

SUMMARY OF DISPOSAL OPTIONS

The disposal options that the Task Force has discussed so far include waste to energy, landfilling, new technologies such as plasma arc or new waste to energy facilities, and diversion of waste utilizing methods such as reuse, recycling, conservation or composting. The selection of a disposal method cannot be made in a vacuum; the choice of collection systems will have a dramatic effect on the possible disposal methods and vice versa. Additionally, it is likely that several disposal methods will have to be used; for example, state law requires recycling and/or composting and waste to energy plants need landfills as backup systems and to dispose of ash. Unlike collection services, the issue of who provides the disposal will be an important part of the disposal solution, mainly because the County currently owns and operates a disposal system. In the collection area, the County does own and operate the drop off collection system but the drop offs are a small part of the overall collection system and could be easily privatized. However, the ultimate fate of the County owned landfill will have to be considered when a disposal option is chosen as the landfill has a significant public investment in it and also has a considerable value.

The following are characteristic of each of the four types of disposal systems which have been discussed by the Task force so far. Some pros and cons are listed, but these have not been thoroughly discussed or vetted by the Task Force; rather they are things that are either apparent or which have been mentioned at a Task Force meeting.

WASTE TO ENERGY (COVANTA)

Covanta has been an active participant at the Task Force meetings and by virtue of the existing waste to energy facility being located in Lake County, it is an option that will be available in 2014 when the existing service agreement expires. This facility takes MSW and burns it producing steam and ultimately electricity. The facility recovers metals and produces ash as a by product which is required to be disposed of in a lined landfill. In other countries the ash has been approved for other uses, but not in Florida. Possible pros and cons of this type of disposal system are:

1. Since energy is produced from the MSW, the operation can be considered an alternative energy supply and might reduce the county's carbon footprint.
2. A landfill is a necessary part of this facility both for disposal of ash and for disposal of MSW at times that the facility is closed for maintenance or repair.
3. With the current price for electricity, this method of disposal is likely more expensive than other methods of disposal.
4. This plant achieves a significant reduction in the volume of the waste that must ultimately be landfilled, and if used in conjunction with the County owned landfill, would significantly extend the life of the landfill.
5. The ash that is produced from this facility causes leachate that is produced at the landfill to require special handling increasing the cost of disposal of the leachate.
6. Environmental arguments exist both for and against incineration as a method to dispose of MSW.

7. Lake County and or Covanta will need additional partners to provide waste for the facility as the waste currently provided in unincorporated Lake County is not enough to run the facility efficiently. Partners could include the cities in Lake County, or other counties or private entities in the Central Florida area. However, it may be possible to have a contract structured with Covanta that does not obligate Lake County to provide any particular quantity of solid waste.

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LANDFILLING

The Task Force visited the Lake County landfill and will hear presentations from private landfill operators as to the feasibility of using landfills for disposal of MSW. All MSW can be disposed of in a landfill, or the landfill could be used in conjunction with other methods. Some of the County MSW could go to Covanta, some could be disposed of using a new technology, some recycled or recovered and the balance disposed of in a landfill. Pros and cons of landfilling are as follows:

1. This may be the least expensive option for disposing of MSW at this time. However, landfill disposal prices have been known to increase and decrease as market forces occur, so it may be necessary to enter a longer term agreement with certain minimum levels of waste to be disposed to eliminate price risk. In some ways, this is similar to the put or pay contracts that exist with waste to energy facilities (such as the current contract with Covanta).
2. There are environmental arguments both for and against landfilling. In any event, under current regulations landfills are required to be lined and the County (or other operator) must provide financial guarantees for long term maintenance of the facility.
3. The Task Force was told that landfills should have 1,000 tons per day of MSW to operate efficiently. Since unincorporated Lake County does not produce that much waste, partners would be needed to provide a waste guarantee for any significant amount of waste.

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NEW TECHNOLOGIES OR A NEW WASTE TO ENERGY FACILITY

The Task Force has heard of a new technology that the City of Orlando is considering and will also have a presentation from at least one other provider of a new technology to dispose of MSW. Additionally, Covanta has mentioned the possibility of the County (along with other partners) building a new, larger waste to energy facility somewhere in Lake County.

1. This type of facility might require Lake County to take on significant risk, either through the need for capital investment, long term put or pay contracts where a certain amount of MSW is required to be produced and paid for, or for technological risk.
2. New technologies might provide a better environmental method of disposal of MSW.
3. A larger facility might be able to provide economies of scale decreasing the cost of disposal for Lake County.

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DIVERSION OF WASTE UTILIZING METHODS SUCH AS REUSE, RECYCLING, CONSERVATION OR
COMPOSTING

There are many ways in which waste can be kept out of the waste stream such that it never arrives at a disposal facility to be burned or buried. Lake County currently provides curbside collection of recyclables as an example. The current list of items that are being recycled could be expanded; the Force has heard that Alachua County has set a goal of reuse or recycling of 100% of the MSW waste stream. Additional efforts could be made to recycle yard waste and other organic materials. Pros and cons of this approach are as follows:

1. State law mandates that the County recycle and or compost a certain portion of its MSW, although current regulations recognize the disposal of MSW at the waste to energy plant as recycling.
2. There are environmental arguments in favor of this method of dealing with MSW, including safer disposal of waste but also in the saving of resources through reuse.
3. This type of disposal is likely more expensive than other types of disposal. Prices for recycled materials vary widely based on economic and other circumstances that make it difficult to project a long term income stream.
4. The more waste that is disposed of this way reduces the overall amount of waste that the County needs to dispose of; while beneficial, this could have negative impacts on long term waste disposal contracts that utilize other methods of disposal.
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ADDITIONAL OPTIONS

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