RESOLUTION NO. 11-039

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING THE ATTACHED "FIRST AMENDMENT TO AGREEMENT FOR THE TRANSPORTATION AND DISPOSAL OF SOLID WASTE" BETWEEN THE CITY AND WASTE MANAGEMENT, INC. OF FLORIDA; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution 04-082 the City Commission approved a contract between the City and Waste Management; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached "First Amendment to Agreement for the Transportation and Disposal of Solid Waste" between the City and Waste Management, Inc. of Florida is hereby approved.

Section 2: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 1st day of February, 2011.

Authenticated by the presiding officer and Clerk of the Commission on February 2, 2011.

Filed with the Clerk February 2, 2011.

CRAIG CATES, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

MEMORANDUM

EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager
E. David Fernandez, Asst. City Manager - Operations

FROM: Jay Gewin, Utilities Manager

DATE: January 7, 2010

SUBJECT: **Approval of Amendment # 1 to the City's Solid Waste Hauling and Disposal Contract with Waste Management**

Action Statement:

This resolution will approve amendment # 1 to the City of Key West's contract for municipal solid waste (MSW) hauling and disposal with Waste Management.

Background:

On February 19, 2004 the City Commission approved a 20-year contract establishing Waste Management to provide municipal solid waste hauling and disposal services for the City of Key West. (Resolution 04-082). This contract governs the hauling of the City's solid waste from the Transfer Station in Rockland Key, to approved disposal sites where the waste is typically converted to energy, with limited waste landfilled. The contract has an initial 7-year term, a renewal 7-year term, and a final 6-year renewal term.

This contract was initiated after the City made the decision to close the former Waste-to-Energy site on Stock Island, and convert the facility to a temporary transfer station while the new site on Rockland Key was being constructed. The RFP for this contract was developed in conjunction with the City's Solid Waste Technical Advisory Committee, which sought to develop a solid waste site for a minimum 20-year period. The City's comprehensive plan also requires the City to provide solid waste collection, hauling, and disposal services to our residential and commercial customers, and our capacity and ability to provide solid waste services is a key concurrency requirement to accommodate development plans.

Section 7.55 of this contract allows Waste Management to seek an extraordinary rate adjustment once a year. Due to such factors as the escalation of fuel costs, disposal services, licensing fees, and operation costs, Waste Management is seeking an extraordinary rate adjustment. It is the first time an extraordinary rate adjustment has been requested in the first 7-year term. During this contract amendment negotiation, the City also used this opportunity to insert proposals into the amendment that would be beneficial to our utility.

The City has requested that Kessler Consulting generate a Solid Waste Master Plan for the City of Key West. City Staff utilized Kessler's expertise frequently during the contract amendment negotiations. Their knowledge in industry trends, rate comparisons with other municipalities, and contract analysis were of tremendous benefit to the City.

Purpose and Justification:

City staff recognizes that there have been substantial increases in fuel costs since the contract's inception. Diesel fuel costs have risen from $1.61 per gallon in April of 2004 to $3.20 in December of 2010 (Lower Atlantic Diesel Retail Sales Index from the US Energy Information Administration).

It is also apparent that the City is receiving favorable disposal costs for our waste compared to other municipalities. Both our hauling and disposal costs, with the proposed amendment, are still in line with industry standards. Kessler Consulting performed a comparison between our rate and those of other Florida counties and cities, and found our fees to be favorable.

The amendment includes the following components:

1) Fuel Base Rate vs. Non-Fuel Base Rate – Retroactive to October 10, 2010, when negotiations on the amendment were beginning, the rate will be $67.70 per ton, comprised of a non-fuel base rate of $59.67 and a fuel base rate of $8.03.

   From this point onward, the larger non-fuel base rate will increase at a rate of 75% of the CPI per year, which is consistent with the existing contract.

   The fuel base rate is generated by a formula which reflects the actual costs incurred through the hauling of solid waste. It is based on the average of 22 tons per truck hauling at 6 miles per gallon, the 366 miles round-trip to the Waste to Energy facility, and the current diesel fuel index for the region. The fuel base rate will be adjusted quarterly as a result of changes to the regional fuel index.

   The fuel base rate would also be modified for the City's benefit should the vehicles performing the hauling become more fuel efficient in the future.

2) Requires City approval if waste is diverted to a landfill instead of a waste-to-energy plant for more than a 2-week period - The State of Florida has established a 75% recycling goal for counties and cities that includes a recycling credit for communities

that send its solid waste to a waste-to-energy facility. If our waste is sent directly to a landfill, we would lose this potential credit.

The City will focus its efforts on increasing its recycling rate through the actual recycling of items within its solid waste stream. However, it would nonetheless be beneficial for the City to receive this additional recycling credit that is available. This stipulation is not in the current contract.

3) Removal of requirement to haul solid waste extracted from a possible new recycling facility back to the transfer station (section 6). - The City may be interested in entering a joint-venture with the County at some point in the future on a composting, or other type of recycling facility (at a different site than the City's Transfer Station). At such a facility, any solid waste inadvertently included with the compost/recycling stream would need to be extracted. This change to the current contract would not require this extracted waste to be hauled back to the Transfer Station if it was not economically feasible to the City.

4) Contract Opener for City should Waste Management negotiate a better subcontracted hauling contract- Waste Management currently subcontracts the hauling arrangement through Bulk Express Transport, Inc. Should they negotiate a long-term (6 months or longer) hauling contract in the future that is at least 10% less expensive than the current arrangement, the City can renegotiate its contract to capture a share of the savings. This stipulation is not in the current contract.

5) Fuel eliminated from eligibility for a future extraordinary rate adjustment request – Waste Management will no longer be able to cite fuel as justification to seek a future extraordinary rate adjustment. This is very significant for the City to be able to lock in favorable hauling and disposal rates for the long term.

6) Updated location of definitions according to Florida Administrative Code - Several definitions within Florida Administrative Code have been moved to a new code chapter since the original contract was entered into in 2004. We will use this amendment as an opportunity to update these terms.

7) Updated to include new Transfer Station location - The original 2004 contract identified the City of Key West Transfer Station as being located at its former location on College Road. The amendment will change the site to the new facility at Rockland Key.

It is in the City's interest to maintain its current favorable hauling and disposal rates. This is a critical component in establishing long-term Solid Waste Utility budgets, maintaining acceptable reserve fund balances, and limiting risk of utility rate adjustments to our customers. Maintaining hauling and disposal contracts that ensure capacity for solid waste processing are also a key concurrency requirement within our City's comprehensive plan.

The current solid waste hauling contract with Waste Management has a clause that allows an audit to determine an extraordinary rate adjustment should a negotiated agreement with the City become unachievable. The audit itself would be costly, and its results could expose the

City to a significantly larger increase, when such factors as the considerable increase in fuel costs over the term of the contract are considered.

Moving forward, the City looks forward to new ideas and plans to help increase our recycling rate. Many proposals will be generated through the Solid Waste Master Plan. However, we need to remember that however successful we are in the future, we will always need a contract for the hauling and disposal of solid waste. It will be our goal to divert as much recycled materials out of the waste stream in the future as possible, thereby lowering the amount of solid waste hauled to the mainland under this contract.

Options:

1) The City can issue an RFP and seek proposals for solid waste hauling and disposal services. This option is not recommended because it is likely that proposals would result in higher costs than are currently being paid by the City.

2) The City can decline Waste Management's extraordinary rate adjustment request. If this were to occur, Waste Management could opt out of the contract which would result in the City having to go out to RFP. The City and Kessler Consulting both believe a new RFP would result in higher costs.

3) The City can approve Amendment # 1 to the MSW hauling and disposal contract with Waste Management. This amendment will help lock in favorable long-term hauling and disposal rates. It also includes items that will update the contract to reflect actual fuel costs incurred, will help protect a City recycling credit for utilizing waste-to-energy, and will contain mechanisms that will help minimize barriers in future recycling efforts.

Financial Impact:

There will be additional costs to the City in the short-term. This increase would be approximately $120,000 of a figure budgeted at $3,478,100 for FY 2011. This additional cost will be able to be covered within the budgeted amount. However, maintaining the favorable financial terms within the long-term solid waste hauling and disposal contract helps protect Solid Waste Utility fund balance and minimize the chances of requiring a sudden rate increase in the future.

Additionally, this proposed increase of $120,000 is an increase that is less than we would expect should the audit provision in the contract be exercised. This would be due to the fact that the additional cost to the City would be retroactive to the original letter from Waste Management exercising the extraordinary rate adjustment.

Recommendation:

City Staff recommends option # 3, the approval of Amendment # 1 to the solid waste hauling and disposal contract with Waste Management.

FIRST AMENDMENT TO AGREEMENT FOR THE TRANSPORTATION AND DISPOSAL OF SOLID WASTE

THIS AGREEMENT is made and entered into this 1st day of February, 2011, retroactive to October 1, 2010, by and between the City of Key West (the "City"), a municipal corporation organized and existing under the laws of the State of Florida, and Waste Management Inc. of Florida (the "Contractor"), a Florida corporation.

WITNESSETH:

WHEREAS, the City and Contractor entered into that certain Agreement for the Transportation and Disposal of Solid Waste dated March 30, 2004, (the "Agreement"); and

WHEREAS, the parties desire to modify the methodology for calculating Service Fee adjustments; and

WHEREAS, the City and Contractor have negotiated the terms of this Amendment, which constitutes the entire agreement of the parties.

NOW, THEREFORE, in consideration of the promises and mutual covenants contained herein, the Contractor and the City agree that they shall comply with and be bound by all of the terms of this Amendment, and for other good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

1. The recitations set forth above are true and accurate and are incorporated herein.

2. All capitalized terms shall have the meanings set forth in the Agreement unless the context requires otherwise.

3. The definition of "Base Rate", contained in Article I, Paragraph 4 of the Agreement, is deleted and replaced with the following:
Base Rate shall mean the component of the Service Fee that compensates the Contractor for all of its basic services under this Agreement, including but not limited to the transport and disposal of the City's Acceptable Waste. It is composed of two elements:

(i) "Non-fuel Base Rate" which means those components that are related to managing, handling, transporting and disposing of the City's Acceptable Waste; and

(ii) "Fuel Base Rate" which means that component of the Service fee that relates to the cost of fuel to perform the activities hereunder.

4. The definitions of the terms listed below contained in Article I of the Agreement are deleted and replaced with the following definitions:

9. "Class I Landfill" shall be as defined in Rule 62-701.340(2)(a), FAC.
26. "Leachate" shall be as defined by Rule 62-701.200(59), FAC.
30. "Objectionable Odor" shall be as defined by Rule 62-701.200(77), FAC.
31. "On-site" means on the land herein defined as the "Site."
42. "Recovered Materials" shall be as defined by Rule 62-701.200(95), FAC.

43. "Recyclable Material" shall be as defined by Rule 62-701.200(98), FAC.
44. "Recycling" shall be as defined by Rule 62-701.200(99), FAC.
46. "Site" means the City of Key West Transfer Station Site located on City-owned real property that is a parcel of land in part of Government Lots 5 & 6, Section 21, Township 67 South Range 26 East on Rockland Key, Monroe County, Florida and being more particularly described as follows:
Commence at the intersection of the Centerline of U.S. Highway No. One (State Road No. 5) and the West abutment of the Rockland Key Viaduct; thence S 63_09'20" W along the original Centerline of U.S. Highway No. One for a distance of 2110.00 feet; thence North for a distance of 970.73 feet; thence West for a distance of 499.89 feet; thence N 19_13'40"E for a distance of 411.15 feet; thence N 00_05'25" W for a distance of 643.94 feet; thence N 61_38'12" W for a distance of 93.64 feet to the Point of Beginning; thence N 28_21'48" E for a distance of 0.83 feet; thence N 15_30'05" W along a chain link fence for a distance of 81.40 feet; thence West for a distance of 214.74 feet; thence along a chain link fence and projections thereof S 05_42'23" E for a distance of 111.51 feet; thence N 86_18'06" E and along said chain link fence for a distance of 215.81 feet; thence N 28_21'48" E for a distance of 20.30 feet back to the Point of Beginning. Said parcel containing 23040 square feet more or less.
47. "Solid Waste" shall be as defined by Rule 62-701.200(107), FAC.
48. "Special Waste" shall be as defined by Rule 62-701.200(113), FAC.
54. "Transfer Station" means the City's Solid Waste transfer, processing and transportation facility located at the Site.
56. "Waste Tire" shall be as defined by Rule 62-701.200(126), FAC.
57. "White Goods" shall be as defined by Rule 62-701.200(133), FAC.
58. "Yard Trash" shall be as defined by Rule 62-701.200(135), FAC.

5. Section 5.6, The Disposal Facility, is modified by adding the following paragraph after the third paragraph of the Section:

Notwithstanding the provisions of the preceding paragraphs, the Contractor shall not divert the City's Acceptable Waste from the two waste-to-energy facilities to the Contractor's three landfills for a period greater than fourteen days without giving Notice to the City and without the City's written approval.

6. Section 6.14, Solid Waste Flow Control, is modified by deleting the last sentence of the second paragraph and replacing it with the following:

<u>After the City's Solid Waste is processed in this fashion, the City shall deliver or have delivered all remaining Acceptable Waste to the Transfer Station, if the City determines such delivery is economically viable.</u> Solid Waste that is not processed for the purpose of Recycling, removing Recovered Materials, removing organic materials, composting or otherwise using or processing the Solid Waste shall be delivered to the Transfer Station.

7. Section 7.5.1, Consumer Price Index Adjustment, is deleted and replaced with the following:

7.5.1 **Fuel and Consumer Price Index Adjustment**

Commencing October 1, 2010, the Service Fee shall be $67.70 per ton comprised of a Non-fuel Base Rate of $59.67 and a Fuel Base Rate of $8.03.

Each of the Fuel Base Rate and Non-fuel Base Rate shall be adjusted as follows:

Non-fuel Base Rate: The Non-fuel Base Rate shall be adjusted each subsequent October 1 during the Term of this Agreement to account for the change in the CPI during the prior twelve (12) months. The Non-fuel Base Rate component of the Service Fee shall be adjusted upward or downward in an amount equal to seventy-five percent (75%) of the change in the CPI during the relevant time period.

When calculating the CPI adjustment for an Operating Year, the new Non-fuel Base Rate shall be determined by using the following formula:

New Non-fuel Base Rate = [((CPI2 - CPI1)/CPI1) x 0.75 + 1] x Current Non-fuel Base Rate

"CPI" = the Consumer Price Index for All Urban Consumers, U.S. City Average, All Items, not seasonally adjusted (Series Id: CUUR0000SA0) published by the United States Department of Labor, Bureau of Labor Statistics.

"CPI1" = the published CPI for July in the preceding year.

"CPI2" = the published CPI for July in the year in which the Non-fuel Base Rate is being adjusted.

Adjustments to the Non-fuel Base Rate made in accordance with this section are intended to reflect changes in the purchasing power of a given amount of money expressed in dollars. If the method of establishing the CPI is revised to more accurately reflect inflation or deflation, with the City's approval, the revised CPI shall be used thereafter when calculating the adjustments to the Service Fee. If CPI1 and CPI2 are not expressed in relation to the same base period, the City shall make an appropriate statistical adjustment or conversion. If the CPI is discontinued, the City shall select another index, which must be representative of the inflationary or deflationary trends affecting the parties' performance under this Agreement, and which is published by the United States government or by a reputable publisher of financial and economic indices.

Fuel Base Rate: The Fuel Base Rate shall be adjusted quarterly on each subsequent January 1, April 1, July 1, and October 1 during the Term of the Agreement. The average monthly price of diesel fuel for the Lower Atlantic No. 2 Diesel Retail Sales by All Sellers (Lower Atlantic PADD 1C) as reported by the U.S. Energy Information Administration will be used to adjust the Fuel Base Rate. The initial Fuel Base Rate of $8.03 per ton is determined by the following mutually agreed upon factors and using the September 2010 fuel price:

round trip miles to the Disposal Facility: 366
miles per gallon: 6
22 ton load

Initial Fuel Base Rate = 366 miles/load x 1 gal/6 miles x $2.895/gal x 1 load/22 tons = $8.03/ton

Should the Contractor utilize more fuel efficient equipment in the future, the Fuel Base Rate will be recalculated based on the miles per gallon achieved by such new equipment and the fuel price at that time.

When calculating the fuel adjustment for each Operating Year quarter, the new Fuel Base Rate shall be determined by using the following formula:

New Fuel Base Rate = [((FP2 - FP1)/FP1) + 1] x Current Fuel Base Rate

"FP" = average monthly price of diesel fuel for the Lower Atlantic No. 2 Diesel Retail Sales by All Sellers (Lower Atlantic PADD 1C) as reported by the U.S. Energy Information Administration.

"FP1" = For the first fuel adjustment, FP1 shall be the fuel price as of September 2010 ($2.895). For all future fuel adjustments, FP1 shall be the published monthly fuel price utilized as FP2 in the previous fuel adjustment.

"FP2" = the published fuel price for the month preceding that in which the Fuel Base Rate adjustment is being made.

The new Service Rate shall be the adjusted Non-Fuel Base Rate and Fuel Base Rate added together.

Total combined adjustments to the Fuel Base Rate and Non-fuel Base Rate shall not exceed five percent (5 %) in any twelve (12) month period. In the event an adjustment would exceed five percent (5 %), the exceedance (i.e., the amount that exceeds five percent) shall be carried forward and applied the next time adjustments are made, provided the total adjustment for combined Fuel and Non-Fuel Base Rates never exceeds five percent (5 %) in any twelve (12) month period. If this Agreement is terminated by either party for any reason, the City shall have no obligation to pay damages or otherwise compensate the Contractor for any previously unpaid CPI or fuel adjustment.

8. Section 7.5.3, Adjustments to Transportation and Disposal Costs, is modified by adding the following sentence to the end of the provision:

> If the Contractor's cost of transportation is reduced at a rate of 10% or more on a term of six months or greater through the use of transfer trailers returning to the Transfer Station to haul soil or other materials to the Lower Keys pursuant to Section 5.2, the City reserves the right to negotiate a reduction in the Service Fee.

9. Section 7.5.5, Extraordinary Rate Adjustment, is modified by adding the following sentence to the end of the provision:

> Adjustments pursuant to this Section 7.5.5 shall not include adjustments for changes in the cost of fuel since they are addressed in Section 7.5.1.

10. Section 12.4.9, Notice of Claims, is modified by deleting the last sentence and replacing it with the following:

All Notices required under this Section 12.4.9 shall be provided promptly.

11. Exhibit A is deleted. Exhibit E is deleted and replaced with the amended Chapter 62-701 FAC (attached to this amendment).

12. Except as modified herein, the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment to the Agreement on the date first written above.

CITY OF KEY WEST, FLORIDA

By: _____
Jim Scholl, City Manager

SEAL OF THE CITY OF KEY WEST, FLORIDA

ATTEST:

_____
Cheryl Smith, City Clerk

WASTE MANAGEMENT INC. OF FLORIDA

By: _____
Tim Hawkins, Vice President

_____
Witness

_____
Witness

RESOLUTION NO. 04-082

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING THE ATTACHED 20-YEAR CONTRACT BETWEEN THE CITY AND WASTE MANAGEMENT, INC. OF FLORIDA; PROVIDING FOR AN EFFECTIVE DATE

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached contract between the City and Waste Management, Inc. of Florida is hereby approved.

Section 2: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 18th day of February, 2004.

Authenticated by the presiding officer and Clerk of the Commission on February 19, 2004.

Filed with the Clerk February 19, 2004.

JIMMY WEEKLEY, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

CHAPTER 62-701
SOLID WASTE MANAGEMENT FACILITIES
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62-701.100 Intent.

The intent of Chapters 62-701 through 62-722, F.A.C., is to establish standards for the construction, operation, and closure of solid waste management facilities to minimize their threat to public health and the environment; to provide for the safe handling, storage, disposal, or beneficial use of ash residue from the combustion of solid waste; to establish a procedure for the examination and certification of resource recovery equipment to implement the tax exemptions provided by Section 212.08(7)(q), F.S., and subsection 12A-1.001(20), F.A.C.; to regulate the production and use of compost made from solid waste; to establish a comprehensive program for the proper management and recycling of used oil; to regulate waste tire storage, collection, transport, processing, recycling, reuse, and disposal; to establish procedures for disbursement of grants for solid waste management; to provide a uniform procedure by which certain persons in this state who handle, purchase, receive, recover, sell or are end users of recovered materials shall be certified by and report to the Department and register with and report to certain local governments; and to implement the provisions of the Florida Solid Waste Management Act, Sections 403.702-.7193 and 403.75-.769, F.S. Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.021, 403.061, 403.087, 403.702-.7193, 403.75-.769 FS. History–New 1-6-93, Formerly 17-701.100, Amended 12-23-96, 5-27-01, 1-6-10.

62-701.200 Definitions.

The following words, phrases or terms as used in Chapters 62-701 through 62-722, F.A.C., unless the context indicates otherwise, shall have the following meaning:

(1) "Active life" means the operating life of a facility as estimated in the permit application, but does not include the long-term care period.

(2) "Agricultural wastes" means the solid wastes resulting from normal farming operations, the raising and slaughtering of animals, and the processing of animal products, orchard, and field crops, which are stored, transported, or disposed of as an unwanted waste material.

(3) "Airport" means any area of land or water, or any manmade object or facility located thereon, which is used, or intended for use, for the landing and takeoff of aircraft, and any appurtenant areas that are used, or intended for use, for airport buildings or other airport facilities or rights-of-way, together with all airport buildings and facilities located thereon.

(4) "Air quality standards" means, unless otherwise specified, those standards set forth in Chapter 62-204, F.A.C.

(5) "ASTM" means the American Society for Testing and Materials.

(6) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells, springs, or surface water.

(7) "Ash residue" means all the solid residue and any entrained liquids resulting from the combustion of solid waste in a solid waste combustor, including

bottom ash, fly ash and combined bottom and fly ash, but excluding recovered metals, glass, and other recovered materials separated from the ash residue.

(a) "Bottom ash" means the solid material remaining after combustion of solid waste, which is discharged from the grates or stoker of a solid waste combustor.

(b) "Fly ash" means the residue from the combustion of solid waste, which is entrained in the gas stream of a solid waste combustor. Fly ash includes particulates, cinders, soot, and solid waste from air pollution control equipment.

(8) "Biomedical waste" has the meaning given it in Chapter 64E-16, F.A.C.

(9) "Biological waste" means solid waste that causes or has the capability of causing disease or infection and includes biomedical waste, animals that died from disease, and other wastes capable of transmitting pathogens to humans or animals. The term does not include human remains that are disposed of by persons licensed under Chapter 470, F.S.

(10) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(11) "CCA treated wood" means lumber, timber, or plywood treated with chromated copper arsenate. This term does not include utility poles unless they have been ground, chipped, or shredded.

(12) "Cell" means a volume of solid waste received since the last previous application of initial cover. The compacted waste and subsequent initial cover constitute a cell that usually contains wastes deposited in one day.

(13) "Class I waste" means solid waste that is not hazardous waste, and that is not prohibited from disposal in a lined landfill under Rule 62-701.300, F.A.C.

(14) "Class III waste" means yard trash, construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by the Department, that are not expected to produce leachate that poses a threat to public health or the environment.

(15) "Clean debris" means any solid waste that is virtually inert, is not a pollution threat to ground water or surface waters, is not a fire hazard, and is likely to retain its physical and chemical structure under expected conditions of disposal or use. The term includes brick, glass, ceramics, and uncontaminated concrete including embedded pipe or steel.

(16) "Clean wood" means wood, including lumber, tree and shrub trunks, branches, and limbs, which is free of paint, glue, filler, penthachlorophenol, creosote, tar, asphalt, chromated copper arsenate, other wood preservatives or treatments.

(17) "Closing" means the time at which a solid waste management facility ceases to accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the facility for any necessary monitoring and maintenance after closing.

(18) "Closure" means the cessation of operation of a solid waste management facility and the act of securing such a facility so that it will pose no significant threat to

human health or the environment. This includes closing, long term monitoring, maintenance, and financial responsibility.

(19) "Cm/sec" means centimeters per second.

(20) "Co-disposal" means the disposal of two or more different types of waste in the same solid waste disposal unit.

(21) "Combustion" means the treatment of solid waste in a device that uses heat as the primary means to change the chemical, physical, or biological character or composition of the waste. Combustion processes include incineration, gasification, and pyrolysis.

(22) "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

(23) "Composite liner" means a liner comprised of a geomembrane, that is underlain and in direct contact with a soil component.

(24) "Construction and demolition debris" means discarded materials generally considered to be not water soluble and non-hazardous in nature, including but not limited to steel, glass, brick, concrete, asphalt material, pipe, gypsum wallboard, and lumber, from the construction or destruction of a structure as part of a construction or demolition project or from the renovation of a structure, including such debris from construction of structures at a site remote from the construction or demolition project site. The term includes rocks, soils, tree remains, trees, and other vegetative matter that normally results from land clearing or land development operations for a construction project; clean cardboard, paper, plastic, wood, and metal scraps from a construction project; except as provided in Section 403.707(9)(j), F.S., yard trash and unpainted, non-treated wood scraps from sources other than construction or demolition projects; scrap from manufacturing facilities that is the type of material generally used in construction projects and that would meet the definition of construction and demolition debris if it were generated as part of a construction or demolition project, including debris from the construction of manufactured homes and scrap shingles, wallboard, siding concrete, and similar materials from industrial or commercial facilities and de minimis amounts of other non-hazardous wastes that are generated at construction or demolition projects, provided such amounts are consistent with best management practices of the construction and demolition industries. Mixing of construction and demolition debris with other types of solid waste will cause it to be classified as other than construction and demolition debris.

(25) "Contaminated soil" has the meaning given it in subsection 62-713.200(3), F.A.C.

(26) "Degradable waste" means waste that decomposes through chemical breakdown or microbiological activity. It includes materials such as food and vegetative wastes, but does not include materials like concrete, ash residue from the combustion of solid wastes and metals.

(27) "Department" means the State of Florida Department of Environmental Protection.

(28) "Design period" means the operating life of the solid waste management facility plus any long-term care period after closing.

(29) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or upon any land or water so that such solid waste or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground waters, or otherwise enter the environment.

(30) "Engineer of record" means a professional engineer registered in the State of Florida in accordance with provisions of Chapter 471, F.S., who is appointed by the owner or operator of the solid waste management facility.

(31) "Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for solid waste management.

(32) "Fill" means man-made deposits of earth or waste materials used to fill excavations, to increase the vertical or horizontal extent of land or solid waste disposal units, or to build embankments.

(33) "Final cover" means the materials used to cover the top and sides of a landfill when fill operations cease.

(34) "Garbage" means all kitchen and table food waste, and animal or vegetative waste that is attendant with or results from the storage, preparation, cooking, or handling of food materials.

(35) "Gas condensate" means the liquid generated as a result of gas recovery processes at a solid waste management facility.

(36) "Gas recovery facility" means a system of wells, trenches, pipes, and other related ancillary structures such as manholes, compressors, and monitoring installations that collect and transport the gas produced in a waste disposal unit to one or more gas processing points or flares. The flow of gas through such a system may be produced by naturally occurring gas pressure gradients or may be aided by an induced draft generated by mechanical means.

(37) "Generation" means the act or process of producing solid waste.

(38) "Geocomposite" means a product composed of two or more materials, at least one of which is a geosynthetic.

(39) "Geomembrane" means a low-permeability synthetic membrane used as an integral part of a system designed to limit the movement of liquid or gas in the system.

(40) "Geogrid" means a geosynthetic formed by a regular network of integrally connected elements with apertures greater than 6.35 mm (1/4 inch) to allow interlocking with surrounding soil, rock, earth and other surrounding materials to function primarily as reinforcement.

(41) "Geonet" means a geosynthetic consisting of integrally connected parallel sets of ribs overlying similar sets at various angles for planar drainage of liquids or gases.

(42) "Geosynthetic" means a planar product manufactured from polymeric material used with soil, rock, earth, or other geotechnical engineering-related material as an integral part of a man-made project, structure or system.

(43) "Geosynthetic clay liner" (GCL) means a low-permeability manufactured material consisting of a layer of low permeability clay placed between two geotextiles.

(44) "Geotextile" means a permeable textile used as a part of a system designed to act as a filter to prevent the flow of fine particles into drainage systems, to provide planar flow for drainage, to serve as a cushion to protect geomembranes, or to provide structural support.

(45) "GRI" means Geosynthetic Research Institute.

(46) "Ground water" means water beneath the surface of the ground within a zone of saturation, whether or not it is flowing through known and definite channels.

(47) "Hazardous waste" means a solid waste regulated by the Department as a hazardous waste pursuant to Chapter 62-730, F.A.C.

(48) "HDPE" means high density polyethylene.

(49) "Household waste" means any solid waste, including garbage, trash, and sanitary waste in septic tanks, derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

(50) "Indoor" means within a structure that excludes rain and public access and would control air flows in the event of a fire.

(51) "Industrial byproducts" means those materials that have a demonstrated recycling potential, can be feasibly recycled, and have been diverted or removed from the solid waste stream for sale, use, or reuse. The term does not include any materials that are defined as recovered materials; a mixed waste stream that is processed to remove recyclable materials; or materials the recycling or use of which is specifically addressed in Department rules, such as construction and demolition debris, ash residue, waste tires, used oil, and compost. Industrial byproducts are regulated as solid waste unless otherwise exempted under paragraph 62-701.220(2)(d), F.A.C.

(52) "Industrial solid waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products or byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing or foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

(53) "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 minimizes vector breeding, animal attraction, and fire potential, prevents blowing litter, controls odors, and improves landfill appearance.

(54) "Integral to" means, as regards the examination and certification of resource recovery equipment, that the machinery or equipment provides a significant function in the resource recovery or recycling process, such that the resource recovery or recycling process could not proceed without that piece of machinery or equipment.

(55) "Intermediate cover" means a layer of compacted earth at least one foot in depth applied to a solid waste disposal unit. The term also includes other material or thickness, approved by the Department, that minimizes disease vectors, odors, and fire, and is consistent with the leachate control design of the landfill.

(56) "Land clearing debris" means rocks, soils, tree remains, trees, and other vegetative matter that normally results from land clearing or land development operations for a construction project. Land clearing debris does not include vegetative matter from lawn maintenance, commercial or residential landscape maintenance, right-of-way or easement maintenance, farming operations, nursery operations, or any other sources not related directly to a construction project.

(57) "Landfill" means a solid waste disposal facility, which is an area of land or an excavation where wastes are or have been placed for disposal, for which a permit, other than a general permit, is required by Section 403.707, F.S. This term shall not include:

(a) A land spreading site;

(b) A surface impoundment;

(c) An injection well defined under and subject to the provisions of Chapter 62-528, F.A.C.; or

(d) A construction and demolition debris disposal site regulated by Rule 62-701.730, F.A.C.

(58) "Lateral expansion" means any horizontal increase in the dimensions of the waste boundary of an existing solid waste disposal unit.

(59) "Leachate" means liquid that has passed through or emerged from solid waste and may contain soluble, suspended or miscible materials.

(60) "Lead-acid battery" means those lead-acid batteries designed for use in motor vehicles, vessels, and aircraft, and includes such batteries when sold as a component part of a motor vehicle, vessel, or aircraft, but not when sold to recycle components.

(61) "Lift" means a completed horizontal series of cells.

(62) "Lined landfill" means a landfill constructed with a liner made of synthetic materials, low-permeability soils, or a combination of these materials, that has been permitted by the Department, and that met the Department's landfill design criteria specified in this chapter or previous versions of this chapter at the time of permitting.

(63) "Liner" means a continuous layer of low-permeability natural or synthetic materials, under the bottom and sides of a landfill, solid waste disposal unit, or leachate surface impoundment, which controls the downward or lateral escape of waste constituents, or leachate.

(64) "Liner system" means a system of leachate collection and liner layers comprised of natural or synthetic materials installed between the subgrade and the waste for the purpose of containing the waste and collecting and removing leachate.

(65) "Liquid waste" means any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

(66) "LLDPE" means linear low density polyethylene.

(67) "Local government" means any municipality, county, district, or authority, or any agency thereof, or a combination of two or more of the foregoing when acting jointly in connection with a project, which has jurisdiction over the collection, recycling, disposal or treatment of solid waste.

(68) "Lower explosive limit" means the lowest percent by volume of a mixture of explosive gases that will propagate a flame in air at a temperature of 25 degrees Celsius and atmospheric pressure.

(69) "Manure" means a solid waste composed of excreta of animals, and residual materials that have been used for bedding, sanitary or feeding purposes for such animals. For purposes of Chapter 62-709, F.A.C., manure does not mean such material generated and managed by normal farming operations.

(70) "Materials recovery" means any process by which one or more of the various components in solid waste is separated and concentrated for reuse.

(71) "Materials recovery facility" means a solid waste management facility that provides for the extraction from solid waste of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.

(72) "Method detection limit" means the smallest concentration of an analyte of interest that can be measured and reported with 99 percent confidence that the concentration is greater than zero. The method detection limit shall be determined pursuant to procedures outlined in Chapter 62-160, F.A.C., which is hereby incorporated by reference.

(73) "Monitoring wells" means strategically located wells from which water samples are drawn for water quality analysis.

(74) "Monofill" means a waste pile, landfill or solid waste disposal unit into which only one type of solid waste is placed.

(75) "Motor vehicle" means an automobile, motorcycle, truck, trailer, semitrailer, truck tractor and semitrailer combination, or any other vehicle operated in this state, used to transport persons or property, and propelled by power other than muscular power, but the term does not include traction engines, road rollers, such vehicles as run only upon a track, bicycles, moped, or farm tractors and trailers.

(76) "Normal farming operations" means the customary and generally accepted activities, practices, and procedures that farmers adopt, use, or engage in during the production and preparation for market of poultry, livestock, and associated farm products; and in the production, harvesting, or packaging of agricultural crops which include agronomic, horticultural, and silvicultural crops. Included are the management, collection, storage, composting, transportation, and utilization of organic agricultural waste, manure, and materials solely derived from agricultural crops. A facility regulated as an Animal Feeding Operation pursuant to Chapter 62-670, F.A.C., that manages its manure on-site will be considered to be engaging in normal farming operations.

(77) "Objectionable odors" has the meaning given that term in Rule 62-210.200, F.A.C.

(78) "Oily wastes" has the meaning given that term in Rule 62-710.201, F.A.C.

(79) "100-year floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(80) "On-site" means on the same or geographically contiguous property, which may be divided by a public or private right-of-way. It does not include two or more parcels of land more than a mile apart that are connected only by a public or private right-of-way.

(81) "Open burning" means the burning of any material under such conditions that the products of combustion are emitted directly into the atmosphere.

(82) "Operator" means any person, including the owner, who is principally engaged in, and is in charge of, the actual operation, supervision, and maintenance of a solid waste management facility.

(83) "Person" means any and all persons, natural or artificial, including any individual, firm, or association; any municipal or private corporation organized or existing under the laws of Florida or any other state; any county of this state; and any governmental agency of this state or the Federal Government.

(84) "PGI" means PVC Geomembrane Institute.

(85) "Population" means the most recent population census determination under Section 186.901, F.S.

(86) "Potable water well" means any excavation that is drilled or bored, or converted from non-potable water use, when the intended use of such excavation is for the location and acquisition of ground water that supplies water for human consumption.

(87) "Processed tire" means a tire that has been treated mechanically, chemically, or thermally so that the resulting material is a marketable product or is suitable for proper disposal.

(88) "Processing" means any technique designed to change the physical, chemical, or biological character or composition of any solid waste so as to render it safe for transport, amenable to recovery, storage or recycling; safe for disposal; or reduced in volume or concentration.

(89) "Professional engineer" means an engineer licensed in the State of Florida in accordance with Chapter 471, F.S.

(90) "Professional geologist" means a geologist licensed in the State of Florida in accordance with Chapter 492, F.S.

(91) "Putrescible waste" means solid waste that contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to be capable of attracting or providing food for birds. The term does not include uncontaminated yard trash or clean wood.

(92) "PVC" means polyvinyl chloride.

(93) "Quantity of tires" means either weight, volume, or actual number of tires. For purposes of Chapter 62-711, F.A.C., assume that, for passenger tires, there are 100 tires per ton and 10 tires per cubic yard and that, for truck tires, there are 20 tires per ton.

(94) "Reasonable assurance" means the existence of a substantial likelihood, although not an absolute guarantee, that the proposed activity and applicant will comply with agency rules, laws, orders and permit conditions. It does not mean proof that a facility will not fail.

(95) "Recovered materials" means metal, paper, glass, plastic, textile, or rubber materials that have known recycling potential, can be feasibly recycled, and have been diverted and source separated or have been removed from the solid waste stream for sale, use, or reuse as raw materials, whether or not the materials require subsequent processing or separation from each other, but does not include materials destined for any use that constitutes disposal. Recovered materials as described above are not solid waste.

(96) "Recovered materials processing facility" means a facility engaged solely in the storage, processing, resale, or reuse of recovered materials. Such a facility is not a solid waste management facility if it meets the conditions of paragraph 62-701.220(2)(c), F.A.C.

(97) "Recovered screen material" means the fines fraction, consisting of soil and other small materials, derived from the processing or recycling of construction and demolition debris which passes through a final screen size no greater than 3/4 of an inch.

(98) "Recyclable material" means those materials which are capable of being recycled and which would otherwise be processed or disposed of as solid waste.

(99) "Recycling" means any process by which solid waste, or materials which would otherwise become solid waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

(100) "Recycling equipment" means machinery or equipment exclusively and integrally used in the actual process by which solid waste or materials which would otherwise become solid waste are separated or processed and reused or returned to use in the form of raw materials or products.

(101) "Resource recovery" means the process of recovering materials or energy from solid waste, excluding those materials or solid waste under control of the Nuclear Regulatory Commission.

(102) "Resource recovery equipment" means equipment or machinery exclusively and integrally used in the actual process of recovering material or energy resources from solid waste. This definition specifically includes recycling equipment.

(103) "Sanitary nuisance" means a condition created by any person, or the keeping, maintaining, propagation, existence, or permitting of anything by a person by which the health or lives of individuals may be threatened or impaired, or by which disease may be caused or transmitted.

(104) "Shredding" means a process of reducing the particle size of solid waste through the use of grinding, shredding, milling, or rasping machines.

(105) "Site" means the area of land or water within the property boundaries of a solid waste management facility where one or more solid waste processing, resource recovery, recycling, storage, or disposal areas are located.

(106) "Sludge" means a solid waste pollution control residual which is generated by any industrial or domestic wastewater treatment plant, water supply treatment plant, air pollution control facility, septic tank, grease trap, portable toilet or related operation, or any other such waste having similar characteristics. Sludge may be a solid, liquid, or semisolid waste but does not include the treated effluent from a wastewater treatment plant.

(107) "Solid waste" means: sludge that is not regulated under the federal Clean Water Act or Clean Air Act, as well as sludge from a waste treatment works, water supply treatment plant, or air pollution control facility; or garbage, rubbish, refuse, special waste, or other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations. Materials not regulated as solid waste pursuant to this chapter are: recovered materials; nuclear source or byproduct materials regulated under Chapter 404, F.S., or under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

(108) "Solid waste combustor" means an enclosed device that uses controlled combustion, the primary purpose of which is to thermally break down solid, liquid, or gaseous combustible solid wastes to an ash residue that contains little or no combustible material. A solid waste combustor specifically includes any facility that uses incineration, gasification, or pyrolysis to break down solid waste.

(109) "Solid waste disposal facility" means any solid waste management facility which is the final resting place for solid waste, including landfills and incineration facilities that produce ash from the process of incinerating municipal solid waste.

(110) "Solid waste disposal unit" means a discrete area of land used for the disposal of solid waste.

(111) "Solid waste management" means the process by which solid waste is collected, transported, stored, separated, processed, or disposed of in any other way, according to an orderly, purposeful, and planned program which includes closure.

(112) "Solid waste management facility" means any solid waste disposal area, transfer station, materials recovery facility, or other facility, the purpose of which is resource recovery or the disposal, recycling, processing, or storage of solid waste. The term does not include recovered materials processing facilities which meet the requirements of paragraph 62-701.220(2)(c), F.A.C., except the portion of such facilities, if any, that is used for the management of solid waste.

(113) "Special wastes" means solid wastes that can require special handling and management, including but not limited to, white goods, waste tires, used oil, lead-acid batteries, construction and demolition debris, ash residue, yard trash, biological wastes, and mercury-containing devices and lamps.

(114) "Stabilized" means that biological and chemical decomposition of the wastes has ceased or diminished to a level so that such decomposition no longer poses a pollution, health, or safety hazard.

(115) "Subgrade" means soils native to or imported to a site, or other materials authorized by a Department permit or this chapter, which may be graded and compacted before a landfill liner system is constructed over them.

(116) "Tire" means a continuous solid or pneumatic rubber covering encircling the wheel of a motor vehicle.

(117) "Tire disposal" means to deposit, dump, spill or place any waste tire or residuals into or upon any structure, land or water. Tire disposal also includes the burning of any waste tire or residuals in a waste-to-energy facility, incinerator, or other facility used solely for the disposal of solid waste.

(118) "Tire recycling" means any process by which waste tires or residuals are reused or returned to use in the form of products or raw materials.

(119) "Ton" means a short ton, 2000 pounds (0.9078 metric tons).

(120) "Transfer station" means a facility the primary purpose of which is to store or hold solid waste for transport to a processing or disposal facility. Operations at such facilities may include separation of incidental amounts of recyclable materials or unauthorized waste.

(121) "Unauthorized waste" means any type of waste that is not allowed to be accepted or managed at a solid waste management facility in accordance with rule or statutory requirements or permit conditions.

(122) "Used oil" has the meaning given that term in Rule 62-710.201, F.A.C.

(123) "Used tire" means a whole waste tire which has a minimum tread depth of 3/32 inch or greater and is suitable for use on a motor vehicle.

(124) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within a facility's property boundary.

(125) "Vector" means a carrier organism that is capable of transmitting a pathogen from one organism to another.

(126) "Waste tire" means a tire that has been removed from a motor vehicle and has not been retreaded or regrooved. The term includes used tires and processed tires, but does not include solid rubber tires and tires that are inseparable from the rim.

(127) "Waste tire collection center" means a site where waste tires are collected from the public before being offered for recycling or disposal and where fewer than 1,500 tires are kept on-site on any given day.

(128) "Waste tire collector" means a person who transports more than 25 waste tires over public highways at any one time.

(129) "Waste tire processing facility" means a site where equipment is used to treat waste tires mechanically, chemically, or thermally so that the resulting material is a marketable product or is suitable for proper disposal. The term includes mobile waste tire processing equipment.

(130) "Waste tire residuals" means any liquids, sludges, metals, fabric or byproducts resulting from the processing or storage of tires. Residuals do not include processed tires held for recycling or disposal, provided the conditions of Rule 62-711.530, F.A.C., are met.

(131) "Waste tire site" means a site at which 1,500 or more waste tires are accumulated. For purposes of this term a site means a piece of property owned, rented, or otherwise controlled by a person, including all contiguous or adjacent properties owned, rented, or otherwise controlled by that person.

(132) "Water quality standards and criteria" means, unless otherwise specified, those standards and criteria set forth in Chapters 62-302 and 62-520, F.A.C.

(133) "White goods" means inoperative and discarded refrigerators, ranges, washers, water heaters, freezers, and other similar domestic and commercial large appliances.

(134) "Working face" means that portion of a solid waste disposal unit where waste is deposited, spread, and compacted before placement of initial cover.

(135) "Yard trash" means vegetative matter resulting from landscaping maintenance or land clearing operations and includes materials such as tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps, and associated rocks and soils.

(136) "Zone of discharge" has the meaning given it in Rule 62-520.200, F.A.C.

All other definitions found in Chapter 403, F.S., and Chapters 62-702 through 62-722, F.A.C., to the extent that they are consistent with the definitions of this chapter, are applicable to the terms used in this chapter.

Rulemaking Authority 403.704 FS. Law Implemented 403.702-.717, 403.75-.769 FS. History–Formerly 10D-12.02, 10-1-74, Revised 7-20-76, Amended 5-24-79, 6-13-84, 4-25-85, 7-1-85, 12-10-85, Formerly 17-7.02, 17-7.020, Amended 8-2-89, 6-25-90, Formerly 17-701.020, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.200, Amended 12-23-96, 5-27-01, 1-6-10.

62-701.210 Documents Incorporated by Reference.

Specific references to the documents listed below are made throughout this chapter. These documents are adopted as standards and are incorporated into this chapter by reference. The reference documents are available for inspection at the Department's district offices.

(1) EPA document EPA/600/R-93/182, Quality Assurance and Quality Control for Waste Containment Facilities, September 1993.

(2) 40 C.F.R. Parts 61.149, 61.150, 61.151, 61.154, Subpart M-National Emission Standard for Asbestos, July 1, 1992.

(3) 40 C.F.R. Part 136, Appendix B, Definition and Procedure for the Determination of the Method Detection Limit, revision 1.1; October 26, 1984.

(4) Method 9095, Paint Filter Test, found in EPA document EPA SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods; Third Edition, September, 1986, as revised, December, 1987.

(5) Methods 601 and 602, 40 CFR Part 136, Appendix A, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater; December 22, 2000.

(6) 40 C.F.R. 258.13, Fault Areas: October, 1991.

(7) 40 C.F.R. 258.14, Seismic Impact Zones; October, 1991.

(8) 40 C.F.R. 258.15 Unstable Areas; October, 1991.

(9) 40 C.F.R. 258, Appendices I and II; October, 1991.

(10) 40 C.F.R. 264 subpart H, except for those sections specified in subparagraph 62-701.630(6)(b)1., F.A.C.; July 1, 2007.

(11) 40 C.F.R. 261.24 Table 1-Maximum Concentration of Contaminants for the Toxicity Characteristic; July, 1992.

(12) GRI Test Method GM13 revision 9 dated June 1, 2009.

(13) PGI 1104 Specification for PVC Geomembrane, effective April 15, 2008.

(14) ASTM Method D5321 "Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method," October 15, 1992.

(15) ASTM Method D4716 "Test Method for Determining the (In-plane) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head," June 10, 1999.

(16) ASTM Method D5887 "Standard Test Method for Measurement of Index Flux Through Saturated Geosynthetic Clay Liner Specimens Using a Flexible Wall Permeameter," December 10, 1995.

(17) ASTM Method D6243-98 "Standard Test Method for Determining the Internal and Interface Shear Resistance of Geosynthetic Clay Liner by the Direct Shear Method," March 10, 1998.

(18) GRI Test Method GM17 revision 6 dated June 1, 2009.

(19) GRI Test Method GM19 revision 2 dated January 28, 2005.

(20) ASTM Method D6766-06a "Standard Test Method for Evaluation of Hydraulic Properties of Geosynthetic Clay Liners Permeated with Potentially Incompatible Liquids," November 15, 2006.
Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.061, 403.702-.717 FS. History–New 1-6-93, Amended 1-2-94, Formerly 17-701.210, Amended 5-27-01, 1-6-10.

62-701.220. General Applicability.

(1) This chapter has been substantially amended several times since it was first promulgated. Except as otherwise specifically provided herein, facilities remain subject to the provisions which were in effect at the time the site was permitted or received a site certification, or at the time a complete application was submitted and deemed complete by the Department.

(2) This chapter applies to all solid waste and each solid waste management facility in this state, with the following exceptions:

(a) Surface impoundments not addressed in subsection 62-701.400(6), F.A.C.;

(b) Injection wells defined under and subject to the provisions of Chapter 65-528, F.A.C.;

(c) Recovered materials or recovered materials processing facilities, if:

1. A majority of the recovered materials at a facility are demonstrated to be sold, used, or reused within one year;

2. The recovered materials or the products or byproducts of operations that process recovered materials are not discharged, deposited, injected, dumped, spilled, leaked, or placed into or upon any land or water that such products or byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of applicable water quality standards and criteria or air quality standards is caused;

3. The recovered materials are not hazardous wastes; and

4. The facility meets the registration requirements in Section 403.7046, F.S., and Chapter 62-722, F.A.C.;

(d) Industrial byproducts, if

1. A majority of the industrial byproducts are demonstrated to be sold, used, or reused within one year;

2. The industrial byproducts are not discharged, deposited, injected, dumped, spilled, leaked, or placed into or upon any land or water so that such industrial byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of water quality standards and criteria or air quality standards is caused, or a significant threat to public health is caused; and

3. The industrial byproducts are not hazardous wastes;

(e) Phosphogypsum stack systems;

(f) Clean debris which has been segregated from other waste and which is used or stored for use as fill or raw material; and

(g) The collection and processing of soil, rocks, vegetative debris, asphalt, and similar materials normally associated with and actually from construction and routine maintenance of roads, as defined in Section 334.03(24), F.S., when such materials are beneficially used or reused by the generator as part of a road construction or maintenance project. Street sweepings, ditch scrapings, shoulder scrapings, and catch basin sediments are included in this exemption provided that any significant amounts of solid waste, such as tires, furniture, white goods, and automobile parts, are removed prior to use or reuse. This exception does not apply when materials are contaminated by a spill or other unusual event. Storage of these materials at transfer stations or off-site waste storage areas is addressed in subparagraph 62-701.710(1)(e)5., F.A.C.

(3) There are several requirements throughout this chapter that requests or demonstrations must be approved by the Department. Unless otherwise specifically stated, this means that the requests or demonstrations must be submitted to the appropriate Department District Office as part of a permit application or request for permit modification. The Department will evaluate such requests or demonstrations in accordance with the applicable criteria set forth in this chapter, and will approve or modify permit conditions if those criteria are met.

(4) In accordance with former Rule 62-701.720, F.A.C., several persons or organizations requested approval of alternate requirements for certain industrial operations. Written determinations made by the Department prior to December 23, 1996, in response to such requests remain in effect even though Rule 62-701.720, F.A.C., has been repealed, until and unless the Department takes action to modify such determinations through rulemaking.

(5) Local zoning. The Department does not evaluate compliance with local zoning or land use ordinances when determining whether to issue or deny any permit under this chapter. Issuance of a permit does not relieve an applicant from compliance with local zoning or land use ordinances, or with any other laws, rules, or ordinances.

(6) There are several references in this chapter to facilities which are constructed or existing. Unless otherwise specified, these terms mean that the facility has received a permit or is exempt from permitting, and has actually been built or is being built in accordance with that permit or exemption. The terms do not include parts of a facility which, although noted in a long-term design plan, were not authorized to be constructed within the five-year term of the facility's permit(s). A landfill with a slurry wall liner system is deemed to have been constructed when the slurry wall was constructed.

(7) There are several requirements in this chapter that stormwater be controlled in accordance with Part IV of Chapter 373 and the rules promulgated thereunder. Unless otherwise specifically provided, the referenced rules are Chapter 62-

25, F.A.C., for facilities within the Northwest Florida Water Management District, and Chapter 62-330, F.A.C., for all other facilities.
Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.061, 403.702-.717 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.220, Amended 5-27-01, 1-6-10.

62-701.300 Prohibitions.

(1) General prohibition.

(a) No person shall store, process, or dispose of solid waste except as authorized at a permitted solid waste management facility or a facility exempt from permitting under this chapter.

(b) No person shall store, process, or dispose of solid waste in a manner or location that causes air quality standards to be violated or water quality standards or criteria of receiving waters to be violated.

(2) Siting. Unless authorized by a Department permit or site certification in effect on May 27, 2001, or unless specifically authorized by another Department rule or a Department license or site certification based upon site-specific geological, design, or operational features, no person shall store or dispose of solid waste:

(a) In an area where geological formations or other subsurface features will not provide support for the solid waste;

(b) Within 500 feet of an existing or approved potable water well unless storage or disposal takes place at a facility for which a complete permit application was filed or which was originally permitted before the potable water well was in existence. This prohibition shall not apply to any renewal of an existing permit that does not involve lateral expansion, nor to any vertical expansion at a permitted facility;

(c) In a dewatered pit unless the pit is lined and permanent leachate containment and special design techniques are used to ensure the integrity of the liner;

(d) In any natural or artificial body of water including ground water and wetlands within the jurisdiction of the Department. This prohibition does not apply to areas of standing water that exist only after storm events, provided that the storage or disposal does not result in objectionable odors or sanitary nuisances;

(e) Within 200 feet of any natural or artificial body of water unless storage or disposal takes place at a facility for which a complete permit application was filed or which was originally permitted before the water body was in existence. This prohibition shall not apply to any renewal of an existing permit that does not involve lateral expansion, nor to any vertical expansion at a permitted facility. For purposes of this paragraph, a "body of water" includes wetlands within the jurisdiction of the Department, but does not include impoundments or conveyances which are part of an on-site, permitted stormwater management system, or bodies of water contained completely within the property boundaries of the disposal site which do not discharge from the site to surface waters. A person may store or dispose of solid waste within the 200 foot setback area upon demonstration to the Department that permanent leachate control

methods will result in compliance with water quality standards and criteria. However, nothing contained herein shall prohibit the Department from imposing conditions necessary to assure that solid waste stored or disposed of within the 200 foot setback area will not cause pollution from the site in contravention of Department rules; and

(f) On the right of way of any public highway, road, or alley.

(3) Burning. Open burning of solid waste is prohibited except in accordance with Chapter 62-256, F.A.C. Controlled burning of solid waste is prohibited except in a permitted incinerator, or in a facility in which the burning of solid waste is authorized by a site certification order issued under Chapter 403, Part II, F.S.

(4) Hazardous waste. No hazardous waste shall be disposed of in a solid waste management facility unless such facility is permitted pursuant to Chapter 62-730, F.A.C.

(5) PCBs. Disposal of liquids containing a polychlorinated biphenyl (PCB), or non-liquid PCBs in the form of contaminated soil, rags, or other debris, may be restricted or prohibited by 40 CFR Part 761. Persons managing PCBs are advised to consult that federal regulation before attempting to dispose of PCBs in any solid waste disposal unit in this state.

(6) Biomedical waste.

(a) No biomedical waste shall be knowingly deposited in any solid waste management facility unless:

1. The solid waste facility is specifically permitted to receive untreated biomedical waste;

2. The biomedical waste has been properly incinerated so that little or no organic material remains in the ash residue, or treated by a process approved by the Department of Health, and the provisions in paragraph 62-701.520(5)(d), F.A.C., are complied with; or

3. The biomedical waste is generated by an individual as a result of self-care, or care by a family member or other non health care provider. However, in order to reduce the chance of exposure to the public, home generators are advised to segregate and package such waste before disposal according to the guidelines for disposal of home-generated biomedical waste available from each county health department.

(b) No solid waste, including treated biomedical waste, shall be commingled with untreated biomedical waste unless the solid waste is being managed in the same manner as the untreated biomedical waste.

(c) Treated or untreated biomedical waste shall not be allowed to leak into the environment during transport.

(7) Class I surface waters. The Department shall not issue a construction permit for a landfill within 3,000 feet of Class I surface waters.

(8) Special wastes for landfills. No person who knows or who should know of the nature of such solid waste shall dispose of the following wastes:

(a) Lead-acid batteries in any landfill;

(b) Used oil in any landfill, except as provided in Chapter 62-710, F.A.C.;

(c) Yard trash in a Class I landfill;
(d) White goods in any landfill; and
(e) Whole waste tires in any landfill, except as provided in Chapter 62-711, F.A.C.

(9) Special wastes for waste-to-energy facilities. No person who knows or who should know of the nature of such solid waste shall dispose of lead-acid batteries, mercury-containing devices, or spent mercury-containing lamps in any waste-to-energy facility.

(10) Liquids restrictions.

(a) Noncontainerized liquid waste shall not be placed in solid waste disposal units which accept household waste or construction and demolition debris for disposal unless:

1. The liquid waste is household waste other than septic waste; or
2. The liquid waste is leachate or gas condensate derived from the solid waste disposal unit, or byproducts of the treatment of such leachate or gas condensate, and the solid waste disposal unit is lined and has a leachate collection system.

(b) Containers holding liquid waste shall not be placed in a solid waste disposal unit unless:

1. The container is a small container similar in size to that normally found in household waste;
2. The container is designed to hold liquids for use other than storage; or
3. The waste is household waste.

(c) Containers or tanks twenty gallons or larger in capacity shall either have one end removed or cut open, or have a series of punctures around the bottom to ensure the container is empty and free of residue. The empty container or tank shall be compacted to its smallest practical volume for disposal.

(11)(a) Used oil and oily wastes. Except as provided in paragraph (b) of this subsection, no person may mix or commingle used oil with solid waste that is to be disposed of in landfills or directly dispose of used oil in landfills.

(b) Oily wastes, sorbents or other materials used for maintenance or to clean up or contain leaks, spills or accidental releases of used oil, and soils contaminated with used oil as a result of spills or accidental releases are not subject to the prohibition in paragraph (a) of this subsection.

(12) Yard trash. The prohibitions of this section apply to the storage, processing, or disposal of yard trash, except that paragraphs (2)(b) and (e) of this section are modified so that the following setback distances shall apply:

(a) 100 feet from off-site potable water wells, no setback required from on-site water wells; and
(b) 50 feet from water bodies.

(13) Tanks. The prohibitions in subsection (2) of this section do not apply to the storage or treatment of solid waste in tanks which meet the criteria of Chapter 62-761 or subsection 62-701.400(6), F.A.C. Instead, no such storage tank shall be installed within

500 feet of any existing community water supply system or any existing non-transient non-community water supply system, nor shall any tank be installed within 100 feet of any other existing potable water supply well.

(14) CCA treated wood. CCA treated wood shall not be incorporated into compost or made into mulch, decorative landscape chips or any other wood product that is applied as a ground cover, soil or soil amendment. CCA treated wood may be ground and used as initial cover on interior slopes of lined solid waste disposal facilities provided it meets the criteria of subsection 62-701.200(53), F.A.C. CCA treated wood shall not be disposed of through open burning or through combustion in an air curtain incinerator.

(15) Dust. The owner or operator of a solid waste management facility shall not allow the unconfined emissions of particulate matter in violation of paragraph 62-296.320(4)(c), F.A.C.

(16) Indoor storage. The prohibitions in subsection (2) of this section do not apply to the storage or processing of solid waste indoors, provided that the indoor storage area has an impervious surface and a leachate collection system. For the purposes of this subsection, an impervious surface means either a poured concrete pad having a minimum thickness of four inches, or an asphalt concrete paving with both a minimum thickness of one and one-half inches and with an additional component to restrict leaching to ground water such as a soil cement sub-base, an epoxy seal or a geomembrane.

(17) Storage in vehicles or containers. The prohibitions in subsection (2) of this section do not apply to the storage of solid waste in an enclosed or covered vehicle or container, provided that such vehicle or container has either been unloaded or moved over public highways within the previous seven days, and provided also that reasonable efforts have been made to minimize leakage from the vehicle or container.

(18) Existing facilities. Those portions of facilities which were constructed prior to May 27, 2001, remain subject to the prohibitions that were in effect at the time the permit authorizing construction was issued. Lateral expansions of such facilities remain subject to the prohibitions that were in effect at the time the permit authorizing the lateral expansion was issued. For example, portions of facilities constructed prior to May 19, 1994 were subject to the prohibition against storing or disposing of solid waste within 500 feet of an existing or approved shallow water supply well, but are not subject to the prohibitions of paragraph (2)(b) of this section. However, lateral expansions of such facilities which occurred after May 19, 1994 are subject to the prohibitions of paragraph (2)(b) of this section.

Rulemaking Authority 403.704 FS. Law Implemented 403.704, 403.7045(3)(d), 403.707, 403.708 FS. History–Formerly 10D-12.06, 10D-12.07, 10-1-74, Amended 5-24-79, 5-27-82, 12-10-85, Formerly 17-7.04, 17-7.040, Amended 6-25-90, Formerly 17-701.040, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.300, Amended 12-23-96, 5-27-01, 1-6-10.

62-701.310 Approval of Alternate Procedures and Requirements.

(1) Applicability. Any person subject to the provisions of this chapter or Chapters 62-702 through 62-722, F.A.C., may request in writing a determination by the Secretary that a requirement shall not apply, and shall request approval of alternate procedures or requirements.

(2) Criteria. The request shall set forth at a minimum the following information:

(a) The specific facility for which an exception is sought;

(b) The specific provisions from which an exception is sought;

(c) The basis for the exception;

(d) The alternate procedure or requirement for which approval is sought and a demonstration that the alternate procedure or requirement provides an equal degree of protection for the public and the environment; and

(e) A demonstration of the effectiveness of the proposed alternate procedure.

(3) Department order. The Secretary shall specify by order each alternate procedure or requirement approved in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S.

(4) Alternate sampling procedures. Approval of alternative or new field and laboratory sampling and analysis procedures shall be requested in accordance with Rules 62-160.430, 62-160.520 and 62-160.530, F.A.C.

(5) Other relief mechanisms. Requests for variances from specific statutory or rule requirements may be made pursuant to Section 403.201, F.S., and Rule 62-110.104, F.A.C. Requests for variances or waivers from rule requirements may also be made pursuant to Section 120.542, F.S., and Rule 28-104.002, F.A.C. Applications for research, development and demonstration permits may be made pursuant to Section 403.70715, F.S., and shall be submitted using Form 62-701.900(32), Application for a Permit to Construct and Operate a Research, Development and Demonstration Facility, effective January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(6) Requests for alternate procedures shall be accompanied by the fee specified in subsection 62-701.315(8), F.A.C. Requests must be submitted to the Director of the Division of Waste Management, 2600 Blair Stone Road, Twin Tower Office Building, Tallahassee, Florida 32399-2400.

(7) To the extent that any request for alternate procedures or requirements involves the practice of engineering or geology, the request shall be signed and sealed by a professional engineer or a professional geologist.

Rulemaking Authority 403.0877, 403.704, 403.707 FS. Law Implemented 403.0877, 403.704, 403.707 FS. History–New 7-1-85, Amended 12-10-85, Formerly 17-7.078, 17-701.078, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.310, Amended 5-27-01, 1-6-10.

62-701.315 Permit Fees for Solid Waste Management Facilities.
Notwithstanding the provisions of paragraph 62-4.050(4)(j), F.A.C., the following fees shall apply to permit applications for solid waste management facilities. The provisions of paragraphs 62-4.050(4)(o) through (v), F.A.C., continue to apply to such permits or applications. Fees for permit modifications are established in subsection 62-701.320(4), F.A.C.

(1)	Construction permits.	
(a)	Class I landfill	$10,000
(b)	Class III landfill	$ 6,000
(c)	Solid waste storage and handling area at a solid waste combustor with a capacity of 50 tons per day or more	$ 5,000
(d)	Solid waste storage and handling area at a solid waste combustor with a capacity of less than 50 tons per day	$ 2,000
(e)	Manure or yard trash composting facility	$ 2,000
(f)	Solid waste composting facility	$ 5,000
(g)	Waste tire processing facility	$ 1,250
(h)	Small waste tire processing facility	$ 500
(i)	Waste tire collection facility	$ 500
(j)	Offsite biomedical waste treatment facility.	$ 2,000
(k)	All other solid waste facilities	$ 1,000
(2)	Operation permits.	
(a)	Class I landfill	$10,000
(b)	Class III landfill	$ 4,000
(c)	Solid waste storage and handling area at a solid waste combustor with a capacity of 50 tons per day or more	$ 5,000
(d)	Solid waste storage and handling area at an air curtain incinerator or at a solid waste combustor with a capacity of less than 50 tons per day	$ 1,000
(e)	Manure and yard trash composting facility	$ 1,000
(f)	Solid waste composting facility	$ 3,000
(g)	Off-site biomedical waste treatment facility	$ 1,000
(h)	All other solid waste facilities	$ 500
(3)	Closure permits.	
(a)	Class I landfill	$ 7,500
(b)	Class III landfill	$ 4,000
(c)	All other solid waste facilities	$ 1,000
(d)	Closure permit for landfill which involves only long-term care (10-year duration)	$ 2,000
(4)	Waste processing facility.	
(a)	Construction/operation permit	$ 2,000
(b)	Renewal permit which does not involve additional construction	$ 1,000

(5) Construction and demolition debris disposal facilities.
(a) Construct, operate, and close a facility, including facilities that also recycle $ 2,500
(b) Renewal permit which does not involve additional construction $ 1,000
(c) Renewal permit involving only long-term care $ 250
(6) General permit for land clearing debris disposal facility or a mobile waste tire processing facility. $ 100
(7) Construction permit and/or an operation permit for a facility which has multiple solid waste management components that normally would require individual solid waste permits. A single application may be submitted and the permit fee will be the sum of all individual permits; however, the total permit fees for the facility shall not exceed $25,000, exclusive of modifications and renewals.
(8) Request for an Alternate Procedure.
(a) Landfill $ 2,000
(b) Other $ 500
(9) Research, Development and Demonstration permits (per year up to three-year duration). $ 1,000
(10) Ground Water Monitoring Plan Approvals for landfills with no other Department permit. $ 500
(11) Transfer of permit. $ 50

Rulemaking Authority 403.061, 403.087, 403.704 FS. Law Implemented 403.087, 403.702, 403.704, 403.707, 403.70715 FS. History–New 5-27-01, Amended 1-6-10.

62-701.320 Solid Waste Management Facility Permit Requirements, General.

(1) Permit requirements. Except as otherwise provided in this chapter, no solid waste management facility shall be constructed, operated, maintained, modified, or closed without a permit issued by the Department, or by an approved local program acting under a delegation agreement with the Department.

(2) Exemptions. Except as provided in Section 403.707(2), F.S., no permit under this chapter shall be required for the following activities or facilities. For purposes of this subsection, disposal shall be deemed to include storage prior to disposal or processing.

(a) Disposal by persons of solid waste resulting from their own activities on their own property, if such waste is ordinary household waste from their residential property or is rocks, soils, trees, tree remains, and other vegetative matter which normally results from land development operations on that property. Disposal of materials that could create a public nuisance or adversely affect the environment or public health, such as white goods, automotive materials including batteries and tires, petroleum products, pesticides, solvents, or hazardous substances, is not covered under this exemption.

(b) Disposal by persons of solid waste resulting from their own activities on their property, if the environmental effects of such disposal on ground water and surface waters are:

1. Addressed or authorized by a site certification issued under Chapter 403, Part II, F.S., Electrical Power Plant Siting;

2. Addressed or authorized by a permit issued by the Department, including solid waste management permits or other environmental permits modified to include conditions for proper disposal; or

3. Addressed or authorized by, or specifically exempted from the requirement to obtain, a ground water monitoring plan approved by the Department.

(c) On-site disposal of construction and demolition debris, provided that disposal conforms to subsection 62-701.730(17), F.A.C.

(d) Disposal of solid waste resulting from normal farming operations.

(e) Storage of solid waste in containers on property that is owned, rented, or leased by the persons who generated the waste from their own activities which occurred on their property, if the solid waste in such containers is collected at least once a week.

(f) Disposal by persons of solid waste resulting from their own activities on their own property, if that waste disposal occurred before October 1, 1988.

(3) Irresponsible applicant. In addition to the provisions of subsection 62-4.070(5), F.A.C., when determining whether the applicant has provided reasonable assurances that Department standards will be met, the Department shall consider repeated violations of applicable statutes, rules, orders, or permit conditions caused by a permit applicant after October, 1988, relating to the operation of any solid waste management facility in this state if the applicant is deemed to be irresponsible. For purposes of this subsection, the following words have the following meanings:

(a) "Applicant" means the owner or operator of the solid waste management facility in this state, and includes a business entity, a parent of a subsidiary corporation, a partner, a corporate officer or director, or a stockholder holding more than 50 percent of the corporate stock.

(b) "Irresponsible" means that an applicant owned or operated a solid waste management facility in this state, including transportation equipment or mobile processing equipment used by or on behalf of the applicant, which was subject to a state or federal notice of violation, judicial action, or criminal prosecution for activities that constitute violations of Chapter 403, F.S., or the rules promulgated thereunder, and could have prevented the violation through reasonable compliance with Department rules.

(4) Modification of permit.

(a) Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C.

(b) A modification which does not require substantial technical evaluation by the Department, does not require a new site inspection by the Department, and is not expected to lead to substantially different environmental impacts or will lessen the

impacts of the original permit is considered a minor modification, the fee for which is set forth in paragraph 62-4.050(4)(s), F.A.C.

(c) A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification, the fee for which is set forth in subsection 62-4.050(7), F.A.C.

(d) A modification which is reasonably expected to lead to substantially different environmental impacts, but which requires a less detailed review than does a substantial modification, is considered an intermediate modification, the fee for which is one-half of that required for a substantial modification.

(5) Permit application.

(a) Applications for a solid waste management facility shall be submitted on appropriate Department forms listed in Rule 62-701.900, F.A.C., to the Department district office with jurisdiction where the facility is located. A minimum of four copies each of the application, engineering plans and reports, and all supporting information for the proposed construction, substantial modification, operation or closure of a facility shall be provided to the Department.

(b) Information in every application shall be of sufficient detail to show how the facility will be constructed, operated, and closed, and how it will be monitored and maintained after closure, in order to comply with the requirements of this chapter.

(c) Combination facilities. An application for a permit to construct or operate a solid waste management facility having multiple solid waste management components which, if standing alone, would require solid waste management facility permits, shall include all information required to be submitted had each component been proposed as a separate facility, independent of the other components. Such information may be combined or otherwise presented so as to avoid duplicative or repetitive submittals. Additionally, such applications shall be accompanied by such fees as would be required for each facility component; however, the total permit fees for a facility shall not exceed $25,000, exclusive of modifications and renewals.

(6) Engineer of record and professional certification. All engineering plans, reports, and information supporting the application shall be compiled by the engineer of record who shall be responsible for assurance that all technical components have been prepared under the direction and supervision and signed and sealed by the professional registered in Florida in each contributing technical discipline. The engineer of record's signature and seal on the application shall assure that all appropriate technical professional disciplines have been employed in development of the application. The application shall provide that the engineer of record, or another qualified professional working under the supervision of the engineer of record, shall make periodic inspections during construction of the facility to ensure that design integrity is maintained.

(7) Application content and format. Applications for permits to construct, operate, modify, or close a solid waste management facility shall include in the following sequence:

(a) A letter of application transmittal;
(b) A completed application form dated and signed by the applicant;
(c) The permit fee specified in Rule 62-701.315, F.A.C., in check or money order, payable to the Department.
(d) An engineering report addressing the requirements of this rule which shall:
1. Contain a cover sheet stating the project title, location, applicant's name, and the engineer's name, address, signature, date of signature and seal;
2. Have the text printed on 8 1/2 inch by 11 inch consecutively numbered pages;
3. Contain a table of contents or index describing the body of the report and the appendices; and
4. Include the body of the report and all appendices.
(e) Appendices submitted as part of an engineering report to support a permit application shall contain, where required under applicable sections of this rule:
1. An operation plan and closure plan appropriate for the type of facility;
2. A contingency plan that complies with subsection (16) of this section;
3. Illustrative charts and graphs;
4. Records or logs of tests, soil borings, hydrogeological information, geochemical surveys, and water quality analyses; and
5. Engineering calculations, including literature citations.
(f) Plans or drawings for all solid waste management facilities shall:
1. Use sheets 22 inches by 34 inches or 24 inches by 36 inches, and include title blocks;
2. Have a cover sheet that includes the project title, applicant's name, sheet index, legend of symbols, and the engineer's name, address, signature, date of signature and seal;
3. Include a regional map or plan showing the project location in relation to major roadways and population centers;
4. Include a vicinity map or aerial photograph taken within one year preceding the application, showing the facility site and relevant surface features located within 1000 feet of the facility;
5. Have a site plan showing the location of all property boundaries certified by a Florida Licensed Professional Surveyor and Mapper; and
6. Clearly show all necessary details and be numbered, titled, and referenced to the narrative report. Drawings shall contain a north arrow and horizontal and vertical scales, and shall specify drafting or origination dates. All elevations shall be referenced to a consistent, nationally recognized datum.
7. Latitude and longitude data shall be included representing the approximate center of the waste disposal or processing area and shall include the method the data was collected using the following:

Field Name	Also Known As	Description

Object of Interest	Feature	The object the point represents.
Relationship of Point to Object of Interest	Proximity	Identifies how close the point is to the actual object of interest.
Collection Method	Method	The method used to collect the point.
Collection Date	Date	The date the point was collected.
Datum		The reference for measuring locations on the earth's surface.

(g) Documentation that the applicant either owns the property or has legal authorization from the property owner to use the site for a solid waste management facility; and

(h) For facilities owned or operated by a county, a description of the existing or proposed recycling facilities or activities, if any, at the site and a description of whether, and the extent to which, these recycling facilities or activities will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706, F.S.

(i) For purposes of the evaluation required in subsection (3) of this section, a history and description of any enforcement actions described in subsection (3) of this section relating to solid waste management facilities in this state.

(8) Notice of application.

(a) An applicant for a permit to construct or substantially modify a solid waste management facility shall publish and provide proof of publication to the Department of a Notice of Application in a newspaper of general circulation in the area where the facility will be located. This notice shall conform to the requirements of Rule 62-110.106, F.A.C., except that the notice shall be published within 14 days of submittal of a permit application to the Department.

(b) An applicant for a permit to construct or substantially modify a Class I or III landfill shall mail a notice of application to the Chair of the Board of County Commissioners, the highest ranking elected official of the municipality, and each State Senator and Representative serving the jurisdiction in which the project is located. The notice shall be mailed within 14 days of submittal of the application to the Department, and proof of mailing shall be provided to the Department. After the Department completes the permit review, the Department shall send a copy of the notice of intent to issue or deny the permit to these same officials.

(9) Permits for construction, modification, operation, and closure. Complete permit applications for construction or operation of a solid waste management facility, renewal of an operation permit for an existing facility, modification of an existing facility, or closure of a facility shall be evaluated by the respective Department district office in accordance with Chapters 62-4 and 62-701, F.A.C. Except as provided in Rule 62-701.620, F.A.C., the time period for permits shall be no longer than five years from the date of issuance by the Department. However, a construction/operation permit shall be

issued for a longer period, not to exceed ten years, so that the permit will allow up to five years of operation after initial construction has been completed.

(a) The Department shall:

1. Issue a construction permit, or a construction/operation permit for a solid waste management facility, or for a substantial modification of an existing solid waste management facility.

2. Issue an operation permit for a new facility that has been satisfactorily constructed, or to an existing facility which is being operated in accordance with this chapter at the time for permit renewal;

3. Issue a closure permit for closing and long-term care of a landfill that complies with the requirements of Rules 62-701.600-.620, F.A.C.; or

4. Deny the issuance of a permit if reasonable assurance is not provided that the requirements of Chapters 62-4 and 62-701, F.A.C., will be satisfied.

(b) After all specified construction has been completed and before acceptance of any solid waste, the engineer of record shall certify to the Department that the permitted construction is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. The certification shall be submitted on Form 62-701.900(2), Certification of Construction Completion of a Solid Waste Management Facility, effective May 19, 1994, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All deviations shall be described in detail and the reasons therefore enumerated. The permittee shall not accept solid waste at the facility until one of the following has occurred:

1. The Department has stated in writing that it has no objection to the certification of construction completion; or

2. At least 30 days have passed since the certification was submitted and the Department has not responded in writing to the certification.

(c) In addition to the above requirements, the permittee shall not accept solid waste at the facility unless a construction/operation permit or an operation permit has been issued to the permittee. If the applicant has submitted Form 62-701.900(29), as provided for in paragraph 62-701.630(2)(c) or paragraph 62-701.730(11)(b), F.A.C., the permittee shall not accept solid waste at the solid waste disposal unit referenced in that Form unless the Department has given the permittee a specific separate approval authorizing operation of the unit.

(10) Permit renewals.

(a) A renewal application shall be timely and sufficient. If the renewal application is submitted prior to sixty days before expiration of the existing permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the existing permit. When the application for renewal

is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or as otherwise provided in Section 120.60, F.S.

(b) Applicants for permit renewal shall demonstrate how they will comply with any applicable new or revised laws or rules relating to construction, operation, or closure of solid waste management facilities. Closure plans shall be updated at the time of permit renewal to reflect changes in closure design, long-term care requirements, and financial responsibility documentation.

(c) 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. The permit renewal application shall list and reaffirm that the information is still valid.

(11) Permit transfers.

(a) Any person wishing to transfer a permit shall submit such a request using Form 62-701.900(8), Permit Transfer Form, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The form must be completed with the signatures of both the permittee and the proposed new permittee.

(b) A transfer of permit is required upon the sale or transfer of a facility. A transfer of permit is also required if a new or different person takes ownership or control of the facility. A transfer of permit is not required if the facility simply changes its name, although the permittee must notify the Department of such a change using Form 62-701.900(8). A transfer of permit is also not required solely as a result of the sale of stock or assets or a change of operating personnel, as long as ownership or control of the facility has not changed. A permittee may apply for a permit transfer prior to the sale or change of control of the facility, but the permit transfer shall not be effective prior to the sale or change of control.

(c) The proposed new permittee shall provide reasonable assurance that it has the ability to comply with the conditions of the existing permit, that it either owns the property or has legal authorization from the property owner to use the site, and that it meets any financial assurance requirements of the permit or applicable rules.

(d) Within 30 days of receipt of an application for permit transfer, the Department shall request additional information if the application is not complete. Within 30 days of receipt of a complete application, the Department shall either approve or deny the permit transfer. The Department's determination shall be based solely on its evaluation of the requirements in paragraphs (a) through (c) above. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of a complete application, the transfer shall be deemed approved.

(e) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable

for compliance with the terms of the permit. The permittee seeking to transfer the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. If the existing permittee is under a continuing obligation to perform corrective actions as a result of a Department enforcement action or consent order, the permit may not be transferred until the proposed new permittee agrees in writing to accept responsibility for performing such corrective actions.

(f) If financial assurance for closure is required for the permit being transferred, the existing permittee shall maintain that financial assurance until the Department approval of the transfer is final. The proposed new permittee shall also provide financial assurance before the transfer is approved by the Department.

(12) Identification number. The Department shall assign an identification number to each solid waste management facility that receives a permit. The number shall be unique to that facility, and shall remain assigned to that facility at all times. The identification number shall be used on all correspondence and records related to that facility.

(13) Airport safety.

(a) Applicability. This subsection applies to those solid waste management facilities constructed after January 6, 1993, as well as lateral expansions of facilities that were constructed prior to January 6, 1993. For purposes of this subsection, an "airport runway" does not include facilities used solely for helicopters or other aircraft which take off and land vertically.

(b) Solid waste management facilities where waste is stored, disposed, or processed outdoors, shall not be located within 10,000 feet of any licensed and operating airport runway used by turbine powered aircraft, or within 5,000 feet of any licensed and operating airport runway used only by piston engine aircraft, unless the applicant demonstrates that the facility is designed and will be operated so that it does not pose a bird hazard to aircraft.

(c) Applicants proposing to construct new landfills within a six mile radius, and applicants proposing to construct lateral expansions of existing landfills within a five-mile radius, of any licensed and operating airport runway used by turbine powered or piston engine aircraft shall notify the affected airport, the Federal Aviation Administration, and the Florida Department of Transportation when the application is filed with the Department, and shall provide evidence of such notification to the Department.

(d) The following facilities are exempt from the requirements of this subsection:

1. Enclosed solid waste management facilities where waste is received and processed indoors, where all waste or residue is removed by enclosed or covered vehicles, and where putrescible waste is not processed, stored, or otherwise managed outdoors except in enclosed or covered vehicles;
2. Recovered materials processing facilities;
3. Yard trash processing facilities;

4. Land clearing debris disposal facilities;
5. Ash monofills;
6. Construction and demolition debris disposal or recycling facilities that are not co-located with other solid waste disposal facilities accepting putrescible wastes; and
7. Any other solid waste management facility that does not accept putrescible waste for disposal, processing, or recycling.

(14) Other facility permits. In addition to the exemptions in subsection (2) of this section, the following solid waste management facilities that are constructed and operated under an appropriate and currently valid permit are not required to obtain a separate solid waste permit pursuant to this chapter:

(a) Solid waste combustors or air curtain incinerators that are constructed and operated under a permit issued pursuant to Chapters 62-296 or 62-256, F.A.C.; however, if the facility is also storing or disposing of solid waste on the site, and such storage or disposal is not addressed in the permit, a separate solid waste permit is required;

(b) Solid waste combustors that are constructed and operated under a site certification pursuant to Chapter 403, Part II, F.S.;

(c) Solid waste management facilities, such as composting facilities, waste tire processing facilities, soil treatment facilities, and used oil processing facilities, that are required to obtain permits under Chapters 62-702 through 62-722, F.A.C. A facility shall be required to obtain a separate solid waste permit if it also manages significant quantities of other types of solid waste.

(15) Operator and spotter training and special criteria. The owner or operator of a landfill, or other solid waste management facility required by this chapter to have trained operators or spotters, shall not employ a person to perform, nor may any person perform, the duties of an operator or spotter at such facility unless that person is a trained operator or trained spotter. A facility may employ interim spotters, but only if they work under the direct supervision of a trained spotter or trained operator. A facility may employ an interim operator in lieu of a trained operator for no more than three consecutive months.

(a) Owners and operators of facilities shall ensure that operators employed at the facility are properly trained to operate the facility, and that spotters are properly trained to identify and properly manage any unauthorized waste which is received at the facility. A training plan shall be included as part of the permit application. The training plan shall either include a list and schedule of those classes offered to the public which will be attended by the facility's operators and spotters, or shall include a description of the facility's in-house training program. All training courses, whether public or in-house, must be approved by the Department in accordance with Section 403.716, F.S. Any in-house operator training program which includes an examination required by this subsection must be administered by an independent third party. Any other in-house operator training program must be administered by a trained operator. Any in-house

spotter training program must be administered by a trained operator or a trained spotter. The training plan, along with records documenting how the training plan is being implemented, shall be kept at the facility at all times and be made available for inspection by Department staff. The Department will maintain a list of relevant training courses which are available in this State.

(b) In order to be considered trained, operators of the following facilities shall complete the following training requirements at courses described in the facility's operating plan:

1. Operators of landfills, and operators of construction and demolition debris disposal facilities, shall complete 24 hours of initial training, and shall pass an examination as part of that training. Within three years after passing the examination, and every three years thereafter, operators shall complete an additional 16 hours of continued training.

2. Operators of waste processing facilities shall complete 16 hours of initial training, and shall pass an examination as part of that training. Within three years after passing the examination, and every three years thereafter, operators shall complete an additional 8 hours of continued training.

(c) In order to be considered trained, spotters shall complete 8 hours of initial training at courses described in the facility's operating plan. Within three years after attending the initial training, and every three years thereafter, spotters shall complete an additional 4 hours of continued training.

(d) Spotter location.

1. Each facility where spotters are required shall include in its operation plan the number and location of spotters and the procedures to be followed if unauthorized waste is discovered. Spotters shall be stationed where they can inspect each shipment of waste for unauthorized waste.

2. If spotters are to be located on heavy equipment spreading the waste at the working face of a solid waste disposal unit or at a waste processing facility, the operation plan shall specifically provide for the following:

a. The heavy equipment operator is trained as an operator or spotter;

b. When unauthorized waste is discovered, the heavy equipment operator must either move the unauthorized waste away from the active area for later removal and proper management, or must stop operation and notify another person on the ground or on other equipment who will come to the active area and remove the unauthorized waste before operations are resumed; and

c. Each load of waste must be visually inspected for unauthorized waste prior to being compacted or loaded into a transfer vehicle.

(e) Notwithstanding the definition in Rule 62-701.200, F.A.C., and solely for purposes of this subsection, "operator" means any person, including the owner, who is principally engaged in, and is in charge of, the actual operation, supervision, and maintenance of a solid waste management facility and includes the on-site person in charge of a shift or period of operation during any part of the day, such as facility

managers, supervisors and equipment operators. It does not include office personnel, laborers, equipment operators not in a supervisory capacity, transporters, corporate directors, elected officials, or other persons in managerial roles unless such persons are directly involved in on-site supervision or operation of a solid waste management facility. A trained operator may perform the duties of a trained spotter.

(f) For purposes of this subsection, "interim operator" means a person who has, in the opinion of the facility manager, shown competency in his chosen occupation through a combination of work experience, education and training and who has at least one year of experience at that facility or a similar facility. An interim operator must become a trained operator within one year of employment as an interim operator.

(g) For purposes of this subsection, "spotter" means a person employed at a solid waste management facility whose job it is to inspect incoming waste and to identify and properly manage any unauthorized waste that is received at the facility.

(h) For purposes of this subsection, "interim spotter" means a person who has, in the opinion of the facility manager, shown competency in his chosen occupation through a combination of work experience, education and training. An interim spotter must become a trained spotter or trained operator within three months of employment as an interim spotter.

(16) Emergency preparedness and response.

(a) Every permitted solid waste management facility shall have, as part of its operation plan, a contingency plan appropriate for the type of facility to cover operational interruptions and emergencies such as fires, explosions, or natural disasters. The contingency plan shall be kept at the facility at all times and shall be accessible to facility operators. The contingency plan shall include:

1. Designation of persons responsible for implementation of the contingency plan;

2. Procedures for notification of appropriate emergency response persons, including the department, the local government, and local fire protection agencies;

3. A description of emergency procedures to be followed, including the location of fire-fighting equipment and explanations of how to use this equipment;

4. Provisions for the immediate shutting down of those parts of the facility affected by the emergency and notification to customers of the closure of the facility; and

5. Procedures for notification of neighbors and local government officials of the potential impacts of the emergency, and provisions to minimize those impacts.

(b) Every solid waste disposal facility shall have:

1. Sufficient equipment to implement the contingency plan, including equipment for excavating, spreading, compacting, and covering waste;

2. Sufficient reserve equipment or arrangement to obtain additional equipment within 24 hours of equipment breakdown;

3. Communications equipment for emergency and routine communications; and

4. Fire protection and fire-fighting capabilities adequate to control accidental burning of solid waste in the facility. Fire protection includes procedures for notification of local fire protection agencies for assistance in emergencies.

(c) In the case of a fire within the waste pile at a solid waste management facility, all reasonable efforts shall be made to immediately extinguish or control the fire. If the fire cannot be extinguished or controlled within an hour, the owner or operator shall immediately:

1. Implement the contingency plan which is included as part of its operation plan;

2. Cease accepting waste for disposal in those areas of the facility impacted by the fire; and

3. Notify the department and the local government having jurisdiction over the facility of the fire and of the fire control plan being implemented by the owner or operator;

(d) If the fire cannot be extinguished or controlled within 48 hours, the owner or operator shall notify the local fire protection agency and seek its assistance, and shall also notify the local government and any neighbors likely to be affected by the fire.

(17) Minimum ground water criteria. For those solid waste management facilities constructed after January 6, 1993, the minimum ground water criteria specified in Rule 62-520.400, F.A.C., shall apply only outside the permitted zone of discharge, notwithstanding the provisions of Rules 62-520.400 and 62-520.420, F.A.C. However, exceedances of ground water criteria within a permitted zone of discharge shall continue to require evaluation monitoring and prevention measures in accordance with subsection 62-701.510(7), F.A.C.

(18) Zone of discharge. A facility's zone of discharge shall be determined pursuant to Chapter 62-520, F.A.C. For all solid waste disposal facilities constructed after January 6, 1993, the zone of discharge shall not exceed 100 feet from the edge of those solid waste disposal units permitted to be constructed, unless modified in accordance with Rule 62-520.470, F.A.C.

Rulemaking Authority 403.061, 403.704, 403.716 FS. Law Implemented 403.0877, 403.121(3)(e), 403.702, 403.704, 403.707, 403.716 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.320, Amended 12-23-96, 5-27-01, 1-6-10.

62-701.330 Landfill Permit Requirements.

(1) Applicability.

(a) Except as otherwise specifically provided herein, this chapter shall apply to all solid waste disposal units constructed or operated under a landfill permit issued after January 6, 2010, including renewals of existing permits.

(b) All holders of landfill construction or operation permits issued prior to January 6, 2010, which contain conditions not in conformance with this chapter shall apply for modification of the permit to conform to this chapter to the District Office of the Department which issued the permit. The submission shall occur at the time of

application for renewal of an existing permit, or before July 5, 2010, whichever is later. For purposes of this paragraph, a permit issued prior to January 6, 2010, is deemed to include a completed permit application received by the Department prior to January 6, 2010.

(c) Rules 62-701.400-.420, F.A.C., shall not apply to any solid waste disposal unit for which construction is completed prior to the later of the dates specified in paragraph (b) of this subsection. Such solid waste disposal unit may be operated until filled to its permitted or modified design dimensions which, if such unit is lined, may include any future vertical expansion over the liner in accordance with Rule 62-701.430, F.A.C.

(d) Facilities operating pursuant to a Consent Order with the Department in effect on January 6, 2010, shall continue to operate in accordance with the order until the order expires by its own terms, provided the landfill is in compliance with the terms and conditions of the order. If the facility owner or operator fails to comply with any substantive term or condition of the order, the facility covered by the order must comply with the operational, closure and long-term care requirements of this chapter.

(e) Notwithstanding the above, the owner or operator of an unlined Class III landfill shall submit and comply with a CCA management plan that complies with subsection 62-701.730(20), F.A.C., no later than July 5, 2010.

(2) Permitted footprint. Applicants seeking permits for lined landfills are not limited to the amount of area they may need for disposal in a 5-year permit period. Rather, applicants may seek a permit with as large a disposal area as they desire subject to the following conditions.

(a) All of the information normally needed in the permit application shall be supplied for the entire area of the proposed footprint, even if only a smaller portion of the entire footprint will be constructed during the 5-year permit period.

(b) The public notice of agency action shall address the entire area of the footprint identified in the permit application.

(c) During the life of the 5-year permit, the applicant must notify the Department in writing before beginning construction of another permitted phase of the landfill. Construction may proceed, without further action being required by the Department, if it is in accordance with the conditions of the permit. However, if rule changes occur after the 5-year permit is issued which affect the design of the construction, then permit modifications may be required. Upon completion of the construction of a permitted phase of the landfill, a Certification of Construction Completion document must be prepared for the phase and submitted to the Department for approval. Department approval in accordance with paragraph 62-701.320(9)(a), F.A.C., is required before the applicant may begin use of the newly constructed phase. No permit fees will be required for authorizing use of these phases.

(d) At the end of the 5-year permit period, the applicant may apply for renewal of the permit. The information for the construction of the entire footprint will not have to be resubmitted if no substantial change is proposed in the planning or design of future

phases. However, the applicant will be required to update the operation plan for the landfill, evaluate water quality data, ensure the financial assurance cost estimates and mechanism are current and provide reasonable assurance for compliance with any new rules or statutes that may be required of the facility which were not in effect at the time the previous permit was issued. Should there be new liner requirements at the time of permit renewal, the Department will not impose them on phases that are already constructed.

(e) When the permit is renewed, the public notice of agency action shall address:

1. The entire landfill footprint for the operational and closure aspects of the landfill; and

2. The areas of the landfill where the liner has not been installed for the construction aspects of the landfill.

(3) Permit applications. Permit applications for landfills shall be submitted on Form 62-701.900(1), Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Applications shall meet the requirements of Rule 62-701.320, F.A.C., and shall also include the following specific requirements:

(a) A regional map or aerial photograph not more than five years old that shows all airports located within five miles of the proposed landfill. The applicant may show the airports on the regional map required in subparagraph 62-701.320(7)(f)3., F.A.C.

(b) A plot plan of the site showing dimensions, locations of proposed and existing water quality monitoring wells or points, locations of soil borings, proposed plan of trenching or disposal areas, original elevations, proposed final contours, any previously filled waste disposal areas, and fencing. Cross sections shall be included on the plot plan or on separate sheets showing both the original and proposed fill elevations. The scale of the plot plan shall not be greater than 200 feet to the inch.

(c) Topographic maps at a scale of not greater than 200 feet to the inch with 5-foot contour intervals. These maps shall show the proposed fill area, any borrow area, access roads, grades required for proper drainage and cross sections of lifts, special drainage devices if necessary, fencing, and equipment facilities.

(d) A report on the:

1. Current and projected population and area to be served by the proposed site;

2. Anticipated type, annual quantity, and source of solid waste, expressed in tons;

3. Planned active life of the facility, the final design height of the facility, and the maximum height of the facility during its operation; and

4. Source and type of cover material.

(e) The hydrogeological and geotechnical investigations required by Rule 62-701.410, F.A.C.

(f) The ground water monitoring plan required by Rule 62-701.510, F.A.C.

(g) Evidence of an approved laboratory to do water quality monitoring in accordance with Chapter 62-160, F.A.C.

(h) A statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill.

(i) Operational plans and drawings as required in subsections 62-701.500(2), (6), (7), (8), (9), (10), and (11), F.A.C.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, Formerly 17-701.330, Amended 5-27-01, 1-6-10.

62-701.340 General Criteria for Landfills.

(1) Performance standards. A landfill shall be designed, constructed, operated, maintained, closed, and monitored throughout its design period to control the movement of waste and waste constituents into the environment so that water quality standards and criteria and air quality standards will not be violated.

(2) Classification of landfills. Landfills or solid waste disposal units are classified according to the types of waste received.

(a) Class I landfills are those which receive Class I waste.

(b) Class III landfills are those which receive only Class III waste. The Department shall exempt Class III landfills from some or all of the requirements for liners, leachate controls, and water quality monitoring in subsections 62-701.400(3) and (4), and Rule 62-701.510, F.A.C., if the applicant demonstrates that no significant threat to the environment will result from the exemption based upon the types of waste received, methods for controlling types of waste disposed of, and the results of the hydrogeological and geotechnical investigations required in Rule 62-701.410, F.A.C. Such a demonstration must include a CCA treated wood management plan as described in subsection 62-701.730(20), F.A.C., if the landfill will not have a constructed liner system.

(3) Location requirements.

(a) The site shall provide structural support for the facility including total wastes to be disposed of and structures to be built on the site.

(b) A 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.

(c) The minimum horizontal separation between waste deposits in a landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.340, Amended 5-27-01, 1-6-10.

62-701.400 Landfill Construction Requirements.

(1) Minimum design standards. The requirements of this rule are the minimum standards for constructing a landfill. Nothing in this rule shall be construed to prevent the Department from imposing more stringent standards as necessary to protect the environment and the public health and safety due to site specific conditions and types of wastes to be disposed of in the landfill or solid waste disposal unit. An applicant whose landfill design meets the design standards of this rule will be presumed to provide reasonable assurance that the performance standards of subsection 62-701.340(1), F.A.C., will be met.

(2) Planned construction and closure. All landfills shall be designed so that solid waste disposal units will be constructed and subsequently closed at planned intervals throughout the design period of the landfill. Designs to prevent failures of side slopes, and designs to prevent deep-seated failures through the waste, along liner systems, and through foundation soils, shall achieve a minimum factor of safety of 1.5 using peak strength values.

(3) Landfill liner requirements. Class I Landfills shall be constructed with composite or double liners, and a leachate collection and removal system. Liners and leachate collection systems for Class III landfills are addressed in paragraph 62-701.400(3)(g), F.A.C.

(a) Liners shall be:

1. Constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure due to physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and other applied stresses and hydraulic pressures which are anticipated during the operational and closure period of the solid waste disposal unit. The supplier of materials for the liner components shall provide test information accepted by the engineer of record, that supports the capabilities of the materials to meet these needs;

2. Installed upon a base and in a geologic setting capable of providing structural support to prevent overstressing of the liner due to settlements and applied stresses;

3. Constructed so that the bottom of the liner system is not subject to fluctuations of the ground water so as to adversely impact the integrity of the liner system;

4. Designed to resist hydrostatic uplift if the liner is located below the seasonal high ground water table; and

5. Installed to cover all surrounding earth which could come into contact with the waste or leachate.

(b) Composite liners.

1. The upper component of the composite liner shall be a 60-mil minimum average thickness HDPE geomembrane. A primary leachate collection and removal system and a drainage layer shall be installed above the geomembrane liner. Except in sumps and leachate collection trenches, the system shall be designed to limit leachate head above the liner during routine landfill operation after placement of initial cover, as specified in Table A below, depending upon the thickness and hydraulic conductivity of the lower component of the composite liner. Leachate head calculations shall consider leachate recirculation if the leachate is recirculated.

2. The lower component of the composite liner shall be constructed in six-inch lifts. The thickness of the lower component may be varied in relation to the hydraulic conductivity of the lower component and the design leachate head above the liner, in accordance with Table A.

TABLE A:
Minimum Thickness of Lower Component of Composite Liner (feet)

Maximum Design Hydraulic Head (inches)	Maximum Hydraulic Conductivity (cm / sec)		
	1×10^{-7}	5×10^{-8}	1×10^{-8}
1	2.0	1.0	1.0
6	2.5	1.5	1.0
12	3.0	2.0	1.0

(c) Double liners.

1. Double liner systems shall consist of upper and lower 60-mil minimum average thickness HDPE geomembranes, with a primary leachate collection and removal system lying above the upper geomembrane designed to limit the leachate head to one foot above the liner during routine landfill operations after placement of initial cover, except in sumps and leachate collection trenches; and a leak detection and secondary leachate collection system between the upper and lower liners. The lower geomembrane shall be placed directly on a sub-base which is a minimum six inches thick, is free of sharp materials or any materials larger than one-half inch, and has a saturated hydraulic conductivity of less than or equal to 1×10^{-5} cm/sec. A geosynthetic clay liner (GCL) with a hydraulic conductivity not greater than $1x10^{-7}$ cm/sec may be used in place of the six-inch thick sub-base layer provided it is placed on a prepared subgrade which will not damage the GCL.

2. The leak detection and secondary leachate collection system shall have a minimum hydraulic conductivity of ten cm/sec, shall be designed to limit the maximum hydraulic head on the lower liner to one inch, and shall not allow leachate head to exceed the thickness of the drainage layer. The hydraulic conductivity of the leak detection and secondary collection system material shall be derived from transmissivity and thickness measurements.

(d) Standards for geosynthetic components.

1. HDPE geomembranes shall have factory and field seams whose shear strengths during testing are at least 90 percent of the specified minimum yield strength. LLDPE geomembranes shall have factory and field seams whose shear strengths during testing are in conformance with the seam strengths specified in method GRI GM19. PVC geomembranes shall have factory and field seams whose shear strengths during testing are in conformance with the seam strengths specified in method PGI 1104. For all geomembranes, the failure shall occur in the lining material outside the seam area. All field seams must also be visually inspected and pressure or vacuum tested for seam continuity using suitable non-destructive techniques.

2. Geomembranes shall not be used at landfills unless they are subjected to continuous spark testing by the manufacturer at the factory and no defects have been found.

3. Geomembranes shall be protected from physical damage by placing a minimum 24-inch-thick protective layer above the upper liner. All materials in direct contact with the liner shall be free of sharp materials or any materials larger than one-half inch. The upper 12 inches of the protective layer shall be composed of soil, tire chips four square inches or smaller with no protruding wires that could pose a threat to the integrity of the liner, or other materials approved by the Department which are permeable, non-reactive, stable, and which offer protection for the liner from punctures.

4. The first layer of waste placed on the protective layer above the liner and leachate collection system shall be a minimum of four feet in compacted thickness, and consist of selected wastes containing no large, rigid objects that may damage the liner or leachate collection system. Materials that could damage the liner shall be removed from this layer.

5. HDPE geomembranes shall meet the specification contained in method GRI GM13. LLDPE geomembranes shall meet the specification contained in method GRI GM17.

6. PVC geomembranes shall meet the specification contained in method PGI 1104.

7. Interface shear strength of the actual components which will be used in the liner system shall be tested with method ASTM D5321 or an equivalent test method. However, when testing GCLs, method ASTM D6243, or an equivalent test method, shall be used. Unless it can be justified otherwise, the interface shall be tested in a water-saturated state. For the purposes of this test, clays compacted in the test apparatus during setup which have a water content wet of optimum shall be considered water saturated.

8. The transmissivity of geonets shall be tested with method ASTM D4716, or an equivalent test method, to demonstrate that the design transmissivity will be maintained for the design period of the facility. The testing for the geonet in the liner system shall be conducted using actual boundary materials intended for the geonet at the maximum design normal load for the landfill, and at the design load expected from one lift of waste. At the maximum design normal load, testing shall be conducted for a

minimum period of 100 hours unless data equivalent to the 100-hour period is provided in which case the test shall be conducted for a minimum period of one hour. In the case of the design load from one lift of waste, the minimum period shall be one hour. For geonets used in final covers, only one test shall be conducted for a minimum period of one hour using the expected maximum design normal load from the cover soils and the actual boundary materials intended for the geonet.

9. The hydraulic conductivity of GCLs shall be tested with method ASTM D5887, or ASTM D6766-06a, or an equivalent test method. First, the GCL test specimen shall be hydrated with the fluid which is expected to cause hydration in the field, or a similar fluid, for a minimum of 48 hours using sufficient backpressure to achieve a minimum B coefficient of 0.9 and using a confined effective consolidation stress not exceeding five pounds per square inch. Then, the hydraulic conductivity test on the GCL specimen shall be conducted, using the appropriate permeant fluid, at a confined effective consolidation stress not exceeding five pounds per square inch. The hydraulic conductivity test shall continue until steady state conditions are reached or a minimum of two pore volumes of permeant fluid have passed through the test specimen. The permeant fluid shall be either leachate from the landfill (or a similar landfill) if the GCL is used in a liner system, or water if the GCL is used as a barrier layer in a final cover.

10. If not submitted as part of the permit application to the Department, then the testing required in subparagraphs (3)(d)7., 8. and 9. of this section for the materials used in the liner construction shall be conducted as part of the construction quality assurance activities, and the results of these tests shall be included in the completion of construction documents required in subsection (7) of this section.

11. The testing required in subparagraphs (3)(d)7., 8. and 9. of this paragraph are single-point tests required either as part of the permit application phase of a landfill project or prior to liner construction. The purpose of these tests is to confirm that the components selected for the liner construction meet the design criteria used in the permit application.

(e) The following specifications shall be provided for geosynthetic components:

1. Definition and qualifications of the designer, manufacturer, installer, geosynthetic quality assurance consultant, geosynthetic quality assurance laboratory, and quality assurance program;

2. Material specifications for geomembranes, geotextiles, geogrids, geocomposites, and geonets, including general requirements, specified geomembrane properties, and labeling;

3. Manufacturing and fabrication specifications including:

a. Geomembrane manufacturing, including raw material and roll quality control;

b. Geomembrane fabrication, including requirements of personnel, seaming equipment and products, seam preparation, weather conditions for factory seaming,

overlapping and temporary bonding, trail seams, and nondestructive seam continuity testing;

c. Destructive seam strength testing including location and frequency, sampling procedure, size of samples, testing at the fabrication factory, laboratory testing, fabricator's laboratory testing, and procedures for destructive test failure; and

d. Repairs.

4. Geomembrane installation specifications including:

a. Earthwork;

b. Conformance testing;

c. Geomembrane placement, which shall address layout drawings, panel identification, and field panel placement;

d. Field seaming, which shall address seam layout, requirements of personnel, overlapping and temporary bonding, seam preparation, seaming equipment and products, weather conditions for seaming, trial seams, general seaming procedures, nondestructive seam continuity testing, destructive testing, and defects and repairs including identification, evaluation, and repair procedures;

e. Materials in contact with the geomembrane, including granular materials, concrete, and sumps and appurtenances; and

f. 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. GCL specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials.

(f) Standards for soil liner components.

1. Soil components of liners shall be constructed to preclude, to the greatest extent practicable, lenses, cracks, channels, root holes, pipes, or other structural inconsistencies that can increase the saturated hydraulic conductivity of the soil component. The design shall illustrate and describe those instances in which overexcavation of permeable areas and backfilling may be necessary to seal the permeable area. The soil component shall be placed and compacted in layers to achieve the design performance.

2. The permeability of soil liner components shall not be increased above the values specified for the component, as a result of contact with leachate from the solid waste disposal unit. Compatibility of the soil component and leachate shall be demonstrated by testing the soil component with actual or simulated leachate in accordance with EPA Test Method 9100 or an equivalent test method.

3. The soil component of the liner may consist of in-situ soils, provided they meet the specifications for soil liners. Testing of in-situ soil shall be performed in accordance with the site specific Construction Quality Assurance Plan in accordance with subsections 62-701.400(7) and (8), F.A.C.

4. Specifications for the soil component of the liner shall be provided to and approved by the Department, and shall contain at a minimum:

a. Allowable range of particle size distribution and Atterberg limits, to include shrinkage limit;

b. Placement moisture criteria and dry density criteria;

c. Maximum laboratory-determined saturated hydraulic conductivity, using simulated leachate as the saturating and testing liquid;

d. Minimum thickness of the soil liner;

e. Lift thickness;

f. Surface preparation (scarification) for tying lifts together; and

g. Type and percentage of clay mineral within the soil component.

5. The soil liner shall be placed using construction equipment and procedures that achieve the required saturated hydraulic conductivity and thickness. A field test section shall be constructed using the proposed construction equipment and tested to document that the desired saturated hydraulic conductivity and thickness is achieved in the field. Test results shall be submitted to the Department along with the completion of construction documents.

(g) Class III landfills. A Class III landfill shall be constructed with a bottom liner consisting of a single 60-mil minimum average thickness HDPE geomembrane. In the sumps located inside the landfill footprint and in the leachate collection trenches, the geomembrane shall be placed on a GCL with a hydraulic conductivity of less than or equal to 1×10^{-7} cm/sec, or on a compacted clay liner which is a minimum six inches thick with a saturated hydraulic conductivity of less than or equal to 1×10^{-7} cm/sec. The liner shall be placed on a prepared subgrade that will not damage the geomembrane liner or the GCL. A primary leachate collection and removal system and a drainage layer shall be installed above the geomembrane liner. Except in sumps and leachate collection trenches, the system shall be designed to limit leachate head above the liner during routine landfill operation after placement of initial cover to no greater than 12 inches. An applicant may request exemption from the requirements of this paragraph in accordance with paragraph 62-701.340(2)(b), F.A.C.

(4) Leachate collection and removal system. Landfills shall have a leachate collection and removal system that is designed, constructed, maintained, and operated to collect leachate and convey it to collection points for removal.

(a) The primary and secondary leachate collection and removal systems shall:

1. Be constructed of materials that are chemically resistant to the waste disposed of in the landfill and the leachate expected to be generated;

2. Have sufficient mechanical properties to prevent collapse under pressures exerted by overlying wastes, cover materials, and by any equipment used at the landfill;

3. Have granular material or synthetic geotextile filter overlying or surrounding the leachate collection and removal system to prevent clogging of the collection system by infiltration of fine particles; and

4. Have a method to test that the pipes in the system are not clogged, and a method for cleaning the pipes in the system if they become clogged. If any part of the system cannot be tested for clogging, the design shall assure that leachate can be rerouted from that part to a leachate sump in the event of collapse.

(b) The primary leachate collection and removal system shall have a granular drainage layer above the top geomembrane liner, at least 12 inches thick, with a hydraulic conductivity of not less than 1×10^{-3} cm/sec, overlain with an additional 12 inches of protective material as specified in subparagraph 62-701.400(3)(d)3., F.A.C., that is chemically resistant to the waste and leachate. Leachate collection systems incorporating synthetic drainage materials may be used if it can be demonstrated that they are equivalent to or more effective than the granular design, including chemical compatibility, flow under load, and protection of the geomembrane liner.

(c) The leachate collection and removal system shall be designed with a bottom slope to achieve the required leachate head after the predicted settlement determined by the foundation analysis. The minimum slope for the leachate collection system, in areas which drain to lateral collection pipes and header pipes, shall be 1.0 percent after predicted settlement. The minimum slopes for the collection pipes of the leachate collection system, i.e., lateral and header pipes, shall be 0.3 percent after predicted settlement. Minimum slopes shall be measured from the peak grade to the lowest grade along the design flow path. Slopes shall be surveyed after completion using a 50-foot grid in areas which drain to lateral collection pipes and header pipes and at 50-foot intervals where pipes of the leachate collection system are to be installed. These surveyed slopes must demonstrate that positive drainage is shown in the direction of flow between any two grid or interval points.

(5) Leachate recirculation. Leachate shall be recirculated only at solid waste disposal units which have a leachate recirculation system included in their operation plan, and which have been constructed and operated in a manner consistent with that system. If leachate is recirculated after closure, the operation plan shall be included as part of the approved closure plan. The leachate recirculation system shall include estimated impacts on the head of leachate over the liner, subsidence of the waste, and gas production, and shall meet the following requirements unless otherwise approved in the operation plan.

(a) The landfill shall be lined and have a leachate collection and removal system.

(b) Ditches, berms, or other devices shall be installed to control any leachate runoff. Initial and intermediate cover receiving recirculated leachate shall be graded to

shed runoff into the leachate collection system and to minimize mixing of leachate runoff and storm water.

(c) Initial and intermediate cover shall be permeable to the extent necessary to prevent perched water conditions and gas buildup.

(d) Leachate shall not be recirculated during weather conditions or in quantities that may cause runoff outside the solid waste disposal unit, surface seeps, wind-blown spray, or exceedance of the limits of the leachate head on the liner. Ponding is prohibited unless it is an integral part of the design plan.

(e) Landfill gas shall be managed in accordance with Rule 62-701.530, F.A.C.

(f) Recirculation of leachate is prohibited on top of areas where a barrier layer which is part of the final cover has been installed. Irrigation of the final vegetative cover may be done with treated leachate which meets the water quality standards of the receiving water body, if such irrigation does not contribute significantly to leachate generation.

(6) Leachate storage tanks and leachate surface impoundments.

(a) The requirements of this subsection apply to all leachate storage tanks and leachate surface impoundments constructed after January 6, 1993. Leachate storage tanks in use on January 6, 1993 are not required to retrofit to comply with this subsection unless leakage, corrosion or other defects are found. Leachate surface impoundments in use on January 6, 1993 shall be replaced or modified to conform to this subsection by January 6, 1995.

(b) Surface impoundments for leachate treatment or storage that are located at landfills are subject to the following requirements:

1. Surface impoundments shall be constructed so that the bottom of the liner system is not subject to fluctuations of the ground water so as to adversely impact the integrity of the liner system. The applicant shall demonstrate that the surface impoundment design will minimize infiltration of leachate into the environment so that ground water and surface water quality standards and criteria are not violated.

2. The surface impoundment shall be designed in segments such that any one segment may be taken out of service for inspection and repair with no interruption of service.

3. The impoundment shall have a double liner system consisting of an upper and lower 60-mil minimum average thickness HDPE geomembrane, and a leak detection and collection system between the geomembranes with a minimum hydraulic conductivity of one cm/sec. The lower geomembrane shall be placed directly on a subbase which is at least six inches thick and has a saturated hydraulic conductivity of less than or equal to 1×10^{-5} cm/sec. A GCL with a hydraulic conductivity not greater than $1x10^{-7}$ cm/sec may be used in place of the six-inch thick sub-base layer provided it is placed on a prepared subgrade which will not damage the GCL. The leak detection and collection system shall be checked daily. The design of the upper liner shall include calculations to predict the potential leakage through the upper liner. If the daily checks indicate the upper liner is leaking at a rate greater than predicted by the design

calculations, the Department shall be notified. If the leakage rate will result in the flooding of the leak detection and collection system, the impoundment shall be emptied and the liner repaired.

4. To preserve the liner integrity and prevent uplift, ballast material such as rounded gravel or sand, that will not cause damage to the geomembrane liner, shall be placed on top of any liner which is located below the water table.

5. A minimum of two feet of freeboard above the depth which would occur in the event of a 25-year, 24-hour storm shall be maintained in leachate surface impoundments.

6. Vectors and off-site odors shall be controlled.

(c) Above ground leachate storage tanks that are located at solid waste management facilities are subject to the following requirements:

1. Tanks shall be constructed of concrete, steel, reinforced plastic, polyethylene, or fiberglass. Tanks shall be supported on a well drained, stable foundation.

2. Bottoms of steel tanks that rest on earthen material shall be cathodically protected with either sacrificial anodes or an impressed current system which is designed, fabricated, and installed in accordance with the engineering plan submitted to the Department.

3. The exterior surfaces of all steel storage tanks shall be protected by a primer coat, a bond coat, and two or more final coats of paint or other surface coating system designed to prevent corrosion and deterioration.

4. The interior of all tanks shall consist of a material or must be lined with a material, resistant to the liquid being stored.

5. All aboveground tanks shall have a secondary containment system which may consist of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps, or other systems capable of containing the stored leachate. The design volume for the secondary containment system shall be 110 percent of the volume of either the largest tank within the containment system or the total volume of all interconnected tanks, whichever is greater.

6. The secondary containment system shall be constructed of materials compatible with the liquid stored. The containment system shall be constructed of either:

a. A minimum three-foot layer of compacted soil with a maximum saturated hydraulic conductivity of 1×10^{-7} cm/sec or one foot of compacted soil with a maximum saturated hydraulic conductivity of 1×10^{-8} cm/sec with two feet of protective cover; or

b. A concrete pad that will maintain its integrity for the lifetime of the tank, provided that the tank, if made of steel, has a corrosion resistant coating; or

c. A HDPE geomembrane of a minimum average thickness of 60 mils.

7. A system shall be designed to contain and remove storm water from the secondary containment area. Provisions shall be included for the removal of any accumulated precipitation and be initiated within 24 hours or when 10 percent of the

storage capacity is reached; whichever occurs first. Disposal of this stormwater shall be in accordance with the requirements of subsection 62-701.400(9), F.A.C.

8. All aboveground tanks shall be equipped with an overfill prevention system which includes level sensors and gauges, high level alarms, or automatic shutoff controls. The overfill control equipment shall be inspected weekly by the facility operator to ensure it is in good working order.

9. The exposed exterior of all aboveground tanks shall be inspected weekly by the facility operator for adequacy of the cathodic protection system, leaks, corrosion, and maintenance deficiencies. Interior inspection of tanks shall be performed whenever the tank is drained or at a minimum of every three years. If the inspection reveals a tank or equipment deficiency, leak, or any other deficiency which could result in failure of the tank to contain the leachate, remedial measures shall be taken immediately to eliminate the leak or correct the deficiency. Inspection reports shall be maintained and made available to the Department upon request for the lifetime of the liquid storage system.

(d) Underground leachate storage tanks that are located at solid waste management facilities are subject to the following requirements:

1. Tanks shall be constructed of concrete, fiberglass, reinforced plastic, steel that is cathodically protected, or steel that is clad with fiberglass.

2. A secondary containment and a continuous leak detection system shall be installed in the form of a double-walled tank, designed as an integral structure so that any release from the inner tank is completely contained by the outer shell.

a. The interstitial space shall be monitored at least once per week by the facility operator for tightness using pressure monitoring, vacuum monitoring, or electronic monitoring.

b. The tank system shall be protected from both corrosion of the primary tank interior and the external surface of the outer shell.

c. All resistant coatings applied to the primary tank interior shall be compatible with the stored leachate.

d. Cathodic protection systems, where installed, shall be inspected at least weekly by the facility operator. Any deficiency in the cathodic protection system shall be corrected when discovered.

3. All underground tanks shall be equipped with an overfill prevention system which includes level sensors and gauges, high level alarms, or automatic shutoff controls. The overfill control equipment shall be inspected weekly by the facility operator to ensure it is in good working order.

4. Inspection and leak detection monitoring reports shall be maintained at the facility and made available to the Department upon request for the lifetime of the liquid storage system.

(e) A schedule for routine maintenance of the leachate collection and removal system shall be established to ensure operation of the system. The maintenance schedule shall be a part of the facility operation plan.

(7) Liner systems construction quality assurance.

(a) Liner systems shall have a construction quality assurance plan to provide personnel with adequate information to achieve continuous compliance with the liner construction requirements. The plan shall include or refer to specifications and construction methods which use established engineering practices to construct a liner system and provide for quality control testing procedures and sampling frequencies. Sampling and testing shall be conducted in the field by trained personnel during construction and after construction completion. Such personnel will be under the direction of the construction quality assurance professional engineer, to assure the liner system will comply with the standards. The construction quality assurance professional engineer or his designee shall be on-site at all times during construction to monitor construction activities and shall be on-site to monitor off-loading of the geosynthetics to be used in the liner system. Construction activities include the time during which the protective layer is installed over the geomembrane, to ensure that the placement techniques do not cause damage to the liner system materials.

(b) Liner systems shall be installed in accordance with a Department-approved construction quality assurance plan. Plans that comply with EPA Document EPA/600/R-93/182 shall be presumed to be in compliance with this section. The following minimum specific elements shall be included in the plan:

(c) Unless otherwise approved by the Department, one destructive test sample shall be collected every 500 feet along the total length of the seams. If an electrical leak location survey method, or other equivalent non-destructive test method, is used to locate and repair leaks in the installed liner system, then one destructive test sample shall be collected every 1000 feet along the total length of the seams in the areas where this method is used.

(d) If an electrical leak location survey method, or other equivalent method is used to test the geomembrane(s) in the liner system, testing shall be conducted after placement of the soil drainage layer. The geomembrane liner leak location survey shall be performed using standard industry methods, and any leaks located shall be repaired and tested by methods approved by the Department. The results of the geomembrane liner leak location survey, including a description of the locations of any leaks detected and the repairs that were conducted on these leaks, shall be documented in a final report included with the completion of construction documents required in this subsection.

1. Responsibility and authority of all organizations and key personnel involved in permitting, designing, constructing, and providing construction quality assurance of the waste disposal facility shall be described fully;

2. Minimum qualifications of the construction assurance quality professional engineer and supporting personnel shall be in the plan to demonstrate that they possess the training and experience necessary to fulfill their identified responsibilities;

3. Procedures and tests that will be used to monitor the installation of the liner system components shall be described in detail;

4. The sampling activities, sample size, sample locations, frequency of testing, acceptance and rejection criteria, and plans for implementing corrective measures that may be necessary shall be described; and

5. Reporting requirements for construction quality assurance activities shall be described, including daily summary reports, observation data sheets, problem identification and corrective measures, and final documentation. All such documents shall be included in the final report which shall be forwarded to the Department.

(e) A laboratory experienced in the testing of geosynthetics, independent of the liner manufacturer and installer, shall perform the required testing which must include, at a minimum, conformance testing for all geosynthetics and geocomposites, and testing of seam shear and peel strength for geomembranes.

(f) The professional engineer in charge of construction quality assurance shall provide a signed, sealed final report and record drawings to the Department stating that the liner system has been installed in substantial conformance with the plans and specifications for the liner system. The report and drawings shall be submitted along with a certification of construction completion on Form 62-701.900(2).

(8) Soil liner construction quality assurance. In addition to the requirements of subsection (7) above, the following requirements apply to construction of the soil component of liner systems. All required testing and analysis shall be performed in accordance with generally accepted engineering procedures, such as those promulgated by the American Society for Testing and Materials (ASTM). Parenthetic references to ASTM methods are intended as guidance only.

(a) A construction quality assurance/quality control plan shall be prepared for each soil liner project to outline project specifications and construction requirements. The plan shall specify performance criteria for the soil liner, and provide quality control testing procedures and minimum sampling frequencies. In addition, the plan shall define the responsibilities of the parties that will be involved in soil liner construction, and shall present minimum qualifications of each party to fulfill their identified responsibilities.

(b) Field and laboratory testing during liner construction shall be conducted by a qualified soil testing laboratory representing the owner. A qualified field technician representing the owner shall provide full time, on-site inspection during liner construction. The field technician shall work under the supervision of a professional engineer with experience in soil liner construction.

(c) Prior to soil liner installation, an appropriate borrow source shall be located. Suitability of the liner construction materials from that source shall be determined in accordance with the following:

1. If demonstrated field experience is available from at least three prior successful projects of five or more acres each to document that a given borrow source can meet the requirements of the project specifications, then extensive laboratory testing of the borrow source will not be required. However, the source of material shall be geologically similar to and the methods of excavating and stockpiling the material shall be consistent with those used on the prior projects. Furthermore, a minimum of

three representative samples from the appropriate thickness of the in-situ stratum or from stockpiles of the borrow material proposed for liner construction shall be submitted to an independent soil testing laboratory to document through index testing that the proposed material is consistent with the material used on prior successful projects. At a minimum, index testing shall consist of percent fines, Atterberg limits and moisture content determinations.

2. If demonstrated field experience as defined above is not available or cannot be documented, then the following requirements shall be met.

a. A field exploration and laboratory testing program shall be conducted by an independent soil testing laboratory to document the horizontal and vertical extent and the homogeneity of the soil strata proposed for use as liner material. A sufficient number of index tests from each potential borrow stratum shall be performed to quantify the variability of the borrow materials and to document that the proposed borrow material complies with specifications. At a minimum, the index tests shall consist of percent fines, Atterberg limits and moisture content determinations.

b. Sufficient laboratory hydraulic conductivity tests shall be conducted on samples representative of the range invariability of the proposed borrow source (ASTM D-5084). For each such sample, test specimens shall be prepared and tested to cover the range of molding conditions (moisture content and dry density) required by project specifications. The hydraulic conductivity tests shall be conducted in triaxial type permeameters. The test specimens shall be consolidated under an isotropic consolidation stress no greater than 10 pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved and relatively constant values of hydraulic conductivity are measured (ASTM D-5084). The borrow source will only be considered suitable if the hydraulic conductivity of the material, as documented on laboratory test specimens, can be shown to meet the requirements of the project specifications at the 98 percent confidence level.

(d) Prior to full-scale liner installation, a field test section or test strip shall be constructed at the site above a prepared subbase. The test strip shall be considered acceptable if the measured hydraulic conductivities of undisturbed samples from the test strip meet the requirements of the project specifications at the 98 percent confidence level. If the test section fails to achieve the desired results, additional test sections shall be constructed in accordance with the following requirements:

1. The test section shall be of sufficient size such that full-scale liner installation procedures can be duplicated within the test section;

2. The test section shall be constructed using the same equipment for spreading, kneading and compaction and the same construction procedures (e.g., number of passes, moisture addition and homogenization, if needed) that are anticipated for use during full-scale liner installation;

3. At a minimum, the liner test section shall be subject to the following field and laboratory testing requirements:

a. A minimum of five random samples of the liner construction material delivered to the site during test section installation shall be tested for moisture content (ASTM D-2216), percent fines (ASTM D-1140) and Atterberg limits (ASTM D-4318);

b. At least five field density and moisture determinations shall be performed on each lift of the compacted liner test section;

c. Upon completion of the test section lift, the thickness of the lift shall be measured at a minimum of five random locations to check for thickness adequacy; and

d. A minimum of five Shelby tube or drive cylinder (ASTM D-2937) samples shall be obtained from each lift of the test section for laboratory hydraulic conductivity testing. Laboratory hydraulic conductivity testing shall be conducted in triaxial type permeameters (ASTM D-5084). The test specimens shall be consolidated under an isotropic consolidation stress no greater than 10 pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved and relatively constant values of hydraulic conductivity are measured (ASTM D-5084).

(e) Full scale liner installation may begin only after completion of a successful liner test section. During liner construction, quality control testing shall be provided to document that the installed liner conforms to project specifications. The testing frequencies for quality control testing are specified below; however, during construction of the first five acres of the liner, these frequencies shall be doubled. Samples shall be obtained from random locations selected by an independent soil testing laboratory. If there are indications of a change in product quality or construction procedures during liner construction, additional tests shall be performed to determine compliance.

1. Field testing during liner installation. The following field tests shall be performed:

a. Prior to the laying of the liner materials, the liner subbase shall be compacted to the specified density. Density tests shall be conducted at a minimum rate of two tests per acre;

b. A minimum of two moisture content and field density determinations shall be conducted per acre per lift of the compacted liner. The degree of compaction shall be checked using the one-point field Proctor test or other appropriate test procedures; and

c. A minimum of four thickness measurements shall be conducted per acre per lift of the compacted liner.

2. Laboratory testing during liner installation. The following laboratory tests shall be performed:

a. Percent fines (ASTM D-1140) of the liner construction material shall be determined at a minimum frequency of two tests per acre per lift of installed liner;

b. Atterberg Limits determinations shall be performed on one sample per acre per lift of installed liner; and

c. Hydraulic conductivity testing of Shelby tube or drive cylinder (ASTM D-2937) samples of the compacted liner shall be performed at a minimum frequency of one test per acre per lift. Laboratory hydraulic conductivity tests shall be conducted in triaxial type permeameters (ASTM D-5084). The test specimens shall be consolidated under an isotropic consolidation stress no greater than 10 pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved and relatively constant values of hydraulic conductivity are measured.

(f) If the test data from a liner section does not meet the requirements of the project specifications, additional random samples may be tested from that liner section. If such additional testing demonstrates that the thickness and hydraulic conductivity meet the requirements of the project specifications at the 95 percent confidence level, that liner section will be considered acceptable. If not, that liner section shall be reworked or reconstructed so that it does meet these requirements.

(9) Surface water management systems.

(a) Stormwater shall be controlled in accordance with Part IV of Chapter 373, F.S., and the rules promulgated thereunder. A copy of any permit for stormwater control issued by the Department, or documentation that no such permit is required, shall be submitted to the Department and construction authorized by that permit shall be completed before the facility receives waste for disposal. Applicants should be aware that other government agencies may also regulate stormwater management and may require separate permits. For aboveground disposal units, the design of any features intended to convey stormwater to a permitted or exempted treatment system shall be included in the solid waste construction permit.

(b) A stormwater management system shall be designed, constructed and maintained which, at a minimum, prevents stormwater from the peak discharge of the 25 year storm event from running onto those portions of the landfill which have not been closed.

(c) Stormwater management systems shall be designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate shall be considered leachate and is subject to the requirements of subsections 62-701.500(8) and 62-701.510(5), F.A.C.

(10) Gas control systems. Landfills that receive degradable wastes shall be designed and constructed with a gas management system that complies with the requirements of Rule 62-701.530, F.A.C.

(11) Landfills in ground water. A landfill constructed so that the bottom liner is constantly in contact with ground water is not prohibited by this rule. However, an applicant proposing such a design shall include special design features which

demonstrate that the landfill will provide an equivalent degree of protection for the environment as would a similar landfill whose bottom liner is not in contact with ground water. Such a design is not entitled to the presumption of compliance with performance standards which is set forth in subsection (1) of this section. In addition to any other assurances of financial responsibility for closure, an applicant shall provide a performance bond sufficient to ensure long-term maintenance and operation of the leachate collection system.
Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.400, Amended 5-27-01, 1-6-10.

62-701.410 Hydrogeological and Geotechnical Investigation Requirements.

(1) Hydrogeological investigation and site report. The hydrogeological investigation and site report required by subsection 62-701.330(3), F.A.C., shall be site specific, shall be conducted by or under the supervision of a professional geologist or professional engineer with experience in hydrogeologic investigations, and shall:

(a) Define the landfill site geology and hydrology and its relationship to the local and regional hydrogeologic patterns including:

1. Direction and rate of ground water and surface water flow, including seasonal variations;
2. Background quality of ground water and surface water;
3. Any on site hydraulic connections between aquifers;
4. For all confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill, the porosity or effective porosity, horizontal and vertical permeabilities, and the depth to and lithology of the layers and aquifers; and
5. Topography, soil types and characteristics, and surface water drainage systems of the site and surrounding the site.

(b) Include an inventory of all the public and private water wells within a one-mile radius of the proposed landfill site. The inventory shall include, where available:

1. The approximate elevation of the top of the well casing and the depth of each well;
2. The name of the owner, the age and usage of each well, and the estimated daily pumpage; and
3. The stratigraphic unit screened, well construction technique, and static water levels of each well.

(c) Identify and locate any existing contaminated areas on the landfill site.

(d) Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas to demonstrate compliance with paragraph 62-701.300(2)(b), F.A.C.

(2) Geotechnical site investigation. The geotechnical site investigation required by subsection 62-701.330(3), F.A.C., shall be conducted by or under the supervision of a professional engineer with experience in geotechnical engineering. Investigations required in paragraphs (a) through (d) of this subsection may be conducted by a professional geologist. Prior to any construction on the landfill site, the engineer shall define the engineering properties of the site that are necessary for the design, construction, and support of the landfill and all installations of the facility and shall:

(a) Explore and describe subsurface conditions including soil stratigraphy and ground water table conditions;

(b) Explore and address the presence of muck, previously filled areas, soft ground, lineaments, and sinkholes;

(c) Evaluate and address fault areas, seismic impact zones, and unstable areas as described in 40 C.F.R. 258.13, 258.14 and 258.15;

(d) Include estimates of the average and maximum high ground water table across the site; and

(e) Include a foundation analysis to determine the ability of the foundation to support the loads and stresses imposed by the landfill. It may include geotechnical measures necessary to modify the foundation to accommodate the imposed loads and stresses. The foundation shall be analyzed for short-term, end of construction, and long-term stability and settlement conditions. Considering the existing or proposed subgrade conditions and the landfill geometry, analysis shall include:

1. Foundation bearing capacity;
2. Subgrade settlements, both total and differential; and
3. Subgrade slope stability.

(3) Report. The geotechnical site investigation report shall describe the site subsurface conditions and shall include, at a minimum, the methods used in the investigation, all soil boring logs and laboratory results, analytical calculations, cross sections, interpretations and conclusions.

(4) Report verification. The site reports and supporting information, including detailed description of the methods, calculations, and interpretations used, shall be signed and sealed by the appropriate professional. The hydrogeological report shall be signed and sealed by a professional geologist or professional engineer with experience in hydrogeological investigations. The geotechnical report shall be signed and sealed by a professional engineer with experience in geotechnical engineering.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.0877, 403.702, 403.704, 403.707 FS. History–New 1-6-93, Formerly 17-701.410, Amended 12-23-96, 5-27-01, 1-6-10.

62-701.420 Geotechnical Investigation Requirements. (Repealed) Specific Authority 403.061, 403.704, FS. Law Implemented 403.702, 403.704, 403.707, FS. History -- New 1-6-93; Amended 1-2-94, Formerly 17-701.420, Repealed 12-23-96.

62-701.430 Vertical Expansion of Landfills.

(1) Applicability. Construction of a solid waste disposal unit on top of or against the side slopes of a previously filled landfill, whether active, closed, or inactive is considered vertical expansion of that landfill. Vertical expansion shall require either a modification of the landfill permit, or a new permit if the landfill has been closed. If a landfill has not been closed at the time of the vertical expansion, then the closure requirements of that landfill will apply at the time of closure of the vertical expansion, unless the closure requirements for the vertical expansion are more stringent. The following requirements shall apply:

(a) The vertical expansion shall not cause or contribute to any leachate leakage from the existing landfill, shall not cause objectionable odors, and shall not adversely affect the closure design of the existing landfill.

(b) For vertical expansion over lined landfills, no interface liner is required between the old and new landfill slopes.

(c) For vertical expansion over landfills that were not constructed with a liner system or were not constructed in accordance with permit requirements, the vertical expansion shall comply with all the requirements of Rule 62-701.400, F.A.C., with the following exceptions:

1. Side slopes of six feet horizontal to one foot vertical rise or steeper require the installation of a single geomembrane slope liner overlain by a leachate collection and removal system;

2. The slope liner shall consist of a 60-mil or thicker HDPE geomembrane.

3. The liner shall be protected from physical damage by a 24-inch thick protective layer above the liner and a bedding layer below the liner at least 24 inches thick to protect against the calculated differential settlement.

4. In all vertical expansion construction, grades shall slope toward the new expansion area.

5. If the vertical expansion consists exclusively of construction and demolition debris, the expansion must comply with the requirements of Rule 62-701.730, F.A.C., as well as paragraph (a) of this subsection. If the vertical expansion consists exclusively of land clearing debris, the expansion must comply with the requirements of Rule 62-701.803, F.A.C., as well as paragraph (a) of this subsection.

6. If the vertical expansion consists of a composting operation, it must meet the requirements of Chapter 62-709, F.A.C., as well as paragraph (a) of this subsection.

7. If the vertical expansion consists of a Class III landfill, the provisions of paragraph 62-701.340(3)(c), F.A.C., apply.

(d) The provisions of subsection 62-701.610(1), F.A.C., are applicable to all operations, including recycling operations, conducted on top of closed landfills.

(2) Construction requirements. The design for the vertical expansion shall also provide calculations and supporting information on the following factors:

(a) Construction on the slopes of a filled landfill requires a determination of foundation stability in accordance with Rule 62-701.410, F.A.C., and calculations for the total settlement of the waste in the existing landfill and the waste that will be disposed of in the new disposal area to be constructed. Total settlement calculations shall address both compression and differential settlement and shall be based on worst case predictions. Total settlement calculations shall show the final elevations of the liner systems, that gravity drainage will be maintained, and that no other component of the design will be adversely affected.

(b) The vertical expansion design shall achieve a minimum factor of safety 1.5 using peak strengths for:

1. The liner system stability for liner systems installed over existing landfill slopes to prevent sliding along the interface between liner system components; and
2. Deep stability, to prevent sliding along all potential failure surfaces through the waste mass, along the liner systems, and through the foundation soils.

(c) Surface water management during construction of the vertical expansion over the slopes of an existing landfill shall be consistent with subsection 62-701.400(9), F.A.C., and shall require proper design of the drainageway at the interface between the existing slopes and vertical expansion area. The design shall;

1. Prevent infiltration into the existing and new landfills;
2. Minimize erosion of cover materials;
3. Carry the calculated flow; and
4. Comply with the cover requirements.

(d) A gas control system shall be installed to vent gas from the interface between the existing landfill slopes and the vertical expansion slopes to prevent accumulation of gas under the new liner system. Gas-venting is achieved by installing a gas-venting layer under the entire slope that will be covered by the new liner system. The gas-venting layer shall convey gas to vertical vents at the crest of the interface slopes.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 5-19-94, Formerly 17-701.430, Amended 5-27-01, 1-6-10.

62-701.500 Landfill Operation Requirements.

(1) Operating personnel. All landfills shall have at least one trained operator at the landfill during all times when the landfill receives waste, in accordance with subsection 62-701.320(15), F.A.C. All landfills shall have at least one trained spotter at each working face at all times when the landfill receives waste to detect unauthorized wastes.

(2) Operation plan. Each landfill owner or operator shall have an operational plan that provides written, detailed instructions for the daily operation of the landfill. The operation plan shall be kept at or near the landfill facility and shall be accessible to landfill operators. The operation plan shall be substantially complied with at all times, and shall be revised if operational procedures change. The plan shall include procedures for:

(a) Designation of persons responsible for operation and maintenance of the facility;

(b) Emergency preparedness and response, as required in subsection 62-701.320(16), F.A.C.

(c) Controlling the type of waste received at the site. The plan shall specify inspection procedures, number and location of spotters for each working face, and procedures to be followed if unauthorized waste is discovered;

(d) Weighing incoming waste, if required under paragraph 62-701.500(4)(a), F.A.C.;

(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.

(3) Operating record. The operating record shall consist of: all records, reports, analytical results, demonstrations, and notifications required by this chapter; any construction, operation, and closure permits, including all modifications to those permits, issued by the Department, along with the engineering drawings and supporting information; and the training records required by subsection 62-701.320(15), F.A.C. The record is considered part of the operation plan, and shall be kept with the plan at or near the landfill facility, or in an alternate location designated in the operating permit which is readily accessible to landfill operators. The operating record shall be available for inspection at reasonable times by Department personnel.

(4) Waste records.

(a) The owner or operator of a landfill shall weigh all solid waste as it is received. Landfill operators shall record, in tons per day, the amount of solid waste received and shall estimate the amount of wastes listed in paragraph (b) of this subsection. Waste reports shall be compiled monthly, and copies shall be provided to the Department annually.

(b) Types of waste received:

1. Municipal solid waste.
2. Class III waste.
3. Ash residue.
4. Other wastes.

(5) Control of access. To prevent unauthorized waste disposal, 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.

(6) Monitoring of waste.

(a) The owner or operator shall implement a load-checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The load-checking program shall consist of the following minimum requirements:

1. The landfill operator shall examine at least three random loads of solid waste delivered to the landfill each week. The waste collection vehicle drivers selected by the inspector shall be directed to discharge their loads at a designated location within the landfill. A detailed inspection of the discharged material shall be made for any unauthorized wastes. If the landfill owner or operator also owns or operates a transfer station, this inspection may be carried out at that transfer station before delivery of the waste to the landfill.

2. If unauthorized wastes are found, the facility shall contact the generator, hauler, or other party responsible for shipping the waste to the landfill to determine the identity of the waste sources.

(b) Handling hazardous wastes.

1. If any regulated hazardous wastes are identified by random load checking, or are otherwise discovered to be improperly deposited at the landfill, the landfill operator shall promptly notify the Department, the person responsible for shipping the wastes to the landfill, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the landfill operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

2. Subsequent shipments from sources found or suspected to be previously responsible for shipping regulated hazardous waste shall be subject to precautionary measures prior to the solid waste management facility accepting wastes.

(c) Recording inspection results. Information and observations resulting from each random inspection shall be recorded in writing and retained at the landfill for at least three years. The recorded information shall include, at a minimum: 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.

(d) Temporary storage. The owner or operator shall make arrangements or shall have equipment for temporary storage, handling and transport to an authorized disposal or recycling facility for unauthorized waste which is inadvertently accepted by the facility. Unless an alternate schedule is included in an operation plan submitted with the permit application, which provides for the control of odors and vectors, putrescible

waste shall not be stored for longer than 48 hours and non-putrescible waste shall not be stored for longer than 30 days.

(7) Waste handling requirements.

(a) All solid waste at Class I landfills shall be spread in layers of approximately two feet in thickness and compacted to approximately one foot in thickness or as thin a layer as practical before the next layer is applied. Solid waste at all Class III sites shall be spread in layers and compacted once every week using suitable heavy equipment. Bulky materials which are not easily compacted should be worked into other materials as much as practical.

(b) The first layer of waste placed above the liner and leachate collection system shall be a minimum of four feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system.

(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 shall not exceed 10 feet unless authorized in the operation plan. Lift depths greater than 10 feet may be allowed depending on specific operations, daily volume of waste, width of working face, and good safety practices.

(d) The working face shall be only wide enough to accommodate vehicles discharging waste, and to minimize the exposed area and unnecessary use of cover material.

(e) Initial cover shall be applied and maintained at landfills in order to minimize any adverse environmental, safety, or health effects such as those resulting from birds, unauthorized wastes, blowing litter, odors, vectors, or fires. The minimum frequency for applying cover is:

1. For Class I landfills, at the end of each working day. However, for those areas where solid waste will be deposited on the working face within 18 hours, initial cover may consist of a temporary cover, such as a tarpaulin, which may be removed prior to deposition of additional waste; and

2. For Class III landfills, at the end of each work week.

(f) An intermediate cover in addition to the six-inch initial cover shall be applied and maintained within seven days of cell completion if additional solid waste will not be deposited within 180 days of cell completion. The landfill operator may remove all or part of the intermediate cover before placing additional waste or installing final cover.

(g) Solid waste disposal units which have been filled to design dimensions shall receive final cover within 180 days after attaining final elevation or in accordance with the closure plan for the landfill.

(h) Uncontrolled and unauthorized scavenging shall not be permitted at any landfill site. Controlled salvaging for recycling may be permitted by the landfill operator.

(i) A litter policing operation shall be employed to keep litter from leaving the working area of the landfill. Litter outside the working area shall be picked up within 24 hours. Some litter may be exposed through the initial cover if it is in traffic areas and away from public view.

(j) Erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the storm water management system. Such measures shall be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurrence the landfill operator shall notify the Department and propose a correction schedule.

(8) Leachate management.

(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 leachate collection and removal system and for maintaining the system as designed for the design period. Leachate shall be collected and treated as necessary so that water quality standards and criteria are not violated. If the leachate is classified as a hazardous waste, it shall be managed in accordance with Chapter 62-730, F.A.C. Leachate treatment or disposal facilities that may be used shall be identified in the operating plan, and the Department shall be notified as to which facility is actually being used.

(c) Leachate may be discharged to an off-site treatment plant. The landfill operator is responsible for having a written contract or agreement with the off-site treatment plant to discharge leachate to the plant.

(d) On-site leachate treatment or pretreatment systems are part of the leachate collection and removal system and shall be designed according to the expected characteristics of the leachate. The design may include adjustments to the system as necessary to accommodate changing leachate characteristics.

(e) The landfill operator shall have a prepared contingency plan to handle leachate collection, removal, and treatment problems such as interruptions of discharges to a treatment plant.

(f) Quantities of leachate collected by the leachate collection and removal system shall be recorded in gallons per day before on-site treatment or transport off-site, and shall be included with the operating record.

(g) A recording rain gauge shall be installed, operated, and maintained to record precipitation at the landfill. Precipitation records shall be included with the operating record and shall be maintained and used by the permittee to compare with leachate generation rates.

(h) New leachate collection systems shall be water pressure cleaned or inspected by video recording after construction but prior to initial placement of wastes. Existing leachate collection systems shall be water pressure cleaned or inspected by

video recording at the time of permit renewal. Results of the collection system cleanings or inspections shall be available to the Department upon request.

(9) Gas monitoring. All landfills that have received degradable wastes shall implement a gas management system to meet the requirements of Rule 62-701.530, F.A.C.

(10) Stormwater system management. Stormwater management systems shall be operated and maintained as necessary to meet the requirements of subsection 62-701.400(9), F.A.C.

(11) Equipment and operation features. The landfill shall have:

(a) Sufficient equipment to ensure proper operation of the landfill and for excavating, spreading, compacting, and covering waste;

(b) Sufficient reserve equipment or arrangement to obtain additional equipment within 24 hours of equipment breakdown;

(c) Communications equipment for emergency and routine communications;

(d) Dust control methods;

(e) Fire protection and fire-fighting capabilities adequate to control accidental burning of solid waste in the landfill. Fire protection includes procedures for notification of local fire protection agencies for assistance in emergencies;

(f) Litter control devices, portable fences, or other suitable devices; and

(g) Signs indicating the name of the operating authority, traffic flow, hours of operations and restrictions or conditions of disposal.

(12) Roads. The landfill shall have:

(a) An all-weather access road that is passable and safe under normal operating conditions; and

(b) An inside perimeter road and other on-site roads, maintained to allow access to monitoring devices and stormwater controls, for landfill inspections and fire fighting.

(13) Recordkeeping. In addition to records and reporting required by other sections of this chapter, the landfill owner or operator shall:

(a) Keep records of all information used to develop or support the permit applications and any supplemental information submitted to comply with this chapter pertaining to construction of the landfill throughout the design period. Records pertaining to the operation, except for weigh tickets, of the landfill shall be kept for the design period of the landfill. Weigh tickets shall be kept for five years.

(b) Retain records of all monitoring information, including calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by permit, for at least ten years. Background water quality records shall be kept for the design period of the landfill.

(c) Maintain an annual estimate of the remaining life and capacity in cubic yards of the existing, constructed landfill and remaining capacity and site life of other permitted areas not yet constructed. The annual estimate shall be based on a summary

of the heights, lengths, and widths of the solid waste disposal units. The estimate shall be made and reported annually to the Department.

(d) Records which are more than five years old and which are required to be retained may be archived, provided that the landfill operator can retrieve them for inspection within seven days.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.500, Amended 5-27-01, 1-6-10.

62-701.510 Water Quality and Leachate Monitoring Requirements.

(1) Applicability.

(a) This section shall apply to all applications for construction, operation, or closure (including long-term care) of a solid waste disposal unit at a landfill. However, subsection (3) of this section shall not apply to any solid waste disposal unit in operation prior to January 6, 1993 that has a ground water monitoring system installed and maintained as required in its approved ground water monitoring plan.

(b) This rule is intended to supplement the ground water monitoring requirements of Chapters 62-520 and 62-522, F.A.C. Any provisions of Chapters 62-520 and 62-522, F.A.C., that are not in direct conflict with the provisions of this rule remain applicable. This rule does not relieve a person from compliance with any permit condition or Department order, nor does it limit the Department's authority to modify a permit or ground water monitoring plan in accordance with Chapter 62-520, F.A.C.

(c) The requirements of this rule are the minimum standards for monitoring water quality and leachate. Nothing in this rule shall be construed to prevent the Department from imposing more stringent standards as necessary to protect the environment and the public health and safety due to site specific conditions and types of wastes to be disposed of in landfills or solid waste disposal units.

(2) Water quality monitoring plan and system.

(a) The permit applicant shall provide to the Department a water quality monitoring plan for the landfill that describes the proposed ground water, surface water, and leachate monitoring systems. The plan shall be based on the hydrogeological investigation required in Rule 62-701.410, F.A.C., and be prepared by, or under the supervision of, a professional geologist or professional engineer with experience in hydrogeologic investigations. The plan shall be signed and sealed by the professional geologist or professional engineer.

(b) The water quality monitoring system shall be installed and consist of: a sufficient number of ground water wells installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer, as well as other aquifers reasonably expected to be affected by the landfill; surface water monitoring points installed at locations to yield samples of surface water that may be affected by the landfill; and leachate monitoring points to yield representative leachate samples. All

sampling and analysis activities shall be performed in accordance with Chapter 62-160, F.A.C.

(c) The water quality monitoring plan shall comply with the provisions of subsection 62-520.600(3), F.A.C. The applicant shall specify sampling locations and frequency in the water quality monitoring plan, and shall provide justification for these locations and frequencies based upon site conditions.

(3) Ground water monitoring.

(a) Two or more detection wells shall be located within the zone of discharge hydraulically downgradient from the solid waste disposal unit, to detect leachate releases. These wells shall be located no more than 50 feet from the edge of the solid waste disposal unit, unless site specific conditions make such placement impractical. These wells shall be capable of monitoring each solid waste disposal unit as it is operated.

(b) Multiple downgradient compliance wells shall be located at or immediately adjacent to the compliance line of the zone of discharge, if required in subsection (7) of this section. If site-specific conditions require installation of compliance wells within the zone of discharge, then a confirmed exceedance of a ground water standard above background at such wells will be considered a violation of that standard.

(c) A sufficient number of background wells installed as part of the site hydrogeological investigation required in Rule 62-701.410, F.A.C., shall be maintained throughout the design life of the landfill to provide information on background water quality.

(d) Monitoring wells.

1. The location of each well, in degrees, minutes and seconds (to two decimal places) of latitude and longitude, and the elevation of the top of the well casing to the nearest 0.01 foot, using a consistent, nationally recognized datum, shall be determined by a Florida Licensed Professional Surveyor and Mapper. The location information required in subparagraph 62-701.320(7)(f)7., F.A.C., shall be included. Upon completion of each well, Form 62-701.900(30), Monitoring Well Completion Report, effective date January 6, 2010, hereby adopted and incorporated by reference, shall be submitted to the Department to report details of the well construction and location. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

2. An identification number shall be assigned by the Department to each monitoring well in accordance with the Department's Water Assurance Compliance System computer file. The identification number shall be used on all water quality monitoring reports.

3. Well spacing shall be spaced no greater than 500 feet apart across the downgradient direction of ground water flow, and no greater than 1500 feet apart across the upgradient direction of ground water flow, in the uppermost aquifer within the zone of discharge, unless site specific conditions support the use of alternate well spacing.

Conditions to be considered include ground water flow directions and rates, estimated longitudinal and transverse dispersivity rates, proximity to or presence of sensitive environments and ground water users, nature of the wastes, method of disposal, and the proposed design and size of the facility.

4. Well screens shall be located to readily detect representative ground water conditions within the saturated thickness of the uppermost aquifer within the zone of discharge. Well screens shall not act as conduits through confining layers between water bearing strata. The annular space (the space between the borehole and well casing) above the sampling depth shall be sealed to prevent contamination of samples and ground water. Wells monitoring the unconfined water table shall be screened so that the water table can be sampled at all times. The applicant shall provide technical justification for the actual screen length chosen.

5. Monitoring wells shall be constructed so as to provide ground water samples that exhibit the physical and chemical properties of that portion of the aquifer screened by the well. Unless otherwise authorized in a Department permit, new monitoring wells, and existing monitoring wells at the time of permit renewal, shall have protective bollards or other devices installed around them if they are located in areas of high traffic flow to prevent damage from passing vehicles. Monitoring wells shall be locked to minimize the potential for unauthorized access.

6. Any monitoring wells which are abandoned or which will be covered due to lateral expansions of a landfill or the construction of new solid waste disposal units shall be plugged as necessary so that they do not act as a conduit for any leachate release to the ground water. The Department shall be notified in writing before any monitoring wells are abandoned or plugged.

7. Detection sensors capable of detecting changes in ground water that may indicate leachate releases, linked to a data recorder, may be used to augment detection wells or may be used as an alternative to detection wells, upon demonstration of their effectiveness to the Department.

(4) Surface water monitoring.

(a) All surface water bodies that may be affected by a contaminant release from the facility shall be monitored, except bodies of water contained completely within the property boundaries of the disposal site which do not discharge from the site to surface waters. In bodies of standing water, one or more representative monitoring points shall be located as close as practical to the facility. For flowing water bodies, a sufficient number of upgradient and downgradient locations shall be used to allow the effect of the landfill to be measured.

(b) Discharges from detention ponds for storm water shall be sampled at the point of discharge to waters of the state or from the property, whichever is closer to the detention pond.

(c) The details concerning the sampling locations and the analysis requirements shall be specified in the water quality monitoring plan. Each monitoring location shall be marked and its position shall be determined by a Florida Licensed

Professional Surveyor and Mapper in degrees, minutes and seconds of latitude and longitude.

(5) Leachate sampling. The water quality monitoring plan shall specify the location of, and proposed protocol for, landfill leachate sampling to obtain a representative characterization of the leachate composition in the leachate collection and removal system as the leachate comes from the wastes and before it is subjected to conditions that may change the characteristics of the leachate. All sampling points shall be located to minimize pumping of leachate before sampling.

(6) Initial and routine sampling frequency and requirements. Except as otherwise specified in a Department permit or order or in subsection (7) of this section, frequency of sampling and analysis shall comply with the following. However, the owner or operator of a solid waste disposal unit may request a permit modification from the appropriate District Office of the Department to delete specific monitoring parameters or field parameters from routine analyses of detection or compliance wells and surface water. The Department will grant such modification upon a demonstration that these parameters are not reasonably expected to be in or derived from the waste contained in the unit, or are not reasonably expected to be detected in the ground water as a result of the operations of the facility.

(a) Demonstration to delete parameters. A demonstration to delete monitoring parameters may include an evaluation of:

1. The concentration or contrast between monitoring parameters in leachate and in background water quality; and

2. The types, quantities and concentrations of constituents in the wastes, and their degradation products, managed at the facility;

(b) Initial background water quality.

1. Initial background water quality for a proposed landfill shall be determined by analysis of at least one water sample taken from each well that was installed, and each surface water monitoring location that was established, during the site hydrogeological investigation. Any new monitoring well that is installed after completion of the site hydrogeological investigation, unless the new monitoring well is installed to replace an existing well within the monitoring network, shall also be analyzed for initial background water quality. The water quality information shall be submitted to the Department as part of the supporting information for the permit application.

2. Sampling and analysis for initial background ground water quality shall be for the parameters listed in paragraphs (8)(a) and (8)(d) of this section.

3. Sampling and analysis for initial background surface water quality shall be for the parameters listed in paragraph (8)(b) of this section.

(c) Routine leachate sampling.

1. Leachate shall be sampled and analyzed annually for the parameters listed in paragraphs (8)(c) and (d) of this section.

2. For landfills which are receiving waste, if this annual analysis indicates that a contaminant listed in 40 CFR Part 261.24 exceeds the regulatory level listed

therein, the permittee shall initiate monthly sampling and analysis and shall notify the Department in writing. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

(d) Routine monitoring well sampling. All detection wells, and a representative sample of background wells, shall be sampled and analyzed at least semi-annually for the ground water parameters listed in paragraph (8)(a) of this section, in accordance with the water quality monitoring plan. The owner or operator of a solid waste disposal unit may request a permit condition or modification from the appropriate District Office of the Department to use an alternate monitoring frequency. The Department will approve such condition or modification upon a demonstration that the alternate frequency is appropriate based upon site specific lithology of the aquifer and unsaturated zone, hydraulic conductivity of the aquifer and unsaturated zone, ground water flow rates, minimum distance of travel and the fate and transport of parameters detected.

(e) Routine surface water sampling. Surface waters shall be sampled and analyzed semi-annually for the parameters listed in paragraph (8)(b) of this section, in accordance with the water quality monitoring plan.

(7) Evaluation monitoring, prevention measures and corrective action.

(a) Evaluation monitoring and prevention measures. If monitoring parameters are detected in detection wells in concentrations that are significantly above background water quality, or that are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the permittee may resample the wells within 30 days after the sampling data is received, to confirm the data. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department in writing within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring as follows:

1. Routine monitoring of all monitoring wells, surface water monitoring locations and leachate sampling locations shall continue according to the requirements of subsection (6) of this section.

2. Except as provided in paragraph (b) of this subsection, within 90 days of notification from the Department to initiate evaluation monitoring and annually thereafter, the permittee shall sample and analyze a representative sample of the background wells and all affected detection wells for the parameters listed in paragraph (8)(d) of this section. Any new parameters detected and confirmed in the affected downgradient wells shall be added to the routine ground water monitoring parameter lists required in subsection (6) of this section for the affected wells.

3. Within 90 days of notification from the Department to initiate evaluation monitoring, the permittee shall install and sample compliance monitoring wells at the compliance line of the zone of discharge and downgradient from the affected detection monitoring wells. These wells shall be installed according to the requirements of

paragraph (3)(d) of this section, and, except as provided in paragraph (b) of this subsection, samples from these wells and the affected detection wells shall be analyzed quarterly for the parameters listed in paragraph (8)(a) of this section and any other parameters detected in the affected detection and downgradient wells sampled in subparagraph (7)(a)2. and annually for the parameters listed in paragraph (8)(d). If any contaminants are detected and confirmed in compliance wells in concentrations that exceed both background levels and Department water quality standards or criteria, then the provisions of paragraph (7)(c) of this section apply; otherwise, the following subparagraphs apply.

4. Within 180 days of notification from the Department to initiate evaluation monitoring, the permittee shall submit a contamination evaluation plan to the appropriate Department District Office. This plan shall be designed to delineate the extent and cause of the contamination, in order to predict the likelihood that Department water quality standards will be violated outside the zone of discharge, and to evaluate methods to prevent any such violations. After the Department and the permittee agree that the plan is so designed, the permittee shall implement this plan and submit a contamination evaluation report in accordance with the plan. All reasonable efforts shall be made by the permittee to prevent further degradation of water quality from the landfill activities.

5. If the contamination evaluation report indicates that water quality standards or criteria are likely to be violated outside the zone of discharge, the permittee shall, within 90 days, submit a prevention measures plan to the Department. Upon approval, the permittee shall initiate prevention measures to prevent such violations.

6. The owner or operator of a solid waste disposal unit may request a permit modification from the appropriate District Office of the Department to use an alternate monitoring frequency, for repeated sampling during evaluation monitoring. The Department will grant such modification upon a demonstration that the alternate frequency is appropriate based upon site specific lithology of the aquifer and unsaturated zone, hydraulic conductivity of the aquifer and unsaturated zone, ground water flow rates, minimum distance of travel and the fate and transport of parameters detected.

7. The owner or operator of a solid waste disposal unit may request a permit modification from the appropriate District Office of the Department to delete specific monitoring parameters or field parameters from evaluation analyses of detection or compliance wells. The Department will grant such modification upon a demonstration that these parameters are not reasonably expected to be in or derived from the waste contained in the unit.

8. The permittee shall not discontinue evaluation monitoring, and return to routine monitoring only, until authorized to do so by the Department. The Department shall make this determination based upon the results of the contamination evaluation report and other relevant water quality data.

(b) If the parameters detected in the detection wells identified in paragraph (a) of this subsection consist only of iron, aluminum, manganese, sulfates, or total dissolved solids (TDS), either individually or in any combination, then only the detected parameters are required to be monitored in the representative background wells, affected detection wells and downgradient compliance wells required in this section rather than the parameters listed in paragraphs (8)(a) and (8)(d). However, if the facility is unlined, the parameters specified in paragraph (8)(a) shall also be analyzed for in the initial sampling event for the affected detection wells and downgradient compliance wells.

(c) Corrective actions.

1. If any contaminants are detected and confirmed in compliance wells in concentrations that exceed both background levels and Department water quality standards or criteria, the permittee shall notify the Department within 14 days of this finding and shall initiate corrective actions. Unless alternative corrective actions are specifically required in a permit or consent order in effect on April 17, 2005, corrective actions shall comply with the applicable provisions of Chapter 62-780, F.A.C. This provision is intended to clarify that applicable elements of Chapter 62-780, F.A.C., set forth the appropriate corrective actions in such cases, not to create a new requirement for corrective actions or to incorporate Chapter 62-780, F.A.C., into Chapter 62-701, F.A.C. Evaluation monitoring shall continue according to the requirements of paragraph (7)(a) of this section.

2. For purposes of this rule, Chapter 62-780, F.A.C., is intended to apply only to violations of ground and surface water quality standards and criteria outside of the facility's permitted zone of discharge. Nothing herein is intended to limit a person's liability for site rehabilitation resulting from unauthorized spills, leaks, or discharges of pollutants or hazardous substances.

a. The provisions in Chapter 62-780, F.A.C., regarding assessment and remediation of contamination in soils do not apply.

b. The provisions in Chapter 62-780, F.A.C., regarding source removal, de minimis discharges, emergency response actions, interim source removal, do not apply.

c. To the extent that any requirements in Chapter 62-780, F.A.C., regarding notice, quality assurance, professional certification, frequency of sampling events, emergency response, or long-term care may conflict with similar requirements in Chapter 62-701, F.A.C., or in a facility's permit conditions, the requirements in Chapter 62-701, F.A.C., or the facility's permit, shall govern.

3. For purposes of this rule, the following definitions in Chapter 62-780, F.A.C., shall have the following meanings:

a. "Cleanup target level" means primary and secondary ground water standards, ground water minimum criteria, surface water standards, and surface water toxicity and human health criteria, which are specified in Chapter 62-777, F.A.C.

b. "Contaminated site" means any surface water or ground water outside of the facility's zone of discharge that contains contaminants that may be harmful to human health or the environment.

(8) Water quality parameters. The following list of water quality monitoring parameters shall be used for each type of sampling to be done.

(a) Ground water monitoring parameters:

Field Parameters	Laboratory parameters
Static water level in wells before purging	Total ammonia – N
Specified conductivity	Chlorides
pH	Iron
Dissolved oxygen	Mercury
Turbidity	Nitrate
Temperature	Sodium
Colors and sheens (by observation)	Total dissolved solids (TDS)
	Those parameters listed in 40 CFR Part 258 Appendix I

(b) Surface water monitoring parameters:

Field parameters	Laboratory parameters
Specific conductivity	Unionized ammonia
pH	Total hardness (as mg/L $CaCO_3$)
Dissolved oxygen	Biochemical oxygen demand (BOD_5)
Turbidity	
Temperature	Iron
Colors, sheens (by observation)	Mercury
	Nitrate
	Total dissolved solids (TDS)
	Total organic carbon (TOC)
	Fecal coliform
	Total phosphorus (as mg/L P)
	Chlorophyll A
	Total nitrogen
	Chemical oxygen demand (COD)
	Total suspended solids (TSS)
	Those parameters listed in 40 CFR Part 258 Appendix I

(c) Leachate monitoring parameters:

Field parameters	Laboratory parameters
Specific conductivity	Total ammonia – N
pH	Total alkalinity (as mg/L $CaCO_3$)
Dissolved oxygen	Chlorides

Colors, sheens	Iron
(by observation)	Mercury
Temperature	Nitrate
	Temperature
	Sodium
	Total dissolved solids (TDS)
	Biochemical oxygen demand (BOD_5)
	Chemical oxygen demand (COD)

(d) Those parameters listed in 40 CFR Part 258, Appendix II, as well as the field parameters specified in paragraph (a) of this subsection.

(9) Water quality monitoring reporting.

(a) The landfill owner or operator shall report all representative water quality monitoring results to the Department within 60 days from completion of laboratory analyses, unless a different due date is specified in the permit. This report shall also include any leachate monitoring results obtained in accordance with paragraph (6)(c) of this section. In accordance with subsections 62-160.240(3) and 62-160.340(4), F.A.C., water quality data contained in the report shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit. The permittee shall include Form 62-701.900(31), Water Quality Monitoring Certification, effective date January 6, 2010, hereby adopted and incorporated by reference, with each report certifying that the laboratory results have been reviewed and approved by the permittee. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The operator of the landfill shall notify the Department at least 14 days before the sampling is scheduled to occur so that the Department may collect split samples. The report shall include at least the following:

1. The facility name and identification number, sample collection dates, and analysis dates;
2. All analytical results, including all peaks even if below maximum contaminant levels;
3. Identification number and designation of all surface water and ground water monitoring points;
4. Applicable water quality standards;
5. Quality assurance, quality control notations;
6. Method detection limits;
7. STORET code numbers for all parameters;
8. Water levels recorded prior to evaluating wells or sample collection. Elevation reference shall include the top of the well casing and land surface at each well site at a precision of plus or minus 0.01 foot (using a consistent, nationally recognized datum);

9. An updated ground water table contour map signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, with contours at no greater than one-foot intervals unless site-specific conditions dictate otherwise, which indicates ground water elevations and flow direction; and

10. A summary of any water quality standards or criteria that are exceeded.

(b) A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department every two and one-half years during the active life of the facility, and every five years during the long-term care period. The report shall summarize and interpret the water quality and leachate monitoring results and water level measurements collected during the past two and one-half years. The report shall contain, at a minimum, the following:

1. Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;

2. Trend analyses of any monitoring parameters consistently detected;

3. Comparisons among shallow, middle, and deep zone wells;

4. Comparisons between background water quality and the water quality in detection and compliance wells;

5. Correlations between related parameters such as total dissolved solids and specific conductance;

6. Discussion of erratic and/or poorly correlated data;

7. An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and

8. An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

(c) All field and laboratory records specified in Rules 62-160.600-.630, F.A.C., shall be made available to the Department and be retained for the design period of the landfill.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.510, Amended 5-27-01, 1-6-10.

62-701.520 Special Waste Handling.

(1) Motor vehicles. Motor vehicles that are brought to a landfill may be stored temporarily in a separate area until they are removed for recycling. If vehicles cannot be recycled, all fluids and batteries shall be removed from the vehicles and they shall be compacted to minimize voids before being placed in the disposal area.

(2) Landfilling shredded waste. Landfilling shredded solid waste without daily soil cover may be an environmentally acceptable method of final disposal at a landfill

that meets the requirements of Rule 62-701.340, F.A.C. A properly designed and operated shredding facility shall be approved by the Department contingent upon the following conditions:

(a) Particle size. Seventy percent of all shredded waste, dry weight, shall be capable of passing through a three-inch screen.

(b) Waste shall be spread to a smooth contour and compacted promptly after placement and left undisturbed to prevent odors. Blowing of shredded waste by the wind shall be controlled.

(c) All solid waste storage areas in the shredding facility shall be maintained and cleaned at the end of each day's operations or during continuous operation, as necessary, to prevent vector problems. All equipment shall be designed and maintained to control spillage and to achieve the required product quality.

(d) An operational plan shall include provisions for removal and proper disposal of wastes within 24 hours should the shredding facility break-down or operational quality be diminished. The operational plan shall include provision for a stock pile of emergency soil cover material and a plan to convert the operation to a conventional landfill operation.

(e) Shredded waste disposal units that fill design dimensions shall be closed in accordance with Rule 62-701.600, F.A.C.

(3) Asbestos waste disposal.

(a) Asbestos-containing waste materials may be accepted for disposal at a permitted Class I or 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, shall meet the requirements of 40 CFR Part 61.154, which are incorporated by reference herein. For purposes of this rule, the term "Administrator," when used in 40 CFR Part 61.154, shall mean Secretary of the Department of Environmental Protection.

(b) The waste generator shall make arrangements with the landfill operator before disposal of such regulated asbestos-containing waste materials, 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 shall direct the waste transporter to the designated disposal location. The disposal location shall be recorded in accordance with 40 CFR Part 61.154, and a record of the asbestos location shall be maintained.

(4) Contaminated soil. Soil that has been contaminated with petroleum products or any other materials that are not hazardous wastes may be disposed of in Class I landfills, and may be used as initial or intermediate cover material at solid waste disposal facilities if it meets the criteria of subsections 62-701.200(53) or (55), F.A.C., as appropriate. Contaminated soil that has the potential to leach constituents in excess of Department ground water standards or criteria may be used only at Class I landfills and only in those areas of the landfill where runoff or infiltration is captured by the leachate collection system.

(5) Biological waste disposal.

(a) Disposal of bodies of domestic animals, upon the death of such animals due to disease, shall be accomplished pursuant to Section 823.041(1), F.S. This provision does not prohibit the disposal of such animals in Class I landfills.

(b) Disposal of dead poultry and hatchery residue shall be accomplished pursuant to Section 583.181(2), F.S.

(c) Bodies of captive wildlife, as well as bodies of domestic animals that have not died due to disease, may either be used, burned, disposed of in a Class I landfill, or disposed of on the property where they died provided they are buried at least two feet below the surface of the ground and above the water table.

(d) Biomedical waste that has been treated may be disposed of as solid waste that is not biomedical. Such treated waste must be in containers clearly labeled with the phrase "Treated Biomedical Waste." The local governments that are responsible for solid waste collection and disposal shall be notified that treated biomedical waste will be disposed of in their facility before such disposal. This requirement does not supersede the provisions of Section 381.0098(8), F.S., regarding acute care hospitals. All transport vehicles transporting treated biomedical waste to a solid waste facility for disposal shall be fully enclosed and secured when unattended. This provision shall not be construed as superseding a solid waste management facility operator's authority to set limitations or restrictions on the disposal of treated biomedical waste at that facility. Treated biomedical waste shall be disposed of only at permitted Class I landfills or incinerators used to combust solid waste.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.705, 403.707, 403.708 FS. History–Formerly 10D-12.07, 10-1-74, Amended 5-24-79, 11-25-82, 7-10-84, 12-10-85, Formerly 17-7.06, 17-7.060, 17-701.060, Amended 1-6-93, 1-2-94, Formerly 17-701.520, Amended 5-27-01, 1-6-10.

62-701.530 Gas Management Systems.

(1) Design requirements.

(a) Landfills that receive degradable wastes shall have a gas management system designed to prevent explosions and fires, and to minimize off-site odors, lateral migration of gases and damage to vegetation. Combustible gases shall be calibrated to methane. Owners or operators of such landfills shall submit a general gas management system design as part of their permit application, and may modify that design as necessary at the time of closure based upon site-specific conditions. Landfill gas management systems shall:

1. Be designed to prevent the concentration of combustible gases generated by the landfill from:

a. Exceeding twenty-five percent of the lower explosive limit for combustible gases in structures on- or off-site, excluding gas control or recovery components; and

b. Exceeding the lower explosive limit for combustible gases at or beyond the landfill property boundary;

2. Be designed for site-specific conditions;

3. Be designed to reduce gas pressure in the interior of the landfill by collecting the gases to prevent them from moving laterally. Collection pipes, pathways, or vents shall collect gas from at least the uppermost two-thirds of the filled waste or where the more anaerobic conditions exist. Air shall not be forced into the collection system. Passive venting or suction shall be used to extract gas; and

4. Be designed to not interfere with or cause failure of the liner, leachate control systems or final cover.

(b) Flaring of landfill gases may be used as a method of gas control, particularly control of objectionable odors, in accordance with the permitting requirements of Chapter 62-296, F.A.C.

(c) Landfills using piping or a similar conduit to convey gas shall be furnished with a positive means of gas condensate collection and disposal at each low point in the conveyance system.

(2) Monitoring requirements. Owners or operators of solid waste disposal units at landfills that have received degradable waste shall implement a routine gas monitoring program to ensure that the design requirements of subparagraphs (1)(a)1. and 3. of this section are met. The routine gas monitoring program shall monitor concentrations of combustible gases at ambient monitoring points and in soil monitoring probes.

(a) Ambient monitoring points. Ambient monitoring points shall be located in on-site structures, excluding gas control or recovery components, that can be impacted by combustible gases from the landfill as determined by the location of these structures and property boundaries of the facility.

(b) Soil monitoring probes. Soil monitoring probes shall be installed along each property boundary segment of the facility, particularly those adjacent to off-site occupied structures within 100 feet of the property boundary or where distressed vegetation is present, and shall be spaced as needed to detect gas migration. When locating the soil monitoring probes, the owner or operator shall also consider the location of facility structures and the soil conditions, hydrogeologic conditions and hydraulic conditions surrounding the facility. Soil monitoring probes shall extend to the depth of the base of waste fill or at least three feet below ground surface, whichever is deeper. Sampling shall be conducted in the headspace of the monitoring probe without purging the gas before collecting the sample. Where sand, gravel, or more gas permeable soil strata may interconnect the waste deposit and the property boundary, multiple depth monitoring probes if a confining unit is not penetrated, or a single monitoring probe extending from the soil surface to the water table, are necessary to draw gas samples from the permeable layers.

(c) All ambient monitoring points and soil monitoring probes shall be sampled quarterly for concentrations of combustible gases, and the results reported to the Department no later than 15 days after the end of the quarter in which the monitoring

occurred. Combustible gases shall be determined as a percent of the lower explosive limit and shall be calibrated to methane.

(3) Construction and control requirements. The gas management system shall be constructed and operated as authorized by a Department permit or this section.

(a) Gas remediation plan. If the results of monitoring show that combustible gas concentrations exceed the lower explosive limits specified in subsection (1) of this section, the owner or operator shall:

1. Immediately take all necessary steps to ensure protection of human health and notify the Department; and

2. Within seven days of detection, submit to the Department for approval a gas remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed remedy. The remedy may include some or all of the gas management system design contained in subsection (1) of this section. The remedy shall be completed within 60 days of detection unless otherwise approved by the Department.

(b) Odor remediation plan. The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C. After being notified by the Department that objectionable odors have been confirmed beyond the landfill property boundary, the owner or operator shall:

1. Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;

2. Submit to the Department for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval.

3. Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

(4) Closure requirements. Owners or operators of solid waste disposal units at landfills that have received degradable waste and have been filled to their design dimensions, and have not been certified closed prior to May 27, 2001, shall construct, if not already constructed, and operate a gas management system to ensure that the requirements of subsections (1), (2) and (3) of this section are met.

(5) Landfill gas recovery facilities.

(a) Landfill gas recovery facilities are considered solid waste management facilities, and shall be constructed and operated only in accordance with a Department permit. If a gas recovery facility is included in the approved closure plan or closure permit of the landfill, no separate permit for the facility is required, provided that the facility must meet all the requirements of this subsection.

(b) The application shall be submitted on Form 62-701.900(1), and shall contain at least the following:

1. The information contained in subsections 62-701.320(7) and 62-701.330(3), F.A.C.;

2. Where relevant and practical, the information required in subsection 62-701.600(4), F.A.C.;

3. An estimate of the quantities of gas condensate currently collected or expected to be collected, and a description of how the condensate is or will be disposed of;

4. A description of the procedures for sampling, analyzing, and reporting data from the condensate sampling; and

5. A closure plan that shall include methods to control landfill gasses after operation of the recovery facility ceases and any other requirements contained in subsection 62-701.400(10), F.A.C.

(c) The owner or operator of a gas recovery facility shall post a performance bond to cover the estimated costs of closing the facility. If the gas recovery facility is included in the approved closure plan or closure permit of the landfill, and if the closure costs are included in the landfill closure cost estimates for which financial responsibility is required by Rule 62-701.630, F.A.C., then no separate proof of financial responsibility is required.

(6) Compliance with this section does not relieve an applicant from compliance with any applicable air requirements of Title V, county ordinance, or local programs.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 5-27-01, Amended 1-6-10.

62-701.600 Landfill Final Closure.

(1) Applicability.

(a) Landfills or solid waste disposal units that were closed in a manner approved by the Department prior to January 6, 2010, or that have received final cover before July 1, 1985, are exempt from the requirements of this section, although they remain subject to the rules that were in effect at the time of closing.

(b) Owners or operators of landfills or solid waste disposal units that were no longer receiving wastes on January 6, 2010, that have not been closed in accordance with an approved closure plan or closure permit, and that do have an approved closure plan or closure permit are exempt from the requirements of this section as long as the closure plan or closure permit is complied with.

(c) Landfills or solid waste disposal units that receive wastes after January 6, 2010, shall comply with the requirements of this section.

(2) Closure permit requirements. The owner or operator shall submit an application to the Department for final closure of the landfill, or closure of the solid waste disposal unit, at least 90 days before the date when wastes will no longer be accepted. The application shall be on Form 62-701.900(1). If the landfill is operating under a Department permit, the owner or operator may request a modification of the permit in

lieu of submitting a closure permit application. The application or request for modification shall include an updated closure plan which is made up of the following:

(a) A closure design plan;

(b) A closure operation plan;

(c) A plan for long-term care; and

(d) A demonstration that proof of financial responsibility for long-term care will be provided.

(3) Closure design plan. The closure design plan shall consist of engineering plans and a report on closing procedures that apply to the final closing of solid waste disposal units during the operation of the landfill, the final closing of the landfill, and the monitoring and maintenance during the long-term care period. The closure design plan shall include the following information:

(a) A plan sheet showing phases of site closing.

(b) Drawings showing existing topography and proposed final grades.

(c) Provisions to close solid waste disposal units within the landfill as soon as they reach approved design dimensions and elevations and to finally close the landfill in accordance with the requirements of this rule. Landfills that are designed to be constructed in phases or sections shall include provisions for temporary closure of solid waste disposal units if subsequent, planned filling on top of them will not occur for six months or longer.

(d) Final elevations before settlement, based upon the capability of the foundation to support the total weight of the landfills, including water loading.

(e) Final side slope design. Side slopes of aboveground disposal units shall not be steeper than three feet horizontal to one foot vertical rise to control erosion of the final cover material. Such units shall be designed to control the flow of stormwater, such as building reverse sloping benches or terraces into the side slopes of the landfill, and shall contain down slope drainage ways with water flow energy dissipaters. Access for maintenance equipment shall be provided. Such designs shall address the susceptibility for erosion of the earthen material that is proposed for final cover relative to historical rainfall patterns for the area, the period between the patterns for the area, the period between the application of the final cover and establishment of vegetation, and maintenance procedures.

(f) Final cover installation plans showing the sequence of applying final cover.

1. The final cover shall be installed and tested in accordance with a construction quality assurance plan which meets the requirements of subsections 62-701.400(7) and (8), F.A.C.

2. Final cover shall 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 final cover shall be vegetated to control erosion and provide a moisture infiltration seal, with species that are drought resistant and have roots that will not penetrate the final cover.

3. Top gradients of final cover on landfill areas shall be graded to maximize runoff and minimize erosion, considering total fill height and expected subsidence caused by decomposing waste, and shall be designed to prevent ponding or low spots.

4. The closure design plan shall 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. Landfills shall have a final cover designed to minimize infiltration and erosion, which shall include a barrier layer consisting of a soil layer, a geomembrane, or a combination of a geomembrane with a low permeability material. All geosynthetic and soil components used in the final cover shall meet the standards and specifications contained in subparagraphs 62-701.400(3)(d)1. and 2., (3)(d)5.-11., paragraph (e), and (f), F.A.C. For lined Class I and Class III landfills, the barrier layer shall have a permeability that is substantially equivalent to, or less than, the permeability of the bottom liner system. If the landfill uses a geomembrane in the bottom liner system, the barrier layer shall also incorporate a geomembrane. For unlined Class I landfills, the barrier layer shall have a permeability of 1×10^{-7} cm/sec or less. For unlined Class III landfills, the barrier layer shall have a permeability of 1×10^{-5} cm/sec or less. For unlined Class III landfills which accepted only yard trash, no barrier layer is required; instead, final cover shall consist of a 24-inch thick soil layer, the upper six inches of which shall be capable of supporting vegetative growth.

2. If the barrier layer consists only of soil, it shall be at least 18 inches thick, installed in 6-inch thick lifts, and shall have a final, 18-inch thick layer of soil that will sustain vegetation to control erosion placed on top of the barrier layer.

3. If the barrier layer consists only of a GCL, a protective soil layer at least 24 inches thick shall be placed on top of the GCL with the upper six inches being able to sustain vegetative growth. The GCL shall be placed on a protective soil layer at least six inches thick. Material specifications and installation methods, which may include a drainage layer between the GCL and the protective soil layer over the GCL, shall be adequate to protect the barrier layer from root penetration, resist erosion, and remain stable on the final design slopes of the landfill.

4. If a geomembrane is used in the barrier layer, it shall be either HDPE or LLDPE with a minimum average thickness of 40 mils or PVC with a minimum average thickness of 30 mils, shall have chemical and physical resistance to materials it may come in contact with, and shall withstand exposure to the natural environmental stresses and forces throughout the installation, seaming process, and settlement of the waste during the closure and long-term care period. A protective soil layer at least 24 inches thick shall be put on top of the geomembrane. Material specifications, installation methods, and compaction specifications, which may include a drainage layer between the geomembrane and the protective soil layer, shall be adequate to protect the barrier

layer from root penetration, resist erosion, and remain stable on the final design slopes of the landfill. This layer shall include topsoil or soils that will sustain vegetative growth.

5. The final cover design shall include an evaluation of the stability of the cover system and the disposed waste and shall be designed to meet the factor of safety criteria in subsection 62-701.400(2), F.A.C. This evaluation shall include an analysis of the potential for slides along the weakest interface of the final cover system and of the potential for deep seated rotational or translational failures through the waste and the final cover.

6. An applicant may use an alternate design for the barrier layer or parts of the barrier layer, or for the protective soil layer, upon a demonstration that the alternate design will result in a substantially equivalent rate of storm water infiltration through the final cover. Any alternate design shall be reviewed by the Department as part of its review of the closure design plan.

7. Nothing herein shall preclude the Department from requiring more stringent final or temporary cover designs in a permit or consent order if necessary to protect the public health or the environment because of the nature of wastes received or site specific geological or hydrogeological conditions, or if the landfill has not been adequately constructed, operated, maintained, or closed.

(h) Proposed method of stormwater control. The closure design plan shall demonstrate how the stormwater management systems shall be operated and maintained as necessary to meet the requirements of subsection 62-701.400(9), F.A.C.

(i) Proposed method of access control. The closure design plan shall show how access to the closed landfill shall be restricted to prevent any future waste dumping or use of the facility by unauthorized persons.

(j) A description of the proposed or existing gas management system that complies with Rule 62-701.530, F.A.C.

(4) Closure operation plan. The closure operation plan shall:

(a) Describe the actions that will be taken to close the landfill, such as placement of cover, grading, construction of berms, ditches, roads, retention-detention ponds, installation or closure of wells and boreholes, installation of fencing, seeding of vegetation, and protection of on-site utilities and easements;

(b) Provide a time schedule for completion of the closing and long-term care;

(c) Contain appropriate references to the closure design and other supporting documents;

(d) Describe the proposed method of demonstrating financial assurance for long-term care;

(e) Provide for operation of the water quality monitoring plan required in Rule 62-701.510, F.A.C.; and

(f) Provide for the development and implementation of the gas management system required in Rule 62-701.530, F.A.C.

(5) The owner or operator shall close the facility only in accordance with the closure design plan submitted with the permit application. The owner or operator shall at all times comply with the closure operation plan submitted with the permit application.

(6) Certification of closure construction completion. After closure construction has been completed, the engineer of record shall certify to the Department on Forms 62-701.900(2) that the closure is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated. If the certification is for the final closure of a landfill, it shall include a certification that one of the following has been done:

(a) For landfills with a final elevation of less than 20 feet above the natural land surface, concrete monuments shall be installed to mark the boundaries of the landfill property and other permanent markers shall be installed to outline the general waste filled areas. These markers shall be tied to one or more of the boundary markers by a survey performed by an engineer or a Florida Licensed Professional Surveyor and Mapper. The location and elevation of all markers shall be shown on a site plan filed with the "Declaration to the Public" described in subsection (7) of this section.

(b) For landfills with a final elevation of 20 feet or higher above the natural land surface, a final survey shall be performed after closure is complete by an engineer or a Florida Licensed Professional Surveyor and Mapper to verify that final contours and elevations of the facility are in accordance with the plans as approved in the permit. Aerial mapping techniques which provide equivalent survey accuracy may be substituted for the survey. Contours shall be shown at no greater than five-foot intervals. A copy of the survey shall be included with the certification of closure construction completion.

(7) Declaration to the public. Once closure construction has been completed, the landfill owner or operator shall file a declaration to the public in the deed records in the office of the county clerk of the county in which the landfill is located. The declaration shall include a legal description of the property on which the landfill is located and a site plan specifying the area actually filled with solid waste. The declaration shall also include a notice that any future owner or user of the site should consult with the Department prior to planning or initiating any activity involving the disturbance of the landfill cover, monitoring system or other control structures. A certified copy of the declaration shall be filed with the Department.

(8) Official date of closing. The Department shall evaluate the documents required in subsections (6) and (7) of this section, and within 30 days of its determination that such documents comply with the closure plan and the requirements of this section shall acknowledge by letter to the facility operator that closing of the facility has been completed. If the entire landfill has been closed, the date of this letter shall be the official date of landfill closing for purposes of determining the long-term care period. If only a portion of the landfill has been closed, the long-term care period will

begin upon the closing of the entire landfill, unless the portion that has been closed can be monitored and maintained separately from the rest of the landfill.

(9) Temporary closure.

(a) Placement of final cover over a solid waste disposal unit may be delayed for a period of time specified in an approved closure plan for the following reasons:

1. For the purpose of promoting biological degradation of waste;

2. If additional solid waste will be deposited on the solid waste disposal unit; or

3. If excavation of the waste is planned.

(b) Placement of final cover may be delayed only if the solid waste disposal unit is temporarily closed in accordance with an approved closure plan. Conditions of temporary closure shall include:

1. The solid waste disposal unit was constructed in compliance with its permit conditions, and has a liner and leachate control system;

2. A schedule for closure is shown in the closure plan application;

3. Final cover is installed on side slopes of each completed disposal unit that will not receive additional waste or that will not be excavated, except that if a landfill owner or operator can demonstrate in individual cases that a different process will be adequate to control erosion and odors, and will be expected to result in compliance with applicable stormwater and leachate management requirements, it can be approved as part of the closure plan;

4. Odors and vectors are controlled;

5. An intermediate cover is installed on the solid waste disposal unit;

6. The financial assurance requirements of Rule 62-701.630, F.A.C., are met, and the closure cost estimate takes into account the costs of temporary closure as well as the costs of the final closure; and

7. The landfill owner or operator demonstrates that delaying placement of final cover will not cause or contribute to any significant increase in leachate escaping from the solid waste disposal unit into the environment.

(c) In addition, a solid waste disposal unit that will be excavated in the future shall have a temporary final cover installed.

Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 1-6-93, Amended 1-2-94, 5-19-94, Formerly 17-701.600, Amended 5-27-01, 1-6-10.

62-701.610 Other Closure Procedures.

(1) Use of closed solid waste disposal facilities. Closed solid waste disposal facilities, if disturbed, are a potential hazard to public health, ground water and the environment. The Department retains regulatory control over any activities that may affect the integrity of the environmental protection measures such as the cover, drainage, liners, monitoring systems, or leachate and stormwater controls. Consultation

with the Department is required prior to conducting activities at the closed solid waste disposal facilities.

(2) Relocation of waste. The owner of a closed landfill must request permission from the Department to move waste from one point to another within the footprint of the same solid waste disposal unit. If the landfill has a valid closure permit, the permittee shall seek a modification to reflect the relocation of waste. The Department shall approve such a request upon a demonstration that:

(a) The activity will not cause or contribute to any leachate leakage from the landfill, and will not adversely affect the closure design of the landfill;

(b) Any leachate, stormwater runoff, or gas that is generated by the activity is controlled on site;

(c) Any hazardous waste that is generated by the activity will be managed in accordance with Chapter 62-730, F.A.C.;

(d) Immediately after the activity is completed, the landfill will be covered, vegetated, and graded to comply with the closure requirements that apply to that landfill, which shall include a final cover of at least two feet of soil; and

(e) The appropriate District Office of the Department is notified at least seven days before the activity takes place in order to have the opportunity to inspect the site. Rulemaking Authority 403.704 FS. Law Implemented 403.704, 403.707 FS. History–New 7-1-85, Formerly 17-7.074, 17-701.074, Amended 1-6-93, 1-2-94, Formerly 17-701.610, Amended 5-27-01, 1-6-10.

62-701.620 Long-Term Care.

(1) Long-term care period. The owner or operator of any landfill which receives wastes after January 6, 1993, shall continue to monitor and maintain the integrity and effectiveness of the final cover as well as other appurtenances of the facility, control erosion, fill subsidences, comply with the ground water monitoring plan, and maintain the stormwater system, in accordance with an approved closure plan for 30 years from the date of closing. Before the expiration of the long-term care monitoring and maintenance period, the Department may extend the time period if the closure design or closure operation plan is found to be ineffective, or if the permittee has not performed all required monitoring and maintenance. For purposes of this subsection, "ineffective" means that:

(a) The ground water monitoring system indicates that the landfill continues to impact ground water at concentrations that may be expected to result in violations of Department water quality standards or criteria;

(b) The gas monitoring system indicates that the landfill continues to produce gas in amounts that may be expected to exceed the concentrations of combustible gases allowed in paragraph 62-701.530(1)(a), F.A.C.;

(c) Significant subsidence of waste has not ceased; or

(d) The final cover does not have well established vegetation or is showing signs of continuing significant erosion problems.

(2) Permit for long-term care. Long-term care shall be conducted in accordance with a closure permit. Closure permits involving only long-term care shall be issued with a duration of ten years unless the owner or operator specifically requests a shorter duration. If a shorter duration is requested, the permit fee shall be prorated.

(3) Reduced long-term care period. The owner or operator of a landfill may apply to the appropriate District Office of the Department for a permit modification to reduce the long-term care period or eliminate some aspects of long-term care. The Department will grant such modification if reasonable assurance is provided to the Department that there is no threat to human health or the environment and if the landfill:

(a) Has been constructed and operated in accordance with approved standards;

(b) Was closed with appropriate final cover, vegetative cover has been established, and a monitoring system has been installed;

(c) Has a 10-year history after closure of no violations of water quality standards or criteria detected in the monitoring system, and no increases over background water for any monitoring parameters which may be expected to result in violations of water quality standards or criteria; and

(d) Has had no detrimental erosion of cover, and subsidence of waste has ceased.

(4) Modified ground water monitoring plan. The owner or operator of a landfill may apply to the appropriate District Office of the Department for a modification to their ground water monitoring plan to remove a parameter from the list specified in subsection 62-701.510(8), F.A.C. The Department will grant such modification upon a demonstration that leachate and ground water have consistently been sampled and analyzed for the parameter, and that the parameter has never been detected in the leachate or in any ground water well or surface water point during the active life of the landfill.

(5) Gas monitoring. The gas collection and monitoring system required in paragraph 62-701.600(4)(f), F.A.C., shall be maintained for the long-term care period of the landfill. The owner or operator of a landfill may apply to the appropriate District Office of the Department for a permit modification to reduce the long-term care period. The Department will grant such a modification if the applicant demonstrates that the landfill has stabilized to the point where there is no significant production of combustible gases or objectionable odors.

(6) Stabilization report. Every five years after issuance of a permit for long-term care, the permittee shall submit a report to the Department that addresses stabilization of the landfill. The submittal shall include the technical report required in paragraph 62-701.510(9)(b), F.A.C., and shall also address subsidence, barrier layer effectiveness, storm water management, and gas production and management. For lined landfills, the submittal shall also address leachate collection and removal system effectiveness, leachate quality, and leachate quantity.

(7) Right of access. The landfill owner or operator shall possess or acquire a sufficient interest in, or a right to use, the property for which a permit is issued, including the access route onto the property to carry out the requirements of this rule. The permittee shall retain the right of entry to the landfill property for the long-term care period, after termination of solid waste operations, for inspection, monitoring and maintenance of the site.

(8) Replacement of monitoring devices. If a monitoring well or other device required by the monitoring plan is destroyed or fails to operate for any reason, the landfill owner or operator shall, immediately upon discovery, notify the Department in writing. All inoperative monitoring devices shall be replaced with functioning devices within 60 days of the discovery of the malfunctioning unit unless the landfill owner or operator is notified otherwise in writing by the Department.

(9) Following completion of the long-term care period for each solid waste management unit, the owner or operator shall notify the Department that a certification, signed and sealed by a professional engineer, verifying that long-term care has been completed in accordance with the closure plan has been placed in the operating record. Rulemaking Authority 403.704 FS. Law Implemented 403.703(5), 403.704, 403.707 FS. History–New 7-1-85, Formerly 17-7.075, 17-701.075, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.620, Amended 5-27-01, 1-6-10.

62-701.630 Financial Assurance.

(1) Owner or operator.

(a) "Owner or operator" means, in addition to the usual meanings of the term, any owner of record of any interest in land whereon a landfill is or has been located and any person or corporation which owns a majority interest in any other corporation which is the owner or operator of a landfill.

(b) The owner or operator identified on financial assurance documentation shall be the same individual, registered business entity (not a fictitious name) or government entity as the permit applicant. If there are multiple permittees, only one need be identified on the financial assurance documentation.

(2) Applicability.

(a) A government-owned landfill closed on or before October 1, 1988, shall not be required to comply with this rule.

(b) As a condition for the issuance of a landfill permit, permit transfer, or permit modification authorizing expansion, the owner or operator shall provide the Department with proof of financial assurance issued in favor of the Florida Department of Environmental Protection in the amount of the closing and long-term care cost estimates for the landfill. This proof shall be submitted to the Department as part of the permit application process, except as provided in paragraph (c) of this subsection. The financial mechanism shall either be:

1. If the landfill is owned or operated by a government agency, a landfill management escrow account pursuant to subsection (5) of this section or an alternate financial mechanism pursuant to subsection (6); or

2. If the landfill is not owned or operated by a government agency, an alternate financial mechanism pursuant to subsection (6) of this section.

(c) A permittee may delay submitting proof of financial assurance for a solid waste disposal unit under the following conditions. Such proof must be submitted at least 60 days prior to the planned acceptance of any solid waste. Under no circumstances shall the permittee receive waste at the solid waste disposal unit until it has received written acknowledgement from the Department that the financial mechanism has been properly submitted and funded.

1. The solid waste disposal unit for which a permit is being sought has not received solid waste for storage or disposal;

2. The permit being sought does not authorize operation of the solid waste disposal unit, or requires a specific separate approval by the Department prior to operation being authorized;

3. The permittee identifies the type of financial mechanism it intends to use, and provides reasonable assurance as part of the permit application that it is capable of obtaining and using the identified mechanism; and

4. The permittee submits Form 62-701.900(29), Financial Assurance Deferral Application, effective date January 6, 2010, hereby adopted and incorporated by reference, as part of the permit application. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. This form will inform the permittee of these requirements, and will include an acknowledgement by the permittee agreeing not to accept waste until the financial assurance has been approved.

(d) Owners or operators of existing Class I landfills receiving waste after October 9, 1993, that are required to undertake a corrective action program in accordance with subsection 62-701.510(7), F.A.C., shall submit proof of financial assurance to the Department no later than 120 days after the corrective action remedy has been selected.

(3) Cost estimates for closure.

(a) For the purposes of determining the amount of proof of financial assurance that is required by this section, the owner or operator shall estimate the total cost of closure in current dollars for the permitted portions of the landfill and for those portions of the landfill for which a permit is sought, for the time period in the landfill operation when the extent and manner of its operation make closing most expensive. The annual cost of long-term care shall be estimated, listed separately, and multiplied by the number of years required in the long-term care period. The owner or operator shall submit the estimates, together with all necessary justification, to the Department as part of the permit application. The costs shall be estimated and certified by a

professional engineer for a third party performing the work, on a per unit basis, with the source of estimates indicated.

(b) Closing costs shall be based on the nature and characteristics of the wastes disposed of at the site and shall include estimated costs of cover material, topsoil, seeding, fertilizing, mulching, labor, and any other costs of compliance with Rules 62-701.600-.610, F.A.C.

(c) Long-term care costs shall include land surface care; gas monitoring; leachate pumping, transportation, monitoring and treatment; ground water monitoring, collection and analysis; and any other costs of compliance with Rule 62-701.620, F.A.C.

(d) Cost estimates required in this section shall be prepared and submitted on Form 62-701.900(28), Closure Cost Estimating, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(e) The owner or operator shall keep the latest closure cost estimate at the facility. When this estimate has been adjusted in accordance with paragraph (4)(a) of this section, the latest adjusted closure cost estimate shall also be kept at the facility.

(4) Cost adjustments for closure.

(a) Every owner or operator of a landfill shall annually adjust the closure cost estimate for inflation and submit updated information to the Department. Closing and long-term care costs shall be listed separately. For owners or operators using an alternate financial mechanism, this statement shall be submitted between January 1 and March 1 of each year. For owners or operators using an escrow account, this statement shall be submitted between July 1 and September 1 of each year. This paragraph does not prohibit an owner or operator from submitting other information updating the closure cost estimate at other times of the year. Such adjustments shall be made either by:

1. Recalculating the total cost of closure or long-term care, in current dollars, as specified in subsection (3) of this section; or

2. Using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business as specified in sub-subparagraphs (4)(a)2.a. and b. of this section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

a. The first adjustment is made by multiplying the closure or long-term care cost estimate by the inflation factor. The result is the adjusted closure or long-term care cost estimate.

b. Subsequent adjustments are made by multiplying the latest adjusted closure or long-term care cost estimate by the latest inflation factor.

(b) At the time of permit renewal, or every fifth year when a permit is issued with a duration greater than 5 years, the owner or operator shall revise the cost

estimate. Revisions shall be made by recalculating the total cost of closure or long-term care, in current dollars, as specified in subsection (3) of this section.

(c) In addition to the requirements of paragraphs (a) and (b) of this subsection, the owner or operator shall revise the closure cost estimate by recalculating the total cost of closure or long-term care, in current dollars, as specified in subsection (3) of this section, in the following situations:

1. Prior to any changes to the closing or long-term care plan;

2. Within 30 days of discovery that any of the anticipated costs that formed the basis of the current approved closure cost estimate have changed significantly; or

3. Within 30 days of issuance of an order pursuant to subsection 62-701.730(18), F.A.C., finding that the facility has exceeded any of its permitted dimensions.

(d) If the value of the alternative funding mechanism is less than the total amount of the current closure cost estimate, the owner or operator shall revise the funding mechanisms to reflect the new estimate within the time frames outlined in 40 CFR Part 264, Subpart H.

(5) Landfill management escrow account.

(a) The owner or operator of a landfill that is owned or operated by a government agency shall establish a fee, or a surcharge on existing fees, or other appropriate revenue-producing mechanism, to ensure the availability of financial resources for the proper closing and long-term care of the landfill.

(b) The revenue-producing mechanism shall produce revenue at a rate sufficient to generate funds to meet state landfill closure requirements.

(c) The revenue shall be deposited in an interest-bearing escrow account with a financial institution such as a bank or trust whose operations are regulated and examined by a federal or state agency, or deposited in a Department-approved investment pool, created by the State of Florida or local governments, that has as its primary objective liquidity and preservation of principle. The owner or operator shall file with the Department a signed duplicate original of the escrow agreement and an annual audit of the account. The audit shall be conducted by an independent Certified Public Accountant and shall be filed no later than March 31 of the following year. The audit shall identify where funds are on deposit, give the landfill management escrow account balance as of the end of the fiscal year and itemize, by facility, amounts restricted for closing and long-term care. The audit shall also include a list by date of all deposits and withdrawals made.

(d) Payments into the landfill management escrow account shall be made by the owner or operator at least annually.

1. The first payment must be made before the end of the first fiscal year after the initial receipt of solid waste into the landfill. A notice of such payment shall be submitted to the Department. Subsequent payments must be made over the term of the active life of the landfill. The calculations for such annual payment shall be determined using one of the following methods:

a. "Pay-in" method: payment = (CE - CV)/Y, where CE is the current dollar closing cost estimate at the beginning of the fiscal year, CV is the current value of the escrow account at the beginning of the fiscal year, and Y is the number of remaining years in the design life of the landfill at the beginning of the fiscal year; or

b. "Balance" method: the fiscal year end account balance = [CE x (DE/DL)] – E, where CE is the approved current dollar closing cost estimate (by solid waste disposal unit) at the beginning of the fiscal year; DE, the design life exhausted (by solid waste disposal unit), is the period of time between the initial receipt of waste and the current fiscal year end; DL, the design life (by solid waste disposal unit), is the period of time between initial receipt of waste and end of receipt of waste; and E, all documented closing expenditures to date (by solid waste disposal unit), are expenses identified by the fiscal year end audit(s) as being incurred closing or maintaining the landfill identified in the closure plan. The choice of use of this formula requires the continued use throughout the remaining design life of the landfill or phase. In the event the fiscal year end audited account balance exceeds the required balance, the owner or operator may remove the excess funds upon written authorization from the Department.

2. For government-owned landfills, the owner or operator shall deposit into the escrow account, at the time of closing and each year thereafter, sufficient funds to cover the following year's long-term care costs. In addition, the owner or operator must document specifically how it intends to finance the long-term care of the landfill as part of its closure plan.

3. For landfills not owned by a governmental agency, the long-term care costs shall be included in the closing cost estimates as specified in subparagraph 1. above; long-term care costs must be fully funded when the landfill closes.

4. The owner or operator may accelerate payments into the landfill management escrow account or may deposit the full amount of the current closure cost estimate at the time that the account is established.

(e) The owner or operator may make expenditures from the account and its accumulated interest only for the purpose of landfill closing and long-term care and, if such expenditures do not deplete the fund to the detriment of eventual closing and long-term care as described under the certification procedure in subsection (4) of this section, for planning and construction of resource recovery or landfill facilities. If the owner or operator does not operate a landfill, any funds remaining in the account after paying for proper and complete closing and long-term care, as determined by the Department, shall be deposited by the owner or operator into the general fund of the local government of jurisdiction.

(f) The revenue generated under this subsection and any accumulated interest thereon may be applied to the payment of, or pledged as security for, the payment of revenue bonds issued in whole or in part for the purpose of complying with state landfill closing and long-term care requirements. Such application or pledge may be made directly in the proceedings authorizing such bonds or in an agreement with an insurer of bonds to assure such insurer of additional security therefore.

(g) The owner or operator of any landfill that had established an escrow account prior to January 1, 2007, may continue to use that escrow account to provide financial assurance for closure of that landfill, even if that landfill is not owned or operated by a government agency.

(6) Alternate proof of financial assurance.

(a) The appropriate part of Form 62-701.900(5), Financial Mechanisms for Solid Waste Management Facilities Requiring Closure and/or Long-term Care, effective date January 6, 2010, hereby adopted and incorporated by reference, shall be used, and originally signed duplicates submitted, when demonstrating proof of financial assurance under this section. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Proof of financial assurance under this subsection shall include surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, closure insurance (excluding independent procurement), or financial tests and corporate guarantees, showing that the owner or operator has sufficient financial resources to cover, at a minimum, the costs of complying with all state landfill closing and long-term care requirements. If such proof of financial assurance is surety bonds, letters of credit, trust fund agreements, closure insurance or financial tests and corporate guarantees, such proof shall be submitted on forms provided by the Department in accordance with the requirements of paragraphs (b) through (d) of this subsection. If proof of financial assurance is securities or certificates of deposit, these instruments must be used in conjunction with a trust fund and shall be submitted directly to the trustee. The owner or operator shall estimate such costs pursuant to subsection (3) of this section.

(b) 40 CFR Part 264 Subpart H which contains EPA's rules on financial requirements for owners and operators of hazardous waste facilities are hereby adopted as financial requirements for purposes of this section incorporated by reference as those rules appear in 40 CFR Part 264, revised as of July 1, 2007, except:

1. The following sections of 40 CFR Part 264, Subpart H are specifically not adopted as part of this rule:

a. 264.140; 264.141(a); 264.141(e); 264.142(b); 264.142(c); 264.143(f)(1); 264.144(b); 264.144(c); 264.145(f)(1); 264.147; 264.149; 264.150; and 264.151.

b. All references to 40 CFR Part 265.

c. All references to sections or subparts of 40 CFR Part 264 not contained in Subpart H.

d. All references to EPA Regions.

e. All references to RCRA.

f. 264.140(c) when referring to landfills owned or operated by a government agency.

2. References to 40 CFR 264.143(f)(1) and 264.145(f)(1) shall mean paragraph 62-701.630(6)(c), F.A.C. References in 40 CFR Part 264, Subpart H to the United States Environmental Protection Agency (EPA) shall mean the State of Florida

Department of Environmental Protection (DEP); to Regional Administrator shall mean the Secretary of the Department or the Secretary's written designee; to RCRA permits shall mean solid waste management permits; to Post-Closure Care/Post-Closure Cost Estimate shall mean Long-Term Care/Long-Term Care Cost Estimate; to EPA identification number shall mean the Department identification number; to hazardous waste shall mean solid waste; to hazardous waste treatment, storage or disposal facilities shall mean landfills; to Section 3008 of RCRA shall mean FDEP Agency Action; to Circular 570 of the U.S. Department of the Treasury shall mean Circular 570 of the U.S. Department of the Treasury and licensed to do business in the State of Florida; and to one or more states shall mean in the State of Florida.

(c) An owner or operator may satisfy the requirements of this subsection by passing a financial test using Form 62-701.900(5)(e). To pass this test the owner or operator must meet the criteria of either subparagraph 1. or 2. as follows:

1. The owner or operator must have:

a. One of the two following ratios: A ratio of less than 1.5 comparing total liabilities to net worth; or a ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus $10 million, to total liabilities;

b. Net working capital of at least three times the sum of the required action;

c. Tangible net worth greater than the sum of the required action plus $10 million, or at least three times the sum of the required action, whichever is greater; and

d. Assets located in the United States amounting to at least three times the sum of the required action.

2. The owner or operator must have:

a. A bond issuance, secured or unsecured, having a redemption date with at least five years remaining. An unsecured bond rating must maintain a rating of BBB or better as issued by Standard and Poor's bond rating service or Baa2 or better as issued by Moody's bond rating service. A facility using an insured or secured bond must demonstrate to the Department the bond rating as assigned by Standard and Poor's would be BBB or better, or as assigned by Moody's would be Baa2 or better, if the bond was not an insured or backed security but a bond debenture;

b. Tangible net worth greater than the sum of the required action plus $10 million, or at least three times the sum of the required action, whichever is greater; and

c. Assets located in the United States amounting to at least three times the sum of the required action.

(d) Government-owned facilities providing proof of financial assurance using a financial test must send updated information outlined in 40 CFR 264.143(f)(5) and 264.145(f)(5) to the Department within 180 days after the close of each succeeding fiscal year.

(7) Cost estimates for corrective action. An owner or operator of a landfill required to establish financial assurance for a corrective action program pursuant to paragraph (2)(d) of this section shall have a detailed written estimate in current dollars, estimated and certified by a professional engineer, of the cost of hiring a third party to

perform the corrective action in accordance with subsection 62-701.510(7), F.A.C. The corrective action cost estimate must account for the total cost of corrective action activities as described in the corrective action plan for the entire corrective action period. The owner or operator shall submit the estimate, together with all necessary justification, to the Department for approval along with proof of financial assurance.

(8) Cost adjustments for corrective action.

(a) The owner or operator shall annually adjust the estimate for inflation and changes in the corrective action plan until the corrective action program is completed in accordance with subsection 62-701.510(7), F.A.C. The adjustment shall be made either by:

1. Recalculating the maximum cost of corrective action, in current dollars, as specified in subsection (7) of this section; or

2. By using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business as specified in subparagraphs a. and b. as follows. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

a. The first adjustment is made by multiplying the corrective action cost estimate by the inflation factor. The result is the adjusted corrective action cost estimate. Inflation adjusted estimates shall be submitted along with annual closing and/or long-term care cost estimates.

b. Subsequent adjustments are made by multiplying the latest adjusted corrective action cost estimate by the latest inflation factor.

(b) At the time of permit renewal or if the corrective action plan is modified during the corrective action period, the owner or operator shall revise the corrective action cost estimate. Revisions shall be made and submitted as specified in subparagraph (8)(a)1. of this section. The use of cost estimates that are submitted in accordance with this subsection and used as the basis for comparison against the balance of the funding mechanisms specified in subsection (9) of this section does not constitute estimate approval.

(c) The owner or operator shall keep the latest corrective action cost estimate and, when this estimate has been adjusted in accordance with paragraph (8)(a) of this section, the latest adjusted corrective action cost estimate at the facility until the corrective action is complete.

(9) Financial assurance for corrective action.

(a) For government owned landfills, the owner or operator shall demonstrate proof of financial assurance for corrective action with the Department by identifying a revenue source and establishing an escrow account as specified in paragraph (5)(c) of this section, or by using one of the approved alternate mechanisms specified in subsection (6) of this section. Payments into the landfill management escrow account shall be made by the owner or operator according to one of the following methods:

1. The owner or operator shall deposit into the landfill management escrow the full cost associated with the corrective action remedy within 120 days after the corrective action remedy has been selected; or

2. If the local government can document a specific non-general revenue source adequate to cover the total corrective action cost, then only that portion of the corrective action to be undertaken the following year need be funded.

(b) For privately owned landfills, the owner or operator shall demonstrate proof of financial assurance for corrective action with the Department by using one of the approved alternate mechanisms specified in subsection (6) of this section. If a trust fund is used, the first payment into the trust must be at least equal to one-half of the current cost estimate for corrective action. The amount of subsequent payments must be determined by the following formula: Next payment = [RB – CV]/Y, where RB is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period. The pay-in period is one-half of the estimated length of the corrective action program.

(10) If long-term care is extended because the permittee has failed to perform all required monitoring and maintenance, financial assurance shall continue to be required during the extended long-term care. If the long-term care is extended for any other reason, financial assurance is not required during the extended long-term care period, except as may be required in subsections (7) through (9) of this section. Rulemaking Authority 403.704 FS. Law Implemented 403.704, 403.707 FS. History– New 7-1-85, Formerly 17-7.076, Amended 11-28-89, Formerly 17-701.076, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.630, Amended 5-27-01, 1-6-10.

62-701.640 Closure of Existing Landfills. (REPEALED)

Specific Authority 403.704, FS. Law Implemented 403.704, 403.707, FS. History -- New 1-2-94, Amended 5-19-94, Formerly 17-701.640, Repealed 5-27-01.

62-701.700 Materials Recovery Facilities. (REPEALED)

Specific Authority 403.061, 403.704, FS. Law Implemented 403.702, 403.704, 403.707, FS. History -- New 1-6-93. Amended 5-19-94, Formerly 17-701.700, Amended 5-27-01.

62-701.710 Waste Processing Facilities.

(1) Applicability.

(a) This section applies to solid waste management facilities that process but do not dispose of solid waste on-site. This includes materials recovery facilities and transfer stations, but does not include used oil processing facilities, waste tire processing facilities, soil treatment facilities, yard trash processing facilities that meet the registration requirements of Rule 62-709.320, F.A.C., or solid waste composting

facilities, each of which is regulated under separate rules. Solid waste combustors will require permits under this section for any storage, processing, or disposal operations that are not directly addressed in another Department permit or certification as specified in paragraphs 62-701.320(14)(a) and (b), F.A.C. However, in accordance with paragraph 62-701.320(5)(c), F.A.C., owners or operators of facilities which manage several different types of wastes, including used oil, waste tires, contaminated soil, or compost, may apply for a single permit which addresses all applicable requirements.

(b) No person shall construct or operate a waste processing facility without a permit issued by the Department. All modifications or renewals of existing permits, and all new construction or operation permits issued on or after May 27, 2001, for waste processing facilities, shall comply with this rule.

(c) For facilities operating under a general permit, a timely and sufficient application for an individual permit will be considered a renewal application for purposes of Section 120.60(4), F.S.

(d) A waste processing facility which ceases accepting waste prior to the expiration of its permit shall close in accordance with the provisions of that permit.

(e) The following types of facilities are not subject to the requirements of this section; however, these facilities shall be operated to minimize the discharge of leachate to the environment and to control objectionable odors, litter, dust, and other fugitive particulates:

1. Facilities comprised solely of green boxes, compactor units, permanent dumpsters, and other containers from which wastes are transported to a landfill or other solid waste management facility, which do not accept waste from commercial waste haulers that accept waste from multiple generators;

2. Facilities owned or operated by local governments which serve as drop-off points for household waste, provided:

a. The facility accepts only household waste, which may include yard trash;

b. All putrescible waste, household garbage, yard trash, or other waste which may produce leachate is containerized; and

c. The facility does not accept waste from commercial waste haulers that collect municipal solid waste from multiple generators;

3. Household hazardous waste collection centers operated by or exclusively on behalf of a local government;

4. Facilities at industrial operations where waste is stored prior to shipment to a solid waste management facility, or where industrial byproducts are segregated and managed, provided that the industrial operation is regulated under another Department permit or certification.

5. Facilities used solely for the temporary storage of road maintenance byproducts, which include street sweepings, ditch scrapings, shoulder scrapings, and catch basin sediments, provided:

a. Materials that require screening, as well as separated Class I wastes, shall be stored so that leachate and litter are controlled. Examples would include

storage in covered roll-offs, storage on an impervious surface and under roof, or storage indoors;

b. Unscreened materials that will not be beneficially used shall be disposed of as soon as practical but shall be stored for no longer than three months unless a longer storage time is approved by the Department;

c. Class I wastes that are separated from the material shall be disposed of at a permitted facility at least weekly; and

d. Screened materials, or materials that do not require screening, shall be stored for no longer than six months unless a longer storage time is approved by the Department.

(2) Application. A permit application for a waste processing facility shall be submitted on Form 62-701.900(4), Application to Construct, Operate, or Modify a Waste Processing Facility, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The form shall indicate whether the facility will operate as a materials recovery facility, transfer station, some other type of processing facility, or some combination thereof, shall be signed and sealed by a professional engineer, and shall include the information required in subsections 62-701.320(5), (6), (7), and paragraph (8)(a), F.A.C., specifically including:

(a) A description of the solid waste that is proposed to be collected, stored, processed or disposed of by the facility, a projection of those waste types and quantities expected in future years, and the assumptions used to make the projections;

(b) A site plan, of a scale not greater than 200 feet to the inch, which shows the facility location, total acreage of the site, and any other relevant features such as water bodies or wetlands on or within 200 feet of the site and potable water wells or withing 500 feet of the site;

(c) A description of the operation and functions of all processing equipment that will be used, with design criteria and expected performance. The description shall show the flow of solid waste and associated operations in detail, 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; and

3. Potential safety hazards and control methods, including fire detection and control;

(d) A description of loading, unloading, storage, and processing areas;

(e) Identification and capacity of any on-site storage areas for recyclable materials, non-processable wastes, unauthorized wastes, and residues;

(f) A plan for disposal of unmarketable recyclable materials and residue, and for waste handling capability in the event of breakdowns in the operations or equipment;

(g) A boundary survey, legal description, and topographic survey of the property;

(h) An operation plan which describes how the applicant will comply with subsection 62-701.710(4), F.A.C.;

(i) A closure plan which describes generally how the applicant will comply with subsection 62-701.710(6), F.A.C.; and

(j) The financial assurance documentation required by subsection 62-701.710(7), F.A.C.

(3) Design requirements. Minimum design requirements for waste processing facilities are as follows:

(a) Tipping, processing, sorting, storage and compaction areas that are in an enclosed building or covered area shall have ventilation systems. The areas that are not enclosed shall be equipped with litter control devices.

(b) The facility shall be designed with a leachate control system to prevent discharge of leachate and avoid mixing of leachate with stormwater, and to minimize the presence of standing water.

(c) Provisions shall be made for evaluating the quantity of all incoming solid waste and recovered materials. Storage areas shall be designed to hold the expected volume of materials until they are transferred for disposal or recycling.

(4) Operational requirements.

(a) A permit application for a waste processing facility shall include the following operational requirements:

1. An operation and maintenance manual describing the facility operations, the persons responsible for the operations, and types of equipment that will be used. All activities at the facility shall be performed in accordance with the manual and plans for the facility. Manuals and plans shall be updated as operations change but no less frequently than upon renewal of the operation permit;

2. A plan to inspect the wastes received by the facility, that specifies inspection procedures and procedures to handle unauthorized wastes; and

3. A contingency plan to cover operational interruptions and emergencies such as fires, explosions, or natural disasters.

(b) Stored putrescible wastes shall not be allowed to remain unprocessed for more than 48 hours; however, if the operation plan includes provisions to control vectors and odors, putrescible wastes may be stored for up to seven days. Any other unauthorized waste received by the facility shall be segregated and transported to an authorized disposal or recycling facility within 30 days of receipt. Areas where putrescible waste is stored or processed shall be cleaned at least weekly to prevent odor or vector problems, and all drains and leachate conveyances shall be kept clean so that leachate flow is not impeded.

(c) Operators and spotters shall be trained in accordance with subsection 62-701.320(15), F.A.C.

1. A trained operator shall be on duty whenever the facility is operating. Operating hours shall be posted at the facility.

2. At least one trained spotter shall be on duty at all times that waste is received at the site to inspect the incoming waste. Any unauthorized waste shall be removed from the waste stream and placed into appropriate containers for disposal at a permitted facility in accordance with a schedule submitted as part of the operation plan.

(d) The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C.

(e) Adequate fire protection shall be available at all times.

(f) Access to the facility shall be controlled during the design period of the facility by fencing or other effective barriers to prevent disposal of unauthorized solid waste.

(g) If any regulated hazardous wastes are discovered to be improperly deposited at the facility, the facility operator shall promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

(5) Certification. Certification of construction completion shall be done in accordance with paragraph 62-701.320(9)(b), F.A.C.

(6) Closure requirements.

(a) The permit application shall include a closure plan that identifies the steps needed to close the facility.

(b) The owner or operator shall notify the Department in writing prior to ceasing operations, and shall specify a closing date. No waste shall be received by the facility after the closing date.

(c) Within 30 days after receiving the final solid waste shipment, the owner or operator shall remove or otherwise dispose of all solid waste or residue in accordance with the approved closure plan. Stored putrescible wastes shall continue to be managed in accordance with paragraph 62-701.710(4)(b), F.A.C.

(d) Closure must be completed within 180 days after receiving the final solid waste shipment. Closure will include removal of all recovered materials from the site, as well as performing any contamination evaluation required by paragraph 62-701.710(10)(b), F.A.C. When closure is completed, the owner or operator shall certify in writing to the Department that closure is complete. The Department will make an inspection within 30 days to verify the closure and advise the owner or operator of the closure status.

(7) Financial assurance.

(a) The owner or operator of a waste processing facility shall provide the Department with proof of financial assurance issued in favor of the State of Florida in the amount of the closing cost estimates for the facility. This proof, along with the closing cost estimates, shall be submitted to the Department as part of the permit application for the facility. Proof of financial assurance shall consist of one or more of

the following financial instruments which comply with the requirements of subsection 62-701.630(6), F.A.C.: trust fund; surety bond guaranteeing payment; surety bond guaranteeing performance; irrevocable letter of credit; insurance; and financial test and corporate guarantee. If the owner or operator of the facility is a local government, an escrow account which complies with the requirements of subsection 62-701.630(5), F.A.C., may be used to provide proof of financial assurance. Financial documents shall be submitted on Form 62-701.900(5)(a), (b), (c), (d), (e), (f), (g), or (h), as appropriate.

(b) Closure cost estimates and annual updates thereof shall comply with the provisions of subsections 62-701.630(3) and (4), F.A.C., except that long-term care costs need not be included, and the costs shall be based upon compliance with this section.

(c) If a local government requires financial assurance for closure, which is at least as stringent as that required by this rule, the Department will attempt to establish a cooperative mechanism with the local government and thereby avoid duplicative financial requirements.

(8) Stormwater. Stormwater shall be controlled in accordance with Part IV of Chapter 373, F.S., and the rules promulgated thereunder. A copy of any permit for stormwater control issued by the Department, or documentation that no such permit is required, shall be submitted to the Department and construction authorized by that permit shall be completed before the facility receives waste. Applicants should be aware that other government agencies may also regulate stormwater management and may require separate permits.

(9) Recordkeeping.

(a) Operational records shall be maintained to include a daily log of the quantity of solid waste received, processed, stored, and removed from the site for recycling or disposal, and the county of origin of the waste, if known. These records shall include each type of solid waste, recovered materials, residuals, and unacceptable waste which is processed, recycled, and disposed. Such records shall be compiled on a monthly basis and shall be available for inspection by the Department. Records shall be retained at the facility for three years.

(b) The owner or operator of any facility which recycles construction and demolition debris shall submit an annual report to the Department on Form 62-701.900(7), Annual Report for a Construction and Demolition Debris Facility, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. This report shall include a summary of the amounts and types of wastes disposed of or recycled. The county of origin of materials which are recycled, or a statement that the county of origin is unknown, shall be included in the report. The report shall be submitted no later than April 1 of each year beginning in 1998, and shall cover the preceding calendar year.

(10) Special requirements for facility types.

(a) Transfer stations that accept primarily household waste, commercial waste, recovered materials, or construction and demolition debris, that manage waste on a first-in, first-out basis, and that store waste for no greater than 7 days are exempt from the requirement to provide financial assurance set forth in subsection (7) of this section.

(b) Waste processing facilities that accept only construction and demolition debris are exempt from the requirement to provide a leachate control system set forth in paragraph (3)(b) of this section, provided that all areas where waste is stored or processed are covered by a ground water monitoring system which meets the requirements of paragraph 62-701.730(4)(b), F.A.C. A facility that operates without a leachate control system shall perform a contamination evaluation as part of its closure activities, and shall continue to operate the ground water monitoring system if the evaluation indicates the potential for ground water contamination.

(11) Alternate procedures. The owner or operator of a facility may request alternate procedures and requirements in accordance with Rule 62-701.310, F.A.C. However, if such request is based upon the nature of the waste accepted at the facility (for example, if a facility accepts only segregated wastes which are expected to have a minimal environmental impact), the request will be submitted to and acted on by the appropriate District office of the Department as part of a permit application or modification, and need not be accompanied by any additional fee.
Rulemaking Authority 403.061, 403.704 FS. Law Implemented 403.702, 403.704, 403.707 FS. History–New 5-27-01, Amended 1-6-10.

62-701.720 Industrial Solid Waste Disposal. (REPEALED)
Specific Authority 403.061, 403.704, FS. Law Implemented 403.702, 403.704, 403.707, FS. History -- New 1-6-93, Amended 5-19-94, Formerly 17-701.720, Repealed 12-23-96.

62-701.730 Construction and Demolition Debris Disposal and Recycling.

(1) Applicability.

(a) No person shall construct, operate or close an off-site construction and demolition debris disposal facility without a permit issued by the Department. All holders of construction or operation permits issued prior to January 6, 2010, that contain conditions not in conformance with this chapter shall apply for modification of the permit to conform to this chapter to the District Office of the Department that issued the permit. The submission shall occur at the time of application for renewal of an existing permit, or before July 5, 2010, whichever is earlier. For purposes of this paragraph, a permit issued prior to January 6, 2010, is deemed to include a completed permit application received by the Department prior to January 6, 2010. However, the provisions of paragraph (4)(h) of this section will not apply to any disposal units of a facility that have received a Department permit authorizing construction or operation prior to January 6, 2010.

(b) After the applicable compliance deadline specified above, facilities shall operate only in accordance with the provisions of this section. However, any disposal unit that received a significant amount of waste in accordance with the conditions of its permit prior to the applicable compliance deadline is not required to comply with any siting or construction design requirements of this chapter that were not in effect prior to the applicable compliance deadline. For purposes of this subsection:

1. A "significant amount of waste" means that the disposal unit has received sufficient waste for disposal, in accordance with its normal operational plan, so that it is impractical to remove that waste or to relocate or reconstruct the disposal unit.

2. "Siting or construction design requirements" do not include the hydrogeological investigation required by subparagraph 62-701.730(2)(a)3., F.A.C., or the ground water monitoring plan required by paragraph 62-701.730(4)(b), F.A.C.

(2) Application. A permit application for an off-site construction and demolition debris disposal facility, disposal unit, or lateral expansion shall be submitted on Form 62-701.900(6), Application to Construct, Operate, or Modify a Construction and Demolition Debris Disposal or Disposal with Recycling Facility, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The application shall be in conformance with the requirements of subsections 62-701.320(5), (6), (7), and paragraph (8)(a), F.A.C. All applications shall include the information in paragraphs (b) through (f) of this subsection, and applications to construct or laterally expand a disposal unit shall also include the information in paragraph (a) of this subsection.

(a) An engineering report, signed and sealed by a professional engineer, that includes:

1. A site plan, of a scale not greater than 200 feet to the inch, which shows the project location and identifies the proposed disposal units, total acreage of the site and of the proposed disposal units, and any other relevant features 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;

2. A geotechnical investigation which meets the criteria of Rule 62-701.410, F.A.C.

3. A hydrogeological investigation which meets the criteria of paragraphs 62-701.410(1)(a) and (c), F.A.C.;

4. An estimate of the planned active life of the facility, the design of the disposal areas, the final design height of the facility, and the maximum height of the facility during its operation;

5. Documentation that the facility location will comply with the requirements of paragraphs 62-701.730(4)(g) and (h), F.A.C.

(b) A boundary survey, legal description, and topographic survey of the property;

(c) An operation plan which describes how the applicant will comply with subsection 62-701.730(7), F.A.C., which must include procedures for emergency preparedness and response as required in subsection 62-701.320(16), F.A.C.;

(d) A closure plan that describes how the applicant will comply with subsections 62-701.730(9) and (10), F.A.C.;

(e) The financial assurance documentation required by subsection 62-701.730(11), F.A.C.; and

(f) The CCA treated wood management plan as required in subsection 62-701.730(20), F.A.C.

(3) Certification. Certification of construction completion shall be done in accordance with paragraph 62-701.320(9)(a), F.A.C.

(4) Other requirements. Except as specified in this section, the requirements of Rules 62-701.330 through 62-701.630, F.A.C., do not apply to construction and demolition debris disposal facilities.

(a) The Department shall not require liners and leachate collection systems at individual facilities unless it demonstrates based upon the types of waste received, methods for controlling the types of waste disposed of, the proximity of ground water and surface water, and the results of the hydrogeological and geotechnical investigations that operation of the facility is reasonably expected to result in violations of ground water standards and criteria otherwise. If the Department determines that a liner and leachate control system may be required, it shall notify the applicant within 30 days of receipt of the information which forms the basis for such a determination. The applicant may either submit additional information, redesign the facility to include a liner and leachate collection system, or demand that the Department process the application without such additional information or redesign.

(b) A water quality monitoring plan that meets the criteria set forth in Rule 62-701.510 and Chapter 62-520, F.A.C., shall be included with the permit application, and shall be implemented and maintained by the owner or operator, with the following exceptions:

1. If no disposal unit is constructed with a liner and leachate collection system, then leachate sampling is not required.

2. Unless a disposal unit is constructed or operated within 200 feet of a surface water body, or unless site-specific conditions could reasonably be expected to result in contaminants entering a surface water body, surface water sampling is not required. For purposes of this subparagraph, a surface water body does not include a body of water contained completely within the property boundaries of the disposal site that does not discharge from the site to surface waters.

3. The well spacing requirements of subparagraph 62-701.510(3)(d)3., F.A.C., do not apply. A minimum of one upgradient and two downgradient wells is required, as specified in Chapter 62-520, F.A.C.

4. Detection wells shall be sampled and analyzed at least semi-annually for the following parameters:

Field Parameters	Laboratory Parameters
pH	Aluminum
Turbidity	Chlorides
Temperature	Nitrate
Specific conductivity	Sulfate
Dissolved oxygen	Total dissolved solids
Water elevations	Iron
Colors and sheens	Sodium
(by observation)	Arsenic
	Cadmium
	Chromium
	Lead
	Mercury
	Total ammonia – N
	Xylenes
	Those parameters listed in EPA Methods 601 and 602

5. Background water quality shall be established in accordance with the provisions of paragraph 62-701.510(6)(b), F.A.C., except that the analysis shall also include sulfate and aluminum. In addition, all background and detection wells shall be sampled and analyzed at least once prior to permit renewal for those parameters listed in paragraph 62-701.510(8)(a), F.A.C., as well as sulfate and aluminum.

6. The owner or operator of the facility may request a permit modification from the appropriate District Office of the Department to delete specific laboratory parameters or field parameters from routine analyses of detection wells and surface water. The Department will grant a request for a permit modification upon a demonstration that these parameters are not reasonably expected to be in or derived from the waste which was received or disposed of at the facility.

(c) If monitoring parameters are detected in monitoring wells in concentrations which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the provisions of subsection 62-701.510(7), F.A.C., shall apply.

(d) No solid waste other than construction and demolition debris shall be disposed of at a construction and demolition debris disposal facility.

(e) Waste material from a waste processing facility which is mixed with Class I or Class III waste, either before or after processing, is not considered construction and demolition debris and may not be accepted for disposal at a construction and demolition debris disposal facility.

(f) If a facility is constructed with a liner system, it shall consist of at least a single 60-mil minimum average thickness HDPE geomembrane. In the sumps located inside the disposal facility footprint and in the leachate collection trenches, the geomembrane shall be placed on a GCL with a saturated hydraulic conductivity of less

than or equal to 1 x 10^{-7} cm/sec, or on a compacted clay liner which is a minimum six inches thick with a saturated hydraulic conductivity of less than or equal to 1 x 10^{-7} cm/sec. The liner shall be placed on a prepared subgrade that will not damage the geomembrane liner or the GCL. A primary leachate collection and removal system and a drainage layer shall be installed above the geomembrane liner. Except in sumps and leachate collection trenches, the system shall be designed to limit leachate head above the liner during routine facility operation after placement of initial cover to no greater than 12 inches. The liner system must be constructed in accordance with the requirements of paragraphs 62-701.400(3)(a), (d), (e), and (f), and subsections 62-701.400(4), (7), and (8), F.A.C. Any alternative liner system shall be approved only in accordance with the provisions of Rule 62-701.310, F.A.C.

(g) No solid waste disposal unit shall 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.

(h) For an above-grade disposal facility, the minimum horizontal separation between the waste disposal area and the site property boundary shall be 100 feet, measured from the toe of the proposed final cover slope.

(i) The horizontal boundaries of the waste disposal area authorized in the construction or operation permit shall be clearly delineated with permanent or semi-permanent markers, such as bollards, posts, fencing, or signs, so that the operators can determine on a daily basis whether or not the facility is exceeding its permitted dimensions.

(5) Stormwater. Stormwater shall be controlled in accordance with Part IV of Chapter 373, F.S., and the rules promulgated thereunder. A copy of any permit for stormwater control issued by the Department, or documentation that no such permit is required, shall be submitted to the Department and construction required by that permit shall be completed before the facility receives waste for disposal or recycling. Applicants should be aware that other government agencies may also regulate stormwater management and may require separate permits. For aboveground disposal units, the design of any features intended to convey stormwater to a permitted or exempted treatment system shall be included in the solid waste construction permit.

(6) Temporary storage. The owner or operator shall make arrangements or shall have equipment for temporary storage, handling and transport to an authorized disposal or recycling facility for solid waste, other than construction and demolition debris, that is inadvertently accepted by the facility. Such solid waste that is accepted by the facility shall be segregated and disposed of in accordance with Department rules. Unless an alternate schedule is included in an operation plan submitted with the permit application, which provides for the control of odors and vectors, putrescible waste shall not be stored for longer than 48 hours and non-putrescible waste shall not be stored for longer than 30 days. Any hazardous waste that is received by the facility shall be managed in accordance with the provisions of Chapter 62-730, F.A.C.

(7) Operation requirements. Owners and operators of construction and demolition debris disposal facilities shall comply with the following requirements:

(a) An operation plan describing the facility operations and maintenance, emergency and contingency plans, and types of equipment that will be used shall be kept at the facility at all times and made available for inspection. The operation plan shall describe the method and sequence of filling waste and shall state the maximum allowed lift depth. Lift depth shall not exceed 10 feet unless authorized in the operation plan. Lift depths greater than 10 feet may be allowed depending on specific operations, daily volume of waste, width of working face, and good safety practices. All activities at the facility shall be performed in accordance with this plan and the permit conditions. The plan shall be updated as operations change but no less frequently than upon renewal of the permit. The operation permit shall be modified to reflect any substantive changes to the plan, other than those required for routine maintenance.

(b) Construction and demolition debris shall be compacted and sloped during the life of the facility to assure that the requirements of subsection (9) of this section can be met. A schedule for compaction and grading shall be included in the operation plan. The external slopes of all disposal units shall be no greater than three feet horizontal to one foot vertical rise. The working face and internal slopes of all disposal units shall not be greater than three feet horizontal to one foot vertical rise unless reasonable assurance is provided in the operation plan that fires can be controlled in steeply sloped areas.

(c) Access to the disposal facility shall be controlled during the design period of the facility by fencing or other effective barriers to prevent disposal of solid waste other than construction and demolition debris. Signs indicating the name of the operating authority, traffic flow, hours of operations and restrictions or conditions of disposal shall be posted.

(d) A trained operator shall be on duty at the facility at all times that the facility is operating. In addition, a sufficient number of spotters shall be on duty at the working face to inspect the incoming waste at all times waste is being accepted at the site. Waste shall be inspected after it is removed from the transport vehicle and prior to placement for final disposal. Any unauthorized waste shall be removed from the waste stream and placed into appropriate containers or secure storage areas for disposal or recycling at a facility authorized by the Department to receive such waste.

(e) The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C. If objectionable odors are detected off-site, the owner or operator shall comply with the requirements of paragraph 62-701.530(3)(b), F.A.C.

(f) Fuels, solvents, lubricants, and other maintenance materials shall be stored in secure areas separate from the disposal or sorting areas.

(g) Plastic buckets may be accepted at the facility unless they contain liquids other than water when they arrive; however, they may contain hardened paint, tar, cement or similar non-hazardous materials.

(h) Carpet remnants that are from a construction or demolition project or from a carpet manufacturer may be accepted at the facility.

(i) CCA treated wood shall be managed as provided in subsection (20) of this section.

(j) If any regulated hazardous wastes are discovered to be improperly deposited at the facility, the facility operator shall promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

(8) Training. Operators and spotters employed at the facility shall be properly trained in accordance with subsection 62-701.320(15), F.A.C.

(9) Closure.

(a) At least 90 days prior to the date when wastes will no longer be accepted, the owner or operator of the construction and demolition debris disposal facility shall submit an updated closure plan to the Department to reflect any changes in the closure plan due to actual operational conditions at the facility. If unforeseen circumstances do not allow the notification within 90 days prior to ceasing to receive wastes, then notice shall be provided as soon as the need to close the facility becomes apparent. The updated and approved closure plan shall be incorporated into and made part of the permit.

(b) Final cover and seeding or planting of vegetative cover shall be placed on each disposal unit within 180 days after it has reached its final grade or ceased receiving wastes. Final cover shall consist of a 24-inch-thick soil layer, the upper six inches of which shall be capable of supporting vegetation, and shall be graded and compacted as necessary to eliminate ponding, promote drainage, and minimize erosion. The side slopes of all above-grade disposal units shall be no greater than three feet horizontal to one foot vertical rise. If the disposal unit is lined, the closure design shall include a barrier layer or other measures to ensure that the design leachate head over the liner is not exceeded after closure. The final cover shall be vegetated to control erosion. Disposal units that are aboveground shall be designed to control the flow of stormwater, such as building reverse sloping benches or terraces into the side slopes of the disposal units and shall contain down slope drainage ways with water flow energy dissipaters unless reasonable assurance is provided that adequate erosion control will be achieved in the absence of such measures.

(c) Placement of final cover may be delayed if additional waste will be deposited on the disposal unit within five years, but only if the disposal unit is temporarily closed in accordance with an approved closure plan. Conditions of temporary closure shall include:

1. The disposal unit was constructed in compliance with its permit conditions;
2. A schedule for temporary and final closure is shown in the closure plan;

3. Final cover is installed on side slopes of each completed disposal unit which will not receive additional waste;

4. Odors and runoff are controlled;

5. The closure cost estimate takes into account the costs of temporary closure as well as the costs of the final closure; and

6. An intermediate cover is installed on the disposal unit within 30 days after the unit stops accepting waste. The intermediate cover may be removed before placing additional waste or installing final cover.

(d) The owner or operator shall provide a certification of closure construction completion to the Department within 30 days after closing, covering, and seeding the disposal unit. The owner or operator shall also provide a final survey report done by a professional surveyor, in accordance with paragraph 62-701.600(6)(b), F.A.C., if disposal operations have raised the final elevations higher than 20 feet above the natural land surface.

(e) Upon receipt and approval of the documents required in paragraph (d) of this subsection, the Department shall, within 30 days, acknowledge by letter that notice of termination of operations and closing of the facility has been received. The date of this letter shall be the official date of closing for the purpose of determining the long-term care period, in accordance with subsection 62-701.600(8), F.A.C.

(f) Declaration to the public. After closing operations are approved by the Department, the facility owner or operator shall file a declaration to the public in the deed records in the office of the county clerk of the county in which the facility is located. The declaration shall include a legal description of the property on which the facility is located and a site plan specifying the area actually filled with construction and demolition debris. The declaration shall also include a notice that any future owner or user of the site should consult with the Department prior to planning or initiating any activity involving the disturbance of the facility's cover, monitoring system or other control structures. A certified copy of the declaration shall be filed with the Department.

(10) Long-term care. The owner or operator of the construction and demolition debris disposal facility shall continue to monitor and maintain the integrity and effectiveness of the final cover as well as other appurtenances of the facility, control erosion, fill subsidences, comply with the ground water monitoring plan, and maintain the stormwater system pursuant to a Department permit for five years from the date of closing. Before the expiration of the long-term care monitoring and maintenance period, the Department may extend the time period if the ground water monitoring system indicates that the facility continues to impact ground water at concentrations which may be expected to result in violations of Department water quality standards or criteria; if site-specific conditions make it likely that any contamination which may emanate from the disposal area would not be detected within five years; if the final cover does not have well established vegetation or is showing signs of continuing significant erosion problems; or if the permittee has not performed all required monitoring or maintenance.

(11) Financial assurance.

(a) As a condition for issuance of an off-site construction and demolition debris disposal facility permit, permit transfer, or permit modification authorizing expansion, the owner or operator shall provide the Department with proof of financial assurance issued in favor of the State of Florida in the amount of the closing and long-term care cost estimates for the facility. This proof shall be submitted to the Department as part of the permit application process. The financial mechanism shall either be:

1. For facilities owned or operated by a local government, an escrow account pursuant to subsection 62-701.630(5), F.A.C. or an alternate financial mechanism pursuant to subsection 62-701.630(6), F.A.C.; or

2. For facilities not owned or operated by a local government, an alternate financial mechanism pursuant to subsection 62-701.630(6), F.A.C.

(b) A permittee may delay submitting proof of financial assurance for a solid waste disposal unit under the following conditions. Such proof must be submitted at least 60 days prior to the planned acceptance of any solid waste. Under no circumstances shall the permittee receive waste at the solid waste disposal unit until it has received written acknowledgement from the Department that the financial mechanism has been properly submitted and funded.

1. The solid waste disposal unit for which a permit is being sought has not received solid waste for storage or disposal;

2. The permit being sought does not authorize operation of the solid waste disposal unit, or requires a specific separate approval by the Department prior to operation being authorized;

3. The permittee identifies the type of financial mechanism it intends to use, and provides reasonable assurance as part of the permit application that it is capable of getting and using the identified mechanism; and

4. The permittee submits Form 62-701.900(29) as part of the permit application. This form will inform the permittee of these requirements, and will include an acknowledgement by the permittee agreeing not to accept waste until the financial assurance has been approved.

(c) Closure cost estimates and annual updates thereof shall comply with the provisions of subsection 62-701.630(3) and paragraphs 62-701.630(4)(a) through (d), F.A.C., except that the cost of long-term care shall be based upon a five-year period, and the costs shall be based upon compliance with this section.

(d) If a local government requires financial assurance for closure, which is at least as stringent as that required by this rule, the Department will attempt to establish a cooperative mechanism with the local government and thereby avoid duplicative financial requirements.

(e) Owners or operators of facilities that are required to undertake a corrective action program in accordance with paragraph 62-701.730(4)(c), F.A.C., shall submit proof of financial assurance to the Department in accordance with subsection 62-701.630(7), F.A.C., no later than 120 days after the corrective action remedy has been selected.

(f) If long-term care is extended because the permittee has failed to perform all required monitoring and maintenance, financial assurance shall continue to be required during the extended long-term care. If the long-term care is extended for any other reason, financial assurance is not required during the extended long-term care period, except as may be required in paragraph (e) of this subsection.

(12) Annual Reports. The owner or operator of the facility shall submit an annual report to the Department on Form 62-701.900(7). This report shall include a summary of the amounts and types of wastes disposed of or recycled. The county of origin of materials that are recycled, or a statement that the county of origin is unknown, shall be included in the report. The report shall be submitted no later than April 1 of each year and shall cover the preceding calendar year.

(13) Recycling.

(a) The owner or operator of a facility that accepts construction and demolition debris for disposal and that also recovers materials from the construction and demolition debris waste stream for purposes of recycling shall meet the requirements of this section as well as the requirements of Rule 62-701.710, F.A.C. If there is a conflict between this section and Rule 62-701.710, F.A.C., this section shall govern. It is not necessary for the owner or operator to apply for a separate permit as a waste processing facility or to pay an additional fee.

(b) The owner or operator of a facility that recovers materials from the construction and demolition debris waste stream for purposes of recycling but that does not dispose of any wastes on-site shall apply for a permit on Form 62-701.900(4), and shall comply with the provisions of Rule 62-701.710, F.A.C.

(c) In order to reuse recovered screened material other than clean debris from the construction and demolition debris waste stream, an owner or operator shall demonstrate that this material will be managed and reused in a manner that will pose no significant threat to public health or the environment. In making this demonstration, the owner or operator may consider background levels of receiving soils, whether the material will be blended with other materials, and the likelihood that the material may have unlimited distribution or come into direct contact with the public. Examples of management practices which would not require analysis for health-based criteria include permanent encapsulation, use as initial or intermediate cover or subsurface construction at a permitted landfill, or use under at least two feet of clean cover material.

(d) Metal, paper, glass, plastic, textile, or rubber materials that have been diverted and source separated or have been removed from the construction and demolition debris waste stream for sale, use, or reuse as raw materials may be managed as recovered materials. Other materials that have been diverted and source separated or have been removed from the construction and demolition debris waste stream may be sold, used, or reused as raw materials upon a demonstration that the material will pose no significant threat to public health or the environment.

(14) Incineration. A facility that employs an air curtain incinerator and that also stores or disposes of construction and demolition debris at the site shall meet the permitting requirements of Rule 62-256.500, F.A.C., as well as this section.

(15) Clean debris. Clean debris may be used as fill or raw material in any area, including waters of the State, subject to receipt of an environmental resource permit from the Department where applicable. Clean debris used as fill material is not solid waste, and such use does not require a solid waste permit under this rule.

(16) Landfill disposal. Construction and demolition debris may be disposed of in a permitted landfill. However, each county must maintain segregated disposal areas for construction and demolition debris. The cover requirements for a segregated construction and demolition debris disposal area within a permitted landfill shall be those in subsection (9) of this section. Landfills permitted in accordance with Rule 62-701.330, F.A.C., which have construction and demolition debris disposal units or recycling facilities included as part of their permit conditions, are not required to submit separate permit applications or financial assurance documents under this section.

(17) On-site disposal. Construction and demolition debris that is disposed of on the property where it is generated, or on property that is adjacent or contiguous to and under common ownership and control as that property where the waste is generated, is exempt from the permitting requirements of this section and Rule 62-701.330, F.A.C. However, such disposal is subject to the prohibitions of Rule 62-701.300, F.A.C. All waste shall be inspected by the generator or a spotter prior to disposal, either at the point of generation or at the disposal site, to ensure that any unauthorized waste is removed from the waste stream prior to disposal and managed in accordance with Department rules. Final cover and seeding or planting of vegetative cover shall be placed on each disposal unit within 180 days after final receipt of waste. Final cover shall consist of a 24-inch-thick soil layer, the upper six inches of which shall be capable of supporting vegetation, and shall be graded and compacted as necessary to eliminate ponding, promote drainage, and minimize erosion. The side slopes of all above-grade disposal areas shall be no greater than three feet horizontal to one foot vertical rise.

(18) Disposal restrictions. Construction and demolition debris may be disposed of only in accordance with one of the methods authorized above. In addition, disposal areas shall be operated so that adverse environmental and public health impacts, such as blowing litter and vectors, are minimized. Upon discovery that a permitted facility has disposed of solid waste outside of its permitted dimensions, the owner or operator shall notify the Department within three working days of this discovery. If all waste is not relocated within the permitted dimensions of the facility within 30 days of discovery, upon order of the Department the facility shall not accept any waste until the facility is in compliance with its permitted dimensions.

(19) Asbestos waste disposal. Asbestos-containing waste materials regulated pursuant to 40 C.F.R. Part 61, Subpart M, shall not be disposed of in a construction and demolition debris disposal unit.

(20) CCA treated wood. The owner or operator of a facility, except for a disposal facility with a constructed liner system, shall design and implement a CCA treated wood management plan. The plan shall be designed to minimize the amount of CCA treated wood that is delivered to the facility, and must describe procedures the operator will use to make a reasonable effort to separate any CCA treated wood from other wastes at the facility. CCA treated wood that is separated from other wastes at the facility shall not be disposed of at an unlined solid waste disposal facility.

(21) Alternate procedures. The owner or operator of a facility may request alternate procedures and requirements in accordance with Rule 62-701.310, F.A.C. However, if such request is based upon the nature of the construction and demolition debris accepted at the facility (for example, if a facility accepts only segregated wastes which are expected to have a minimal environmental impact), the request will be submitted to and acted on by the appropriate District office of the Department, and need not be accompanied by any additional fee.

Rulemaking Authority 403.0877, 403.704, 403.707 FS. Law Implemented 403.0877, 403.706, 403.707 FS. History–New 8-2-89, Formerly 17-701.061, Amended 1-6-93, Formerly 17-701.730, Amended 12-23-96, 4-23-97, 5-27-01, 1-6-10.

62-701.801 General Permit for Solid Waste Transfer Station. (REPEALED)

Specific Authority 403.814(1), FS. Law Implemented 403.061, 403.087, 403.088, 403.702-403.73, 403.814, FS. History -- New 7-8-82; Formerly 17-4.61; 17-4.610; 17-7.801; Amended 1-6-93, 5-19-94, Formerly 17-701.801, Repealed 5-27-01.

62-701.802 General Permit for Land Application of Grade II Domestic Wastewater Treatment Sludge. (Repealed)

Specific Authority 403.814, FS. Law Implemented 403.061, 403.087, 403.702, through 403.715, 403.814, FS. History -- New 6-16-84, Formerly 17-4.64, 17-4.640, 17-7.802, 17-701.802, Repealed 12-23-96.

62-701.803 General Permit for Off-site Disposal of Land Clearing Debris.

(1) Notification. Notwithstanding the provisions of Rule 62-701.730, F.A.C., facilities that accept for disposal only land clearing debris may operate under a general permit pursuant to Part III of Rule 62-4, F.A.C., and this section. For purposes of this section, "land clearing debris" includes yard trash and unpainted, nontreated wood scraps and wood pallets that meet the definition of construction and demolition debris. The owner or operator of the land clearing debris disposal facility shall notify the Department in writing of the intent to use this general permit on Form 62-701.900(3), Notification of Intent to Use a General Permit for a Land Clearing Debris Disposal Facility, effective date January 6, 2010, hereby adopted and incorporated by reference. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Owners or operators of solid waste

management facilities which have a permit under Chapter 62-701, F.A.C., to receive land clearing debris are exempt from this requirement. The notification shall include:

(a) A site plan, of a scale not greater than 200 feet to the inch, that shows the project location and identifies the proposed disposal areas, total acreage of the site and of the proposed disposal area, and any other relevant features such as water bodies, wetlands, or potable water wells within 100 feet of the site;

(b) Identification of ground water levels at the site, including the seasonal high ground water level if known;

(c) A general description of the facility operations, including equipment and personnel planned for the operation and closure of the facility, and a training plan which complies with the requirements of subsection 62-701.320(15), F.A.C.;

(d) A boundary survey, legal description, and topographic survey of the property;

(e) The planned active life of the facility, and the design height of the facility;

(f) Closure plans and cross section details of the final cover;

(g) The mailing address and phone number of the owner and operator; and

(h) Documentation that the applicant either owns the land or has legal authorization from the landowner to use the land for a disposal facility.

(2) Certification. Certification of construction completion shall be done in accordance with paragraph 62-701.320(9)(b), F.A.C.

(3) Other requirements.

(a) The requirements of Rules 62-701.330 through 62-701.630, F.A.C., do not apply to land clearing debris disposal facilities, provided that none of the prohibitions contained in Rule 62-701.300, F.A.C., shall be violated.

(b) The owner or operator shall construct the facility only in accordance with the site plan submitted with the notification.

(c) The owner or operator shall operate the facility only in accordance with the descriptions and plans submitted with the notification.

(d) The external slopes of all disposal units shall be no greater than three feet horizontal to one foot vertical rise. The working face and internal slopes of all disposal units shall not be greater than three feet horizontal to one foot vertical rise unless reasonable assurance is provided in the notification that fires can be controlled in steeply sloped areas.

(e) The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C. If objectionable odors are detected off-site, the owner or operator shall comply with the requirements of paragraph 62-701.530(3)(b), F.A.C.

(4) Stormwater. Stormwater shall be controlled in accordance with Part IV of Chapter 373, F.S., and the rules promulgated thereunder. A copy of any permit for stormwater control issued by the Department, or documentation that no such permit is required, shall be submitted to the Department before the facility receives waste for

disposal. Applicants should be aware that other government agencies may also regulate stormwater management and may require separate permits.

(5) Temporary storage. The owner or operator shall make arrangements or shall have equipment for temporary storage, handling and transport to an authorized disposal or recycling facility for solid waste, other than land clearing debris, that is inadvertently accepted by the facility. Such solid waste that is accepted by the facility shall be segregated and disposed of in accordance with Department rules. Unless an alternate schedule is included in an operation plan submitted with the permit application, which provides for the control of odors and vectors, putrescible waste shall not be stored for longer than 48 hours and non-putrescible waste shall not be stored for longer than 30 days. Any hazardous waste that is received by the facility shall be managed in accordance with the provisions of Chapter 62-730, F.A.C.

(6) Compaction. Land clearing debris shall be compacted and sloped as necessary to assure that the requirements of subsection (10) of this section can be met.

(7) Access. Access to the disposal facility shall be controlled during the active life of the facility by fencing or other effective barriers to prevent disposal of solid waste other than land clearing debris.

(8) Inspection of waste. At least one spotter shall be on duty at the working face at all times that the site is operating to inspect the incoming waste. Any material other than land clearing debris shall be removed from the waste stream and placed into appropriate containers for disposal at a permitted facility. Spotters shall be trained in accordance with subsection 62-701.320(15), F.A.C.

(9) Inspections. Operation of a facility under a general permit constitutes consent for Department personnel to inspect the site and such records as are required by this section during normal business hours for compliance with Department rules.

(10) Closure. Final cover and seeding or planting of vegetative cover shall be placed on each disposal unit within 180 days after final receipt of wastes. Final cover shall consist of a 24-inch-thick soil layer, the upper six inches of which shall be capable of supporting vegetation and shall be graded to eliminate ponding, promote drainage, and minimize erosion. The side slopes of all above-grade disposal areas shall be no greater than three feet horizontal to one foot vertical rise.

(11) Notification of closure. The owner or operator shall notify the Department within 30 days after closing, covering, and seeding the facility as required in subsection (10) of this section.

(12) Incineration. A facility that employs an air curtain incinerator and that also stores or disposes of land clearing debris at the site shall meet the permitting requirements of Rule 62-256.500, F.A.C., as well as this section.

(13) A general permit issued under this section shall be valid for five years. Rulemaking Authority 403.704, 403.707, 403.814 FS. Law Implemented 403.707, 403.814 FS. History–New 8-2-89, Amended 1-6-93, 1-2-94, 5-19-94, Formerly 17-701.803, Amended 12-23-96, 4-23-97, 5-27-01, 1-6-10.

62-701.900 Forms.

The forms used by the Department in the solid waste management program are adopted and incorporated by reference elsewhere in this chapter. The following list of forms is provided solely for convenience. Some of the form numbers may not be consecutive due to repeal or transfer of earlier forms. Copies of forms may be obtained from a local District Office or by writing to the Florida Department of Environmental Protection, Solid Waste Section, Mail Station 4565, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Application to Construct, Operate, Modify, or Close a Solid Waste Management Facility, effective January 6, 2010.

(2) Certification of Construction Completion of a Solid Waste Management Facility, effective May 19, 1994.

(3) Notification of Intent to Use a General Permit for a Land Clearing Debris Disposal Facility, effective January 6, 2010.

(4) Application to Construct, Operate, or Modify a Waste Processing Facility, effective January 6, 2010.

(5) Financial Mechanisms for Solid Waste Management Facilities Requiring Closure and/or Long-term Care, effective January 6, 2010.

(a) Solid Waste Facility Irrevocable Letter of Credit.

(b) Solid Waste Facility Financial Guarantee Bond.

(c) Solid Waste Facility Performance Bond.

(d) Solid Waste Facility Closure/Long-Term Care Insurance Certificate.

(e) Solid Waste Facility Financial Test.

(f) Solid Waste Facility Corporate Guarantee.

(g) Solid Waste Facility Trust Fund Agreement.

(h) Solid Waste Facility Standby Trust Fund Agreement.

(6) Application to Construct, Operate, or Modify a Construction and Demolition Debris Disposal or Disposal with Recycling Facility, effective May 27, 2001.

(7) Annual Report for a Construction and Demolition Debris Facility, effective January 6, 2010.

(8) Permit Transfer Form, effective January 6, 2010.

(9) Application for Preliminary Examination and Final Examination and Certification of Resource Recovery Equipment, effective November 15, 2009.

(10) Application for a Permit to Construct/Operate a Solid Waste Management Facility for the Production of Compost, effective December 23, 1996.

(11) Annual Report for a Solid Waste Management Facility Producing Compost Made from Solid Waste, effective December 23, 1996.

(12) Waste Tire Collector Registration Application, effective January 6, 2010.

(13) Waste Tire General Permit Application, effective January 6, 2010.

(14) Waste Tire Site Notification, effective January 6, 2010.

(15) Waste Tire Processing Facility Quarterly Report, effective January 6, 2010.

(16) Waste Tire Collector Annual Report, effective January 6, 2010.
(17) Waste Tire Processing Facility Permit Application, effective January 6, 2010.
(18) Waste Tire Small Processing Facility Permit Application, effective January 6, 2010.
(19) Waste Tire Collection Center Permit Application, effective January 6, 2010.
(20) Application for Recovered Materials Certification, effective January 6, 2010.
(21) Reporting Form for Recovered Materials, effective January 6, 2010.
(22) Closure Cost Estimating Form For Solid Waste Facilities, effective January 6, 2010.
(23) Financial Assurance Deferral Application, effective January 6, 2010.
(24) Monitoring Well Completion Report, effective January 6, 2010.
(25) Water Quality Monitoring Certification, effective January 6, 2010.
(26) Application for a Permit to Construct and Operate a Research, Development and Demonstration Facility, effective January 6, 2010.

Rulemaking Authority 403.704 FS. Law Implemented 403.707 FS. History–New 8-2-89, Amended 1-6-93, 5-19-94, Formerly 17-701.900, Amended 12-23-96, 4-23-97, 5-27-01, 1-6-10.

WASTE MANAGEMENT

WASTE MANAGEMENT OF THE FLORIDA KEYS
125 Toppino Industrial Dr.
Rockland Key, FL 33040
(305) 296-2794
(305) 296-8175 Fax

July 25, 2008

R.B. Havens
Public Works Director
City of Key West
P.O. Box 1409
Key West, Florida 33041

Re: Agreement For the
Transportation and Disposal
Of Solid Waste

Dear R.B. :

Please be advised that Waste Management seeks an adjustment to the contract rates based on extraordinary changes in the costs of providing services under the Agreement. As you know, the primary factor in our petition is the extraordinary increase in the cost of fuel. We will shortly provide corroborating data and documentation as required by Section 7.5.5 of the Agreement.

Sincerely,

GREG SULLIVAN
District Manager