

# **Solid Waste Management Department**

2725 Judge Fran Jamieson Way Building A, Room 118 Viera, Florida 32940

# **Inter-Office Memo**

Date:

March 23, 2019

To:

**Board of County Commissioners** 

Through:

Frank Abbate, County Manager

Through:

John Denninghoff, Assistant County Manager

Development & Environmental Services Group

From:

Euripides Rodriguez C.I.A., Director

Subject:

Melbourne Landfill A.K.A. Florida Recyclers

On January 22, 2019, the Board of County Commissioners directed staff to conduct a report on the possibility of purchasing the Melbourne Landfill also known as Florida Recyclers.

In considering this opportunity, staff wants to highlight for the Board's information that on March 4, 2019, the Board's consultant, Neel Shaffer, Inc. updated its analysis concerning the remaining life expectancy of the Sarno landfill. Their updated analysis indicated that without an increase in capacity the remaining life expectancy of the Sarno Landfill is thirteen months. Considerations outside of the potential purchase of the Florida Recyclers property will be discussed in detail in a second report the Solid Waste Department is currently drafting that will be submitted to the Board with the next few weeks relating to other potential opportunities on how the potential closure of the Sarno Facility can be addressed if the life of the Sarno facility cannot be extended.

### **Background Information**

The Florida Recyclers property consists of two parcels located on Sarno Road in the City of Melbourne. It is partially surrounded by Brevard County properties. There are two properties to the north belonging to the City of Melbourne and Liberty Investments of Brevard, LLC. A portion of the Florida Recyclers land provides a driveway (flag lot) to Sarno Road. Brevard County properties are located to the west, south and east. The Sarno Road Transfer Station is located to the west, the Sarno Road Landfill is located to the south and to the east there is a county parcel that is being used temporarily as a dredge material management area.



Florida Recyclers permitted a 20-acre unlined Construction and Demolition (C&D) debris landfill in 1998. The landfill was expanded to 36-acres and the site was converted to a Class III landfill in 1999. In 2014 Florida Recyclers submitted a permit modification to return the landfill back to a C&D landfill and a 10 year permit was issued. The rules regarding C&D landfills are different than Class III landfills. One of these differences is the Financial Assurance, or what we refer to as landfill closure escrows. Escrows are not allowed for C&D landfills and Florida Recyclers had some difficulties finding another mechanism for the closure requirement. In 2017 a consent order was issued by the Florida Department of Environmental Protection (FDEP). This issue was resolved in May 2017 with a stipulation that the facility must be closed as if it were a Class III facility. The requirements for closures between both types of facilities make closure under Class III rules more expensive in comparison to closure of a C&D facility. Using the Sarno Road Landfill and the Central Disposal Facility partial closure costs as reference, Jones Edmunds and Associates are of the opinion that the trust fund in which closure money for Florida Recyclers is deposited "is likely underfunded".

In order to fully understand the differences in the type of landfills being discussed we have included the definitions of the types of materials received by the landfills. FDEP has defined Class III waste as yard trash, construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by FDEP, that are not expected to produce leachate that poses a threat to public health or the environment. Construction and Demolition materials are 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. In other words C&D materials are those that you can expect to be generated from construction activities. Note that mixing C&D materials with other classification will cause it to be classified as other than C&D.

The regulations regarding construction of both types of landfill have reached the point that there is practically no difference between them. With the requirement that the Florida Recyclers C&D landfill be closed as a Class III the differences are further reduced. On the other hand, use of the Florida Recyclers facility as a Class III landfill will have its challenges. The waste that the Sarno Road Landfill receives is class III material while the Florida Recyclers Landfill receives only C&D material. The Class III materials include C&D as well as other inert materials such as patio furniture. This means that a liner would have to be placed over the existing Florida Recyclers Landfill to use it as a Class III landfill. The liner would be a continuation of the liner that the valley would require. A leachate collection system also would have to be built over the entire Florida Recyclers landfill as well as the valley if the valley is to be used/filled with waste in order to collect the leachate for processing.

The valley mentioned through this report refers to the space that lies between the Florida Recyclers southern footprint of the landfill and the Sarno Road Landfill northern footprint. If the county were to own both properties then this land or airspace could be converted for use as a landfill thus extending the life of the Sarno Landfill.

Last year Florida Recyclers gave the county an "Investment Value Report" prepared by Shawn E. Wilson, MAI regarding their landfill. Investment value is defined by the Dictionary of Real Estate Appraisal, Sixth Edition, 2015, page 121 as "the value of the property to a particular investor or class of investors based on the investor's specific requirements. Investment value may be different from market value because it depends on a set on (*sic*) investment criteria that are not necessarily typical of the market." The Investment value set by this report is \$8,416,000. As a note on page 12 of the report, Ms. Wilson states "Note that the market value of the landfill and business which currently operate on the site is not part of this analysis."

Staff recently requested an independent appraisal with the firm of Clayton, Roper & Marshall, Inc. for the Florida Recyclers property. The appraiser has requested additional information from Florida Recyclers as well as an onsite visit. This request has been forwarded to their attorneys. When the appraisal is complete we will update this report.

The Solid Waste Department contracted with Jones Edmonds & Associates, Inc. to review and evaluate the following:

- Solid Waste Permitting History
- Overall Facility Operations
- Financial Assurance Documentation
- FDEP Environmental Resource Permit (ERP) History
- Permitted Stormwater Management System
- Historical Water Quality and Gas Monitoring Data
- Current Volume and Lifespan Analysis of the Facility
- Valley Fill Expansion Option

Jones Edmond concluded that the facility appears to be operating in a manner consistent with its permit and applicable regulatory guidelines. There are several considerations that are incorporated into an observations section below.

The height that a landfill can be built to is referred to as airspace available for use by the landfill. Airspace is a principal factor in the values and determination of the life expectancy of a landfill. Both the recent vertical expansion area of the Sarno Road Landfill and the Florida Recyclers landfill have a City of Melbourne limitation of forty feet above ground level while having a 104 foot permitted height through the Florida Department of Environmental Protection. In order to go higher than 40 feet a height variance is need from the City. Staff has met with the City of Melbourne staff to initiate the process of seeking a height variance for the Sarno Road Landfill expansion area. The variance request is expected to go before the City of Melbourne council this summer. Staff had initially requested a height variance from the City when we went through the local permitting process for the Sarno Road Landfill expansion project. The variance request was denied at that time with the observation that we could come back to the Council when the landfill was closer to needing the height variance to provide additional airspace. That time has arrived as referenced below.

#### Observations:

With this background information we will proceed with observations relating to the potential purchase of this facility.

- The life expectancy of the Sarno Road Landfill is April 2020 as permitted by the City of Melbourne and October 2024 if we are able to secure a height variance from the City of Melbourne. Acquiring this property would give us additional life expectancy for this facility (see number 2).
- 2. Depending on several factors, to some extent, the acquisition of this site would extend the life of the Sarno Road Landfill by:
  - a. 4.3 years Without using the valley and without a height variance from the City of Melbourne.
  - b. 11 years Without using the valley and with a height variance from the City of Melbourne.
  - c. 8 years Using the valley and without the height variance from the City of Melbourne.
  - d. 20 years Using the valley and with the height variance from the City of Melbourne.
- 3. There would be no disruption to the users of the Sarno Road Landfill as this would just be an extension of the same.
- 4. Landfills sometimes suffer from underground migration of gasses that are produced from the onsite activities. While various challenges can exist with the new additional space, gas migration does not appear to be evident on the Florida Recyclers Landfill.
- 5. The timeline for providing an alternative site for Class 3 disposal material would be mitigated.
- 6. The purchase of this property without a height variance from the City of Melbourne would provide an additional 8 years of capacity. This capacity would come at a cost of \$11.00<sup>1</sup> a cubic yard, for a single composite liner. This compares unfavorably with the cost of building cell 1, which is a double composite liner, at the Central Disposal Facility of \$5.01<sup>2</sup> a cubic yard (the cost per cubic yard decreases as other cells are built as the landfill can be built higher and the valleys in between the cells are filled).
- 7. Assuming the County is granted a height variance, the cost to use Florida Recyclers property would decrease to \$4.88 per cubic yard (see footnote 1).
- 8. The cost mentioned above does not include the cost of a leachate collection and pretreatment system, acquiring the "new" property, stormwater ponds or ditches, existing land, or any other construction cost not strictly related to the building of the liner. These costs would have to be added. (As a side note for clarification, the Central Disposal Facility also did not include the cost of a leachate tank as one is already in place.)
- 9. The existing Trust Fund for closures is likely underfunded in comparison to our most recent closure projects. This shortfall would have to be accounted as an additional expense for the valuation of the Florida Recyclers property to determine if a purchase is advisable.
- 10. Using the valley as a landfill will eliminate one stormwater pond and necessitate the creation of a substitute pond to the east, plus the existing ditches would have to be regraded to convey the stormwater to the new pond. It would also eliminate the Florida Recyclers Landfill stormwater ditch to the south of the property which is part of their stormwater retention system. The current stormwater retention system for the Sarno Road Landfill cost approximately \$1M to create.

<sup>1</sup> Cost presented are from a Jones Edmonds report from June 2018

<sup>&</sup>lt;sup>2</sup> Actual 2016 cost from the construction of cell 1 at the Central Disposal Facility

- 11. Ground water contamination appears to have some impact possibly related to the type of activities in the Florida Recyclers Landfill.
- 12. The environmental impact of the Florida Recyclers Landfill is not clear and the purchase of this facility would mean assuming the environmental risks the current owners have.
- 13. After consuming the airspace (from the various options in item 2) the county would be required to transport the class III, tires and metal materials from the southern part of the county to the Central Disposal Facility at an increase operating cost. This would entail additional personnel for driving the trucks, additional trucks, additional trailers (because of the type of material the trailers would have to be more sturdy) and hardening of the transfer station to accept more abrasive materials. This approach does not take into consideration the need for a yard waste facility as transporting vegetative materials without mulching is extremely expensive.
- 14. Depending on various factors listed above, acquisition of the Florida Recyclers site would extend the Sarno Road Landfill life expediency from 4 to potentially 20 years if favorable outcomes referenced above occur.
- 15. In comparison, to the US192 site has a projected life of 66 years.

Finally, to assure due diligence in evaluating this potential purchase opportunity, staff recommends a thorough independent environmental site assessment be conducted on the Florida Recyclers Landfill to ascertain the groundwater condition before proceeding with the possible purchase of this property. Findings for the Florida Recyclers property could impact the cost associated with acquiring and placing this property into service for the county.

While we have provided cost estimates and ranges of cost, these need to be updated under a more careful study and engineer estimates. This refinement will allow a more informed decision to be made.

# Summary

Staff recommends the following items occur for a thorough evaluation of the potential purchase of the Florida Recyclers Landfill.

- 1. The market value appraisal underway be completed.
- 2. Height variance application efforts should be completed.
- 3. An Environmental Site Assessment should be completed.
- 4. Update this report with consideration of the results of items 1-3.
- 5. A through engineering study about the potential integration of the Florida Recyclers property into the Sarno Road Landfill system should be undertaken to compare costs of available alternatives.