaints received during operation of the GCLF.

Leachate Controls - WMIF is proposing to design, construct, and maintain a LCRS within the lateral expansion area of Parcel 1. The LCRS will be constructed to meet the requirements of Rule 62-701.400(4)(a) and (b), FAC. Please refer to Drawings 8, 9, and 10 in Appendix C for pipe layout, sump and pump station locations, and details of the proposed LCRS.

Stormwater controls - Stormwater management within the active portion of the landfill will be assisted by the proper grading of all working face areas. All stormwater runoff will be drained from the landfill side slope and routed to either the perimeter ditch that surrounds the landfill area or discharged directly into a

stormwater basin. WMIF will utilize external soil terrace swales with side slopes of 2:1, rather than the reverse sloping method of controlling stormwater. Stormwater swales and access roads will be constructed to control the flow of runoff from the landfill. Once water is collected in the stormwater swales, it will flow to structures that will extend from the stormwater swales, down the side slope, to a stormwater basin.

A stormwater collection system has been constructed around the perimeter of the landfill. When the landfill is completed, any stormwater drainage that runs off the final cover cap will run into the stormwater swales and then into the stormwater basins. A series of permanent swales and structures to control the flow of runoff from the finished and capped landfill will be utilized. These swales and structures will assist in protecting against erosion damage to the landfill final cover. The stormwater management system design complies with the requirements of Rule 62-701.400(9), FAC.

Detailed drawings for the stormwater management system serving the site may be found in the Environmental Resources Permit (ERP) Application submitted under separate cover to FDEP, a copy of which is maintained at the landfill site.

- i. The water quality monitoring plan, required by Rule 62-701.510, FAC, has been developed and updated, and is submitted in Appendix I of this permit application. This plan shall not be changed during the operation, closure, and post-closure periods without prior Department approval. WMIF will continue to submit the semi-annual and biennial monitoring reports to the Department as required by Rule 62-701.510(9) and (10), FAC.
- j. The proposed LCRS within the lateral expansion area of Parcel 1 will be cleaned or inspected by video recording after construction, but prior to initial placement of wastes. WMIF will provide the results of the leachate collection system cleanings or inspections to the FDEP upon request.

APPENDIX C

ENGINEERING FIGURES AND DRAWINGS