Crawford County Landfill

Performance Audit

May 27, 2021
To the Crawford County community,

The Auditor of State’s Office recently completed a performance audit for the Crawford County Landfill at the County's request. This review was conducted by the Ohio Performance Team and provides an independent assessment of operations within select functional areas.

This performance audit report contains recommendations, supported by detailed analysis, to enhance the County Landfill’s overall economy, efficiency, and/or effectiveness. This report has been provided to the County and its contents have been discussed with the appropriate elected officials. The County has been encouraged to use the recommendations contained in the report and to perform its own assessment of operations and develop alternative management strategies independent of the performance audit report.

This data-driven analysis of operations provides the County valuable information which can be used to make important financial decisions. Additional resources related to performance audits are available on the Ohio Auditor of State’s website.

This performance audit report can be accessed online through the Auditor of State’s website at http://www.ohioauditor.gov and choosing the “Search” option.

Sincerely,

Keith Faber
Auditor of State
Columbus, Ohio

May 27, 2021
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Introduction

Crawford County (or the County) requested that the Ohio Auditor of State’s Ohio Performance Team (OPT) conduct a performance audit of the County’s landfill operations in order for the County to gain insight into the practices of its landfill operator. The County owns its own landfill, which it also operated until 2005, at which point the County opted to outsource the landfill to a private operator via a lease agreement contract in order to reduce its assumption of risk in operating the landfill. While the County originally competitively bid the landfill operating lease, the original vendor that was selected recently opted to exercise its right under the lease agreement to transfer its authority to a third party.

The new lessee provides both landfill operation services and also serves as one of the primary haulers within the County, which has led to questions regarding its operating practices. A hauler is any person or entity that owns, operates or leases vehicles for the purpose of collecting and transporting solid waste. A landfill operator is responsible for receiving waste and collecting the appropriate fee revenue from individual haulers, then compacting that waste while also being responsible for meeting public health standards.

A performance audit provides tools and guidance to government officials which can result in proactive governing decisions to ensure the continued well-being and safety of constituents. OPT is able to provide performance audits to any government entity in Ohio. These audits provide data-driven analyses and recommendations which can assist officials in improving the economy, efficiency, and effectiveness of both an organization as a whole, or a department or program.

While performance audits may be provided to entities as a result of certain fiscal concerns that are identified by OPT; any entity, regardless of financial condition, may request – and benefit from – a performance audit.

Crawford County Landfill

Crawford County encompasses two municipalities, five villages, and sixteen townships. The two municipalities, Bucyrus and Galion, have the largest populations and are located in the center of the County. The remaining areas are semi-rural to rural. The County includes 400 square miles and has an estimated population of 41,550. The three-member Board of County Commissioners serves as the taxing authority as well as the contracting authority for the County. The Commissioners also create and adopt the County’s annual operating budget and approve expenditures of County tax dollars.

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1 Performance audits are conducted according to Generally Accepted Government Auditing Standards, see Appendix A for more details.
2 Crawford County Financial Audit FY 2018
Crawford County owns a sanitary landfill, which is located within, but not staffed by the County. Portions of the landfill lie within Liberty and Whetstone Townships. Landfill operations are outsourced to Rumpke Waste and Recycling (Rumpke), a waste and recycling management services company. Rumpke is responsible for the upkeep and maintenance of both the landfill site and the equipment used at the facility. Rumpke, or any other company with whom the County may have a lease contract in the future, will also be responsible for the majority of closure and post-closure costs when the facility reaches the end of its lifespan. The Crawford County landfill is the only landfill in Ohio that is government owned and privately operated.

The County has established itself as a single-county solid waste management district (SWMD) under Ohio Revised Code (ORC) § 343.01(A)(1). The purpose of an SWMD is to provide for the safe and sanitary management of solid wastes within all of the incorporated and unincorporated territory of the County. The responsibilities of the SWMD include preparing, monitoring, and updating the solid waste management plan for Crawford County and administering the facilities, such as the landfill and recycling center, and programs that are included in the plan. Per ORC § 3734.54, the SWMD is required to have a policy committee to adopt a solid waste management plan. Pursuant to the Crawford County solid waste management plan, the Crawford County SWMD has a policy committee that is chaired by one of the County Commissioners, as one of the seven-member Board of Directors, and a District Coordinator. However, an SWMD is officially managed by the Board of County Commissioners, pursuant to ORC § 343.01 and ORC § 3734.52(A).

According to its 2019 Comprehensive Annual Financial Report, the SWMD Fund had $759,481 in revenues and $611,666 in expenditures for the year and had an ending fund balance of $573,150. In 2017, the landfill acquired additional land to add capacity and make improvements that allowed for approximately 13 million more cubic yards of additional airspace. This will allow it to operate for the foreseeable future (see Recommendation 2).

From 2005 to 2018, Santek Waste Services, Inc. was responsible for the landfill’s operations and management. On March 20, 2018, the County consented to the transfer of the lease assignment to Rumpke of Northern Ohio, Inc. Per the lease agreement, the operator of the landfill collects revenue from disposal fees, generation fees, and tipping fees (see Rates and Fees). Rumpke then remits the regulatory disposal and generation fees to the County, the state, and the host townships in accordance with the requirements of the ORC (see Crawford County Rates and Fees). A portion of the collected fees must go towards the payment of the General Obligation Bond issued on September 3, 2015, that paid for the cost of improvements to the County

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3 There is also a 7,500 square foot recycling center at the site of the landfill, which the County is responsible for operating.
4 The Crawford County landfill has between 57.3 and 62.4 years of remaining useful life (see Recommendation 2).
5 Landfill operations may be either publically or privately owned and/or operated.
6 According to ORC § 343.07, a Board of County Commissioners may issue bonds of the County under Chapter 133 of the Ohio Revised Code for the purpose of paying a part or the whole cost of the acquisition, construction, enlargement, modification, or repair of any improvement provided to an SWMD.
landfill. At the end of 2019, the bond had a remaining balance of $465,000. Other revenues go towards expenses associated with the solid waste management plan and the County’s General Fund to use for overall County operations.

**Landfill Operations**

A landfill is an important component of solid waste management. Landfills collect and process non-hazardous waste from a variety of sources, and process and store it in such a way to ensure compliance with state and federal regulations. These regulations are designed to protect the environment and the community surrounding a landfill and are updated as advances in technology are made. The types of waste accepted at the Crawford County Landfill include:

- Municipal Solid Waste (MSW) from residential, commercial and agricultural operations;
- Industrial Solid Waste (ISW) from commercial sites;
- Exempt Waste (e.g. construction and demolition debris (C&DD or demo));
- Industrial sludge from wastewater treatment plants; and,
- Animal carcasses (EPA approved location).

While waste may be hauled directly to the landfill, it may also be received via a transfer station. Transfer stations allow for smaller amounts of waste to be collected and consolidated before being moved for disposal purposes. The County accepts waste from both inside and outside of its jurisdiction.

**Waste Collection**

Solid waste is measured and reported in tonnage. There are numerous individual haulers that bring waste to the Crawford County Landfill, including Rumpke. For each load of waste that is dumped at the Crawford County Landfill, Rumpke obtains specific details on the load, including total tonnage and waste origin, and collects the appropriate fees. The tonnage reports that Rumpke compiles to meet OEPA reporting requirements are also sent to Crawford County once a month. A fee collection letter from Rumpke that includes all of the tonnages collected for the month and the total payouts owed to the County, as outlined in the lease agreement, is sent a few weeks after the tonnage report.

When Crawford County operated its own landfill, most of the waste received was coming from inside the County. At that point, the landfill was not generating enough revenue to be solvent. After initially outsourcing the operations, Santek began bringing in more waste from out of

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7 [https://epa.ohio.gov/](https://epa.ohio.gov/)
8 All landfill operators in the State of Ohio are required to provide the OEPA with information on tonnages and fees collected. The OEPA, however, does not have a system in place to verify the accuracy of the reported tonnages. The OEPA reviews topographical maps of all units of a sanitary landfill facility to ensure that owners and/or operators have not exceeded the limits of waste placement.
District. When Rumpke took over operations at the Crawford County Landfill in 2018, they obtained approval to accept up to 4,000 tons of waste per day.

Between 2017 and June of 2020, the total average monthly tonnages collected increased by approximately 46 percent. However, this increase has not occurred uniformly across all types of waste received by the landfill, and the overall increase in tonnage is driven entirely by an increase in out-of-county MSW and ISW waste. The in-county MSW and ISW, exempt waste, and C&DD waste during this time period actually decreased.

### Averages Monthly Tonnages -- 2017 through June 2020

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2020</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSW/ISW In-County</td>
<td>2,519</td>
<td>2,294</td>
<td>(224.6)</td>
<td>(8.9%)</td>
</tr>
<tr>
<td>MSW/ISW Out-of-County</td>
<td>7,522</td>
<td>14,562</td>
<td>7,039.3</td>
<td>93.6%</td>
</tr>
<tr>
<td>Total MSW/ISW</td>
<td>10,041</td>
<td>16,856</td>
<td>6,814.7</td>
<td>67.9%</td>
</tr>
<tr>
<td>C&amp;DD</td>
<td>2,396</td>
<td>1,860</td>
<td>(536.2)</td>
<td>(22.4%)</td>
</tr>
<tr>
<td>Exempt (Other)</td>
<td>447</td>
<td>175</td>
<td>(271.4)</td>
<td>(60.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,884</td>
<td>18,891</td>
<td>6,007.2</td>
<td>46.6%</td>
</tr>
</tbody>
</table>

Source: Crawford County

Note: Rates have been averaging about 1,000 tons per day since June 2020.

The majority of the increase is the result of a new contract in 2019 to accept waste from the Allen County Transfer Station in Lima, as well as the increased tonnage coming in from the Richland County Transfer Station. As a result of the increase in out-of-county transfer waste, a greater percentage of the overall waste received is now coming from outside of Crawford County. The chart below shows the change in proportion of out-of-county vs. in-county waste collection since Rumpke took over operations of the landfill.

### In-County vs. Out-of-County Waste Breakdown

<table>
<thead>
<tr>
<th>Date</th>
<th>In-County</th>
<th>Out-of-County</th>
</tr>
</thead>
<tbody>
<tr>
<td>May, 2018</td>
<td>24.8%</td>
<td>75.2%</td>
</tr>
<tr>
<td>July, 2020</td>
<td>15.7%</td>
<td>84.3%</td>
</tr>
</tbody>
</table>

Source: Crawford County

It is not uncommon for smaller SWMDs to have a higher proportion of total waste collection from out-of-district sources. We selected two peer groups for comparison purposes – the first is comprised of SWMDs which had similar total in-district direct haul waste and the second is comprised of privately owned and operated landfills in SWMDs with only one landfill. In both instances, more than half of the waste collected by the SWMD originated outside of the district.9 In general, these smaller SWMDs do not produce enough waste in-district to maintain landfill operations and the out-of-district waste provides needed revenues. The key is to find a balance

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9 See Appendix B for detailed peer comparison charts
between generating enough revenue to be profitable while not reducing the landfill capacity and remaining useful life too quickly (see Recommendation 2).

**Landfill Finances**

Landfills cover the cost of their operations through tipping fees charged to private haulers per ton of waste disposed. In addition to the tipping fees, there are five other types of fees that a landfill operator may or must collect per State law. Each type of fee is calculated based on specific metrics outlined in the Ohio Revised Code, contracts, or identified flat rates.\(^\text{10}\)

**Crawford County Rates and Fees**

As the landfill operator, Rumpke is required to collect all fees related to waste disposal. It is further responsible for remitting revenues from fees to the appropriate entity, whether that be the state, local townships, or the SWMD. The following fees are collected at the Crawford County landfill and distributed by Rumpke\(^\text{11}\):

**State Treasury Fees**  \(\text{ORC} \, \text{§} \, 3734.57 \, (A)\)

- \$4.75 per ton, collected monthly (sent to EPA quarterly)
- \(0.75\%\) Discount available if remitted to State on time
  - $0.20 to Hazardous Waste Facility Fund
  - $0.70 to Hazardous Waste Clean Up Fund
  - $0.75 to Waste Management Fund
  - $2.85 to EPA Fund
  - $0.25 to Soil and Water Conservation District Assistance Fund

**Host Disposal Fee to Township/City**  \(\text{ORC} \, \text{§} \, 3734.57 \, (C)\)

- \$0.25 per ton, collected monthly (sent to EPA quarterly)
  - Maintain roads and public facilities
  - Provide emergency and other services
  - Offset reduction in real property values resulting from Dump Site

**Crawford County Landfill is within two townships; the fee is disbursed as follows:**

- $0.10/ton to Liberty Township
- $0.15/ton to Whetstone Township

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\(^\text{10}\) See Appendix B for information regarding ORC authorization for fees

\(^\text{11}\) In addition to the fees charged at the Crawford County Landfill, ORC § 343.02 authorizes an SWMD to charge a contract or designation fee.
Disposal Fees to SWMD  
ORC § 3734.57 (B)

Spent in accordance of Solid Waste Plan and 10 allowable purposes
- $1-2 for In-District
- $2-4 for Out-of-District
- $1-2 for Out-of-State

Crawford County rates are currently set at
- $2 for In-District
- $4 for Out-of-District
- $1 for Out-of-State (but does not currently collect)

Generation Fees to SWMD  
ORC § 3734.573

Up to $5/ton unless higher rates are ratified by a resolution, per ORC § 3734.55/.57(B)
- Set by Solid Waste Management District
- Levied upon generation of Solid Waste within the District where first received
- In 2021, Crawford County is charging $4/ton, with plans to increase to $4.50 in 2026

Tipping Fees to Operator of Landfill

Flat rate across the board, or variance depending on negotiated rates with haulers
- In-District Rate must be reported to the EPA
- Out-of-District Rate is not required to be reported

Tipping Fees

To cover the costs of operating the landfill, an operator will typically collect a tipping fee from any hauler who disposes of waste at its landfill. This tipping fee goes toward the costs of personnel, upkeep and maintenance, closure and post-closure, and possible land additions for expansion. In the case of a private operator like Rumpke, this fee covers the cost of doing business with enough margin to be profitable, whereas governments who operate their own landfills will typically charge enough to cover costs. At the Crawford County Landfill, the in-district tipping fee rate was established in the original landfill operator lease agreement in 2005, and it provides for annual increases at the first of each year that are tied to the Consumer Price Index.

The in-district tipping fee (also called the “gate rate”) is the per-ton charge to the typical in-county or in-district hauler for disposing of waste at a landfill, and these rates are reported to the OEPA. Landfill owners or operators can set different pricing levels for tipping fees through contracts. If they charge a separate rate for out-of-district waste, they are not required to report those rates to the OEPA. Because of this, it is fairly typical for landfill operators to have varying tipping fees for out-of-district haulers that are set based on the desire to compete for business. As a result, private operators consider their individual contracted out-of-district tipping fees to be proprietary and confidential information.
Throughout this audit, neither Rumpke nor any other private landfill operators surveyed were willing to share their out-of-district tipping fee rates, so the rate Rumpke is charging at the landfill for out-of-district tipping fees is unknown; therefore, the County is unable to determine if the in-county tipping fee charged by Rumpke is competitive to the rates charged to out-of-district customers. However, in-district rates must be reported to the OEPA, so we were able to compare Rumpke’s in-district rate to the in-district rate of the other landfill operators in the State of Ohio.

The chart below shows how the in-district tipping fee at the Crawford County Landfill compares to other privately operated and government-operated landfills around the State. It also shows the Ohio, Midwest region, national, and calculated weighted national averages for 2019, as reported by the Environmental Research and Education Foundation (EREF).

### In-District Rate Comparisons

<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
<th>$ Difference</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crawford County</td>
<td>$51.00</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Privately Operated Statewide Average</td>
<td>$50.66</td>
<td>$0.34</td>
<td>0.7%</td>
</tr>
<tr>
<td>Government Operated Statewide Average</td>
<td>$37.59</td>
<td>$13.41</td>
<td>35.7%</td>
</tr>
<tr>
<td>Overall Statewide Landfill Average</td>
<td>$47.10</td>
<td>$3.90</td>
<td>8.3%</td>
</tr>
<tr>
<td>EREF Average (Ohio)-2019</td>
<td>$44.35</td>
<td>$6.65</td>
<td>15.0%</td>
</tr>
<tr>
<td>EREF Midwest Regional Average-2019</td>
<td>$48.87</td>
<td>$2.13</td>
<td>4.4%</td>
</tr>
<tr>
<td>EREF National Average-2019</td>
<td>$55.36</td>
<td>($4.36)</td>
<td>(7.9%)</td>
</tr>
<tr>
<td>EREF Calculated Weighted National Average-2019</td>
<td>$52.08</td>
<td>($1.08)</td>
<td>(2.1%)</td>
</tr>
</tbody>
</table>

Sources: OEPA, EREF

Note: Rates from the OEPA shown in top half of table are as of October 6, 2020.

1 Weighted national average accounts for the fact that the actual amount of MSW (Municipal Solid Waste) delivered to landfills in each state varies due to factors such as total waste generation, the fraction recovered for recycling and/or composting, and interstate transport (i.e. import and export of MSW).

The in-county tipping fee for MSW, or everyday items discarded by the public, at the Crawford County Landfill is higher than the average of all government-operated landfills in Ohio, but in line with privately operated landfills. The rate is only slightly above the statewide average of all landfills, which is driven lower by the rates of those that are government-operated. This means that unless Crawford County is willing to take back the operation of the landfill itself, it can expect that the in-district tipping fee being charged by Rumpke is roughly what any other private operator would charge. The County could consider taking back landfill operations and operating with a lower in-district tipping fee; however, the initial startup costs of having to purchase dozers and compactors, which can cost over $1 million, plus hiring and training scale, dozer, and compactor operators would likely be a barrier, not to mention the increased oversight responsibilities and ongoing cost of operations. The County initially outsourced the landfill operations in order to pass that cost burden on to a third party and to avoid potential insolvency with subsidies from the General Fund. The trade-off is that a private contractor will operate at a price that the market will bear and that allows them to maximize profits.
Cost Effectiveness and Rate Comparisons

The OEPA publishes the total tonnages and fees of all landfill operators around the State. In order to determine the reasonableness of the Crawford County Landfill fee rates, comparisons were made with various peer groupings (see Appendix B). The total waste tonnage received by the Crawford County Landfill most closely aligns with the total tonnages of other SWMDs that have similar in-district direct haul tonnages or are one of the following:

- Single-county SWMDs with one landfill;
- Government operated SWMDs; or,
- Government operated SWMDs with one landfill.

The disposal and generation fees that Crawford County charges are either in-line with or above those of each peer grouping.12

With all of the fees discussed above, a Crawford County resident or hauler disposing of waste at the Crawford County Landfill would expect to pay a total of about $62 per ton. This includes the disposal fees of $4.75 per ton to the State and $0.25 per ton to the host community townships. Additionally, it includes the disposal or tier fee of $2 per ton and the generation fee of $4 per ton, which flow into the Crawford County SWMD Fund for the operation of the Crawford County SWMD and the recycling center. It also includes the $51 per ton tipping fee or gate rate charged by Rumpke for the operation of the landfill. The County could consider lowering the progressively increasing generation fee rates to benefit in-county residents; however, those fees are charged to both in-county and out-of-county residents, so that would reduce the total revenue flowing into the SWMD Fund. The only other fee for in-county residents that could be adjusted would be the in-district disposal fee that is currently set at $2 per ton, already half the rate levied on an out-of-county resident; however, the lowest rate allowed by the Ohio Revised Code for this type of fee is $1 per ton. Overall, lowering total costs by $1 per ton is not likely to make it much more cost effective for in-county residents to dispose of waste at the Crawford County Landfill.

One of the benefits that in-county residents receive from having a local landfill operated by a private contractor is that Rumpke is responsible for the upkeep and maintenance of the landfill site and the costly equipment used at the facility as well as the majority of the closure and post-closure costs when the facility reaches the end of its lifespan. Additionally, disposal fees for an in-county resident are lower than those of an out-of-county resident, and the amount now being collected from in-county residents for the retirement of the General Obligation Bond debt for the landfill will be paid off by 2025. Rumpke has been bringing in more out-of-county waste, which has generated more revenue for the County, and therefore its citizens. Rumpke has also increased its compaction rate of the waste, which will increase the lifespan of the landfill, as less airspace is being used (see Recommendation 2).

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12 Generally, government entities are operating at the price point that is necessary to recoup operating costs. Private entities are operating at a price that the market will bear and that allows them to maximize profits. The barrier to Crawford County operating the landfill itself after outsourcing is the initial startup costs.
Flow Control

Crawford County has “flow control” over its landfill, which means that all in-county waste is supposed to be disposed of only at the Crawford County Landfill, or at a facility outside the State of Ohio. A waiver can be granted allowing for disposal at another in-state facility, such as a neighboring county’s landfill.

According to the most recent Facility Data Report compiled by the OEPA for 2019, a small amount of in-district waste was being sent to other landfills in Ohio.13 A total of 36,957.8 out of the total 37,682.6 tons (or 98.1 percent) of waste generated in Crawford County was sent to the Crawford County Landfill, meaning only 1.9 percent of the total was moved outside of the County. This has a negligible impact on the county in lost revenues, but the net dollar loss will increase as fees increase. The generation fee increased to $4 per ton in 2021 and is scheduled to increase to $4.50 in 2026.

The chart below shows the financial effect that this loss of in-district waste had on Crawford County in 2019 and what that effect would be at the new 2021 rates if the District were to continue to lose that amount of waste.

Estimated Revenue Lost from Violations of Flow Control

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2021 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt Tons</td>
<td>280.9</td>
<td>280.9</td>
</tr>
<tr>
<td>Non-Exempt Tons Lost</td>
<td>443.8</td>
<td>443.8</td>
</tr>
<tr>
<td>Generation Fee</td>
<td>$3.00</td>
<td>$4.00</td>
</tr>
<tr>
<td>Generation Fees Lost</td>
<td>$1,332</td>
<td>$1,775</td>
</tr>
<tr>
<td>Disposal Fee</td>
<td>$2.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>Disposal Fee Lost</td>
<td>$888</td>
<td>$888</td>
</tr>
<tr>
<td><strong>Total Fees Lost</strong></td>
<td><strong>$2,219</strong></td>
<td><strong>$2,663</strong></td>
</tr>
</tbody>
</table>

Sources: Rumpke, OEPA

Note: 2019 losses comprise $1,332 in generation fees and $888 in disposal fees. 2021 projected losses comprise $1,775 in generation fees and $888 in disposal fees.

As these losses increase, the total dollar amount lost may become great enough to encourage the County to begin reinforcing its flow control policy. County representatives noted that the current dollar losses would not offset the cost of legal action to recoup the loss. Alternatively, Crawford County could enact a designation or contract fee to recoup losses caused by flow control.

13 These include: Hancock County Landfill (85.8 tons), Huron County Solid Waste Facility (2.36 tons), Carbon Limestone Landfill LLC in Mahoning County (15.54 tons), Mid-State Waste Transfer Facility in Morrow County (582.29 tons), Noble Road Landfill in Richland County (27.43 tons), Rumpke Waste Richland County Transfer Facility (4.91 tons), Evergreen Recycling & Disposal in Wood County (4.74 tons), and County Environmental Landfill of Wyandot (1.67 tons).
violations. An analysis of peer landfill operations indicated these fees may range from $0.15 to $1.78 per ton.

Results of the Audit

At the request of the County, we reviewed several areas in order to provide recommendations for improved operational efficiency and effectiveness. These scope areas were analyzed with specific objectives in mind, which are as follows:

- What opportunities exist for the County to improve internal controls over contract monitoring and performance?
- Are landfill services cost effective to in-county residents?
- Are the rates charged by the landfill reasonable and appropriate?
- Is the payment rate of the contractor for tipping fees for out-of-county customers appropriate?
- Does the landfill have an appropriate land-term plan and capital reserve?

Where applicable, recommendations are based on industry standards and best practices. Our audit resulted in the following recommendations for the County to consider:

- **Recommendation 1**: The current landfill operator lease agreement with Rumpke, and any future contracts with operators, should be revised in order to improve oversight controls over the contract in regards to billing and remittance, as well as hauling and landfill operations, while considering industry best practices.
- **Recommendation 2**: Crawford County should establish capital planning policies that include a multi-year planning and budgeting process, particularly when considering the remaining useful life of its landfill and the funds associated with purchasing future additional acreage.

In regards to the other scope areas, it was determined that rates established by the County and the tipping fees charged by the landfill operator are reasonable and appropriate, and landfill services are cost effective to in-county residents. Therefore, these scope areas yielded no recommendations.
Recommendation 1: Internal Control Over Contract Monitoring and Performance

The current landfill operator lease agreement with Rumpke, and potential future operators, should be revised in order to improve oversight controls over the contract in regards to billing and remittance, as well as hauling and landfill operations, while considering industry best practices.

The existing lease agreement contract does not provide some important internal controls over contract monitoring and performance of the private landfill operator. Internal controls are rules and procedures implemented to avoid fraud, and to ensure integrity and accountability of financial reporting. One of the controls that the County should implement is to begin obtaining the quarterly tonnage reports that Rumpke sends to the OEPA, rather than the initial monthly tonnage reports that may later be corrected for errors. The County should then attempt to reconcile the tonnages reflected in those quarterly reports with those reported on the fee collection letters for the corresponding months.

Background

In 2005, Crawford County decided that it could no longer afford the costs associated with operating its landfill. The County Commissioners underwent a competitive bidding process in order to identify a vendor that would be capable of assuming operations of the landfill and awarded a contract through a lease agreement. The original vender, Santek, transferred its authority under the contract to Rumpke in 2018.

Rumpke currently acts as one of the primary haulers of waste to the landfill and as the operator of the landfill. This means that the company has control over a large portion of the waste entering the landfill and is responsible for the processing of it. Because of this, the County feels it does not have sufficient oversight over the landfill and its performance.

Methodology

OPT reviewed the language of the contract and its four amendments for details on internal controls related to the monitoring and performance of Rumpke. We also reviewed best practices for government oversight of contracted landfill operations as outlined by In the Public Interest (ITPI), a national non-profit research and policy organization that studies public goods and services, and general best practices for contract management as outlined by the National State...
Auditors Association (NSAA). Lastly, we conducted a survey of landfills around the State to identify other best practices related to internal controls over contract monitoring and performance.

**Analysis**

Rumpke keeps track of daily waste and fees received and generates monthly reports, which are then summarized in quarterly reports sent to the OEPA. The existing contract does not specify procedures for weighing the waste received, nor does it have provisions specifying short timelines for resolving customer complaints or collection discrepancies.

When waste is received at the landfill, it is weighed by a scale operator and the driver provides a report on the type of waste in the truck. The scale operator does not confirm this information at the time of weighing. This can be confirmed through the use of radio communications between the scale operator and compactor operators working in the landfill who monitor the dumping of waste. While Rumpke has provided CB radios, it does not require this communication to occur when waste is being disposed. Further, Crawford County’s contract does not stipulate that there must be radio communication between the landfill scale operator and the compactor operators to confirm the waste being dumped. Without radio communication between landfill employees, there is less oversight into what waste is being reported versus what is actually being dumped.

The commissioners are often unable to match the tonnage report totals received from Rumpke to the tonnage report totals shown in the fee collection letter sent by Rumpke a couple of weeks later. Since there is no language in the contract to specify a short timeline for the contractor to remedy such errors, the County is typically unable to resolve these discrepancies to their satisfaction and runs the risk of being shortchanged the fees they are due. Furthermore, the lease agreement does not specify a monetary fine or liquidated damages amount for each missed or erroneous collection and additional fines if the complaint remains unresolved.

OPT compared the tonnage reports from both Santek and Rumpke to the corresponding fee collection letters from January 1, 2017 to June 30, 2020. The chart on the following page shows an overall comparison between the tonnage reports and the fee collection letters in terms of tonnages and what those differences total in the corresponding payments received by the County based on the identified rate per ton for each waste type.

---

15 Additionally, regular scale inspection and certification is not mandated in the lease agreement.
**Tonnage and Fee Report Reconciliation | Jan 2017 - June 2020**

<table>
<thead>
<tr>
<th></th>
<th>Tonnage Report</th>
<th>Fee Report</th>
<th>Difference</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC MSW Tonnage</td>
<td>85,640.8</td>
<td>83,645.0</td>
<td>(1,995.79)</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>IC MSW Revenue</td>
<td>$1,138,166</td>
<td>$1,111,642</td>
<td>($26,524)</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>C&amp;DD Tonnage</td>
<td>91,392.4</td>
<td>93,756.2</td>
<td>2,363.84</td>
<td>2.6%</td>
</tr>
<tr>
<td>C&amp;DD Revenue</td>
<td>$274,177</td>
<td>$281,269</td>
<td>$7,092</td>
<td>2.6%</td>
</tr>
<tr>
<td>Total OOC Tonnage</td>
<td>322,623.8</td>
<td>324,472.1</td>
<td>1,848.24</td>
<td>0.6%</td>
</tr>
<tr>
<td>Total OOC Revenue</td>
<td>$435,542</td>
<td>$438,037</td>
<td>$2,495</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>Total Tonnage</strong></td>
<td><strong>499,657.0</strong></td>
<td><strong>501,873.3</strong></td>
<td><strong>2,216.29</strong></td>
<td><strong>0.4%</strong></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$1,847,885</strong></td>
<td><strong>$1,830,948</strong></td>
<td><strong>($16,937)</strong></td>
<td><strong>(0.9%)</strong></td>
</tr>
</tbody>
</table>

Sources: Rumpke, Crawford County

We found that the total tonnages reported in the fee collection letters to the County have exceeded the total tonnages shown in the tonnage reports by 2,216 tons, or 0.4 percent, since January 2017. However, since the fee letters reflect less total MSW tonnage, which pays at a higher rate, and more total Demo (C&DD) waste, which pays at a lower rate, Crawford County has actually received $16,937, or 0.9 percent less in fees based on the tonnages reported in the fee collection letters than those shown in the Tonnage Reports. According to the County, Rumpke provides the tonnage reports as a courtesy each month, but the totals shown in the fee collection letters reflect a true up and corrections that should match what is submitted to the OEPA. Because of this, the County should request copies of the quarterly tonnage reports that are going to OEPA and attempt to reconcile the previous three months’ fee collection letters to those tonnage reports instead.

All the data for tonnages and payments that are shown in the fee collection letters were tested for accuracy based on rates outlined in the lease agreement to see if the operators had calculated the projected payments correctly. Two tests were done. Under Santek, the totals always matched the formula, but under Rumpke, there have been discrepancies. Rumpke has made errors when summing up the totals on the fee letters and in calculating what those totals should have been based on the contract.

**Fee Collection Revenue by Source**

![Fee Collection Revenue by Source](chart.png)

Source: Crawford County

---

**Efficient • Effective • Transparent**
Fee collection revenue has increased significantly and was on pace at the midpoint of 2020 to reach nearly $1 million for the year. Although the discrepancies identified between the reports and letters were not significant and have generally worked out to the benefit of the County financially, this highlights the need for improved contract oversight by Crawford County officials to prevent future errors from occurring that could negatively impact revenue.\(^\text{16}\)

Contract monitoring is an essential part of the contracting process. Without a sound monitoring process, the contracting agency does not have adequate assurance that it receives the services for which it has contracted. Per the NSAA, performance requirements should be developed that will hold vendors accountable for the delivery of quality services. Generally, contracts should protect the interests of the agency; identify the responsibilities of the parties to the contract; define what is to be delivered; and document the mutual agreement, the substance and parameters of what was agreed upon. Performance requirements should:

- Clearly state the services expected;
- Clearly define performance standards and measurable outcomes;
- Identify how vendor performance will be evaluated;
- Include positive or negative performance incentives;
- Identify the staff responsible for monitoring vendor performance and ensure that sufficient staff resources are available to properly handle vendor management; and,
- Clearly define procedures to be followed if, during the course of performance of a service contract, unanticipated work arises that requires modification of the contract.

Several internal controls specific to landfill operations are contained in the ITPI guidance and were gathered from similar landfills. We noted that these were absent from the current lease agreement between Crawford County and Rumpke. Controls outlined by ITPI, which are not contained in the current contract, include:

- Establish proper procedures and standards for weighing the waste received\(^\text{17}\);
- Specify a short timeline for complaint resolution;
- Specify a short timeline for the contractor to remedy collection errors or discrepancies between the tonnage report and fee collection report (no more than 24 hours); and,
- Specify a monetary fine or liquidated damages amount for each missed collection and additional fines if the complaint remains unresolved.

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\(^{16}\) The County received about $181 less than it would have if the individual fee totals had been summed properly between Rumpke’s first full month as operator in May 2018 and June 30, 2020. The County also received about $276 more than it should have from both Santek and Rumpke between 2017 and June 2020, based on the method of calculating fees outlined in the lease agreement.

\(^{17}\) Ohio Admin. Code 3745-27-19(I) does require the use of weight scales if the landfill receives more than 200 tons of waste per day on average, and that the scales must be inspected, tested, and approved by the county auditor or city sealer having jurisdiction where the scale is located. ORC § 1327.49 establishes that the specifications, tolerances, and regulations for commercial weighing and measuring devices shall be those adopted by the national conference on weights and measures, recommended by the national institute of standards and technology and published in national institute of standards and technology handbook 44, except insofar as specifically modified, amended, or rejected by rule by the director of agriculture.
According to ITPI, an oversight provision should also be included in this part of the contract to assure the operator and the County have plans and personnel to monitor and assess contract compliance. Per ITPI, a good contract does the following:

- Specifies that the County will perform contract monitoring and oversight and establishes those formal procedures, as well as dedicates adequate resources, including staff and funding to oversee the contract
- Requires the County and contractor to jointly develop an operations plan which covers
  - joint monitoring procedures;
  - procedures for fine assessment or performance incentive rewards; and,
  - appeals processes
- Requires the County and contractor to designate contract implementation lead staffers

Peer contract best practices include:

- Monthly tonnage reports must match the fee report and fees paid;
- Communication via CB radio between the scale operator and compactor operators; and
- Scale certified regularly by the auditor and inspected quarterly by the vendor.

**Conclusion**

As a result of some missing key contract provisions, Crawford County’s contract with Rumpke does not provide all of the recommended practices for internal controls over contract monitoring and performance. Therefore, the County should revise the landfill operator contract to improve oversight controls in regards to billing and remittance, as well as hauling and landfill operations, while taking into consideration industry best practices. The County should implement a system of reconciling the quarterly tonnage reports Rumpke submits to the OEPA with the fee collection letters from the corresponding period.
Recommendation 2: Capital Planning

Crawford County should establish capital planning policies that include a multi-year planning and budgeting process, particularly when considering the remaining useful life of its landfill and the funds associated with purchasing future additional acreage. Without such a plan, the County is at risk of not having enough funds available to purchase additional land for future waste disposal and landfill management needs.

Background

A capital reserve plan is a tool that can be used to coordinate the timing and financing of capital improvements over a multi-year period. It ensures that an organization has enough funds set aside for future capital needs, such as large repairs, replacements, and renovations. A plan also helps forecast and strategically determine when capital funds will likely need to be spent.

Methodology

We reviewed the County’s planning and budgeting processes related to landfill operations to determine if they were in-line with best practices as outlined by the Government Finance Officers Association (GFOA), which are developed by government finance experts.

Analysis

Crawford County does not have a capital reserve plan or fund for addressing long-term landfill space needs. Additionally, it is not setting aside money for the purchase of additional landfill space needs in the future or for any potential closure and post-closure costs that might fall to them. Even if the County cannot or does not want to fund a reserve account at this time, a specific capital reserve plan should be developed.

The lease agreement outlines the responsibilities of the County and Rumpke in regards to future landfill space. Per the agreement, Rumpke may add additional real estate, as necessary, to allow for expansion of the existing landfill. However, the agreement does not address the purchase of noncontiguous land, so if such an action was necessary, the County would be responsible for the costs. However, the County does not have a plan in place for the purchase of additional land for landfill use.

Crawford County is not obligated to maintain a specific capital reserve fund for the purchase of additional landfill acreage, but must only demonstrate to the Auditor of State (AOS) that it has enough in its reserves or is healthy enough financially to meet its landfill closure and post-closure costs. The AOS calls this the Financial Assurance Test. If the liability for closure or post-closure costs should ultimately fall to the County, or if additional non-contiguous landfill acreage is needed, County officials have indicated that those costs would be paid out of the

18 For the Agreed upon Procedures of all landfills in Ohio, pursuant to OAC § 3745.
overall County reserves. Eventual expansion of the landfill is inevitable, and as of now the County does not have a dedicated reserve fund to handle the costs associated with that expansion.

The OEPA has a formula for a landfill operator to use to calculate the remaining useful life of a landfill based on the remaining cubic airspace active and under permit, projected tonnage received, compaction rate, etc. Cubic airspace is measured through aerial photography; however, the OEPA does not have any method of verifying the accuracy of the remaining airspace or tonnage collection totals or rate. Owners/operators of landfills are required to provide a topographic map of all of the landfill, which must be certified by a professional skilled in the appropriate disciplines, with updated contour lines on the plan drawing. Those maps are then used to ensure that owners/operators have not exceeded the limits of waste placement. Compaction rate analysis is also periodically measured. Since expected remaining useful life calculations require certain assumptions to be made, there can be variances in projections if one of those inputs changes (e.g., compaction or tonnage collection rate); however, it is driven by a formula that is required to be included in the annual report to the OEPA by all landfill operators. That formula is as follows:

\[
\text{Annual Tonnage Received} = \frac{\text{Compaction Rate} \times \text{Total Remaining Airspace}}{\text{Cubic Yards}}
\]

As of 2020, Rumpke has been compacting waste at a higher rate. Packing more waste into each cubic yard of airspace will affect the projected remaining useful life of the landfill. Rumpke is also reporting waste receipts of around 1,000 tons per day, which also affects remaining useful life projections.

The following chart shows a calculation of the remaining useful life of the Crawford County Landfill based on various inputs. If projections are made at the compaction and average waste levels reported for 2019, then the landfill would have approximately 57.3 years of life remaining. If projections are made based upon the most recent compaction and average waste levels, the landfill would have approximately 62.4 years of life remaining. Rumpke is now compacting the waste more densely than in 2019, but is also currently accepting more waste; therefore, there is only a slight difference in the two useful life projections.
Crawford County Landfill Remaining Useful Life Projection

<table>
<thead>
<tr>
<th></th>
<th>2019 Rate</th>
<th>Current Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compaction Rate (Tons per Cubic Yard)</td>
<td>0.57</td>
<td>0.78</td>
</tr>
<tr>
<td>Estimated Total Remaining Airspace (Cubic Yards)</td>
<td>21,269,961</td>
<td>21,269,961</td>
</tr>
<tr>
<td>Authorized Maximum Daily Waste Receipts (Tons per Day)</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Annual Receipts at Maximum (Tons)</td>
<td>1,068,000</td>
<td>1,068,000</td>
</tr>
<tr>
<td>Remaining Life at Maximum (Years)</td>
<td>11.4</td>
<td>15.6</td>
</tr>
<tr>
<td>Actual Waste Receipts (Tons per Day)</td>
<td>795</td>
<td>1,000</td>
</tr>
<tr>
<td>Days Operated</td>
<td>267</td>
<td>267</td>
</tr>
<tr>
<td>Actual Receipts (Tons)</td>
<td>212,178</td>
<td>267,000</td>
</tr>
<tr>
<td>Remaining Life (Years)</td>
<td><strong>57.3</strong></td>
<td><strong>62.4</strong></td>
</tr>
<tr>
<td>Remaining Tons for Waste Placement</td>
<td>12,152,255</td>
<td>16,654,331</td>
</tr>
<tr>
<td>Gross Airspace Used (Cubic Yards)</td>
<td>371,373</td>
<td>340,997</td>
</tr>
</tbody>
</table>

Sources: Rumpke, Crawford County, OEPA

1 Assumes total remaining gross permitted airspace as of 2019 report to OEPA plus an additional 13.1 million cubic yards of permitted airspace on the additional parcel available to the north that contains the capped C&DD landfill that would have to be permitted by the OEPA to receive MSW/ISW.

Although Crawford County may have a significant number of years of landfill capacity remaining on its available parcels of land, it should have a landfill capital reserve plan and fund to address long-term land space needs in future generations. Any capital reserve plan funding should be tied to the collections being generated by the rental fees outlined in the lease agreement with the landfill operator.

According to Strategies for Establishing Capital Asset Renewal and Replacement Reserve Policies (GFOA, 2019), governments should adopt a written policy addressing capital asset reserve for renewal and replacement as part of a strong capital asset management program, given the many demands on a government’s resources. These reserve policies should coincide with all rate/user charges for the asset(s). Some examples of annual funding allocations for a capital asset reserve are:

- **Maintain a minimum ending balance** equal to a dollar amount or a percentage based on the particular entity’s capital needs and financial capabilities.
- **Annually contribute an amount** based on a percentage of the annual depreciation of the entity’s assets.

According to Capital Asset Management (GFOA, 2017), local governments should establish a system for assessing their capital assets and then appropriately plan and budget for any capital maintenance or replacement needs in order to continue the provision of services that contribute to public health, safety, and quality of life.
Multi-Year Capital Planning (GFOA, 2016) specifies that attention should be given to the following:

- The scope and timing of a planned project should be well defined in the early stages of the planning process;
- Governments should identify and use the most appropriate approaches when estimating project costs and potential revenues undefined;
- For projects programmed beyond the first year of the plan, governments should adjust cost projections based on anticipated inflation;
- A clear estimate of all major components required to implement a project should be outlined, including land acquisition needs, design, construction, contingency and post-construction costs; and,
- The ongoing life cycle costs associated with each project should be quantified, and the sources of funding for those costs should be identified.

A properly prepared capital plan allows an organization to appropriately plan for future expenses by identifying needs, funding options, and the potential impact to operating budgets. Further, by planning for large capital expenses in advance, an organization helps to ensure the continued delivery of goods and services to customers.

**Conclusion**

Crawford County is not required to maintain a reserve fund specifically for landfill expenses. However, without one, the County is at risk of not having sufficient funds available for land space needs and/or any potential future closure costs and post-closure maintenance. Although Crawford County may have a significant number of years of landfill capacity remaining on its available parcels of land, it should have a landfill capital reserve plan and fund to address long-term land space needs in future generations. Any capital reserve plan funding should be tied to the collections being generated by rental fees outlined in the lease agreement with the landfill operator.
Client Response Letter

Audit standards and AOS policy allow clients to provide a written response to an audit. The letter on the following page is the County’s official statement in regards to this performance audit. Throughout the audit process, staff met with County officials to ensure substantial agreement on the factual information presented in the report. When the County disagreed with information contained in the report, and provided supporting documentation, revisions were made to the audit report.
May 11, 2021

Mr. Keith Faber, State Auditor
Office of the Auditor of State
88 East Broad street, 5th Floor
Columbus, Ohio 43215

Dear Auditor Faber,

Crawford County Commissioners would like to Thank you and your staff for your efforts in conducting the Performance Audit of our landfill and landfill operator policies and procedures.

Crawford County found itself unable to feasibly operate our Landfill in 2005, and at that time leased the facility to a private operator. In 2018 the lease operator changed and issues began to surface. In order to address the issues and protect the public asset for future use, the commissioners requested a performance audit to look at all aspects of our lease, operator procedures and life expectancy of the facility.

The audit revealed discrepancies in the monthly tonnage reports from the operator. While much of the information is proprietary information making it difficult to verify.

The audit report provides several recommendations for the county to be aware of and possibly add language in the lease with the private operator to clarify these minor issues. These modifications include the operator providing for greater clarification in the monthly tonnage reports.

The report also gives the commissioners some factual data as to the life expectancy of the facility of 57.3 to 62.4 years and cautions the future administrations of the county for preparedness as when that time approaches.

This report will be a valuable document to the county when questions arise from our citizens about the ongoing operation of the landfill.

Sincerely;

Crawford County Commissioners,

Doug Werdmaner
President,
Board of Commissioners

Tim Ley
Vice President

Larry Schmidt
Member,
Appendix A: Purpose, Methodology, Scope, and Objectives of the Audit

Performance Audit Purpose and Overview

Performance audits provide objective analysis to assist management and those charged with governance and oversight to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

Generally accepted government auditing standards (GAGAS) require that a performance audit be planned and performed so as to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on audit objectives. Objectives are what the audit is intended to accomplish and can be thought of as questions about the program that the auditors seek to answer based on evidence obtained and assessed against criteria.

We conducted this performance audit in accordance with GAGAS. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Summary of Objectives and Conclusions

In order to provide the County with appropriate, data driven recommendations, the following scope area questions were assessed:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>What opportunities exist for the County to improve internal controls over contract monitoring and performance?</td>
<td>R.1</td>
</tr>
<tr>
<td>Are landfill services cost effective to in-county residents?</td>
<td>No Recommendation (See Below)</td>
</tr>
<tr>
<td>Are the rates charged by the landfill reasonable and appropriate?</td>
<td>No Recommendation (See Below)</td>
</tr>
<tr>
<td>Is the payment rate of the contractor for tipping fees for out-of-county customers appropriate?</td>
<td>No Recommendation (See Below)</td>
</tr>
<tr>
<td>Does the landfill have an appropriate land-term plan and capital reserve?</td>
<td>R.2</td>
</tr>
</tbody>
</table>
Q  What opportunities exist for the County to improve internal controls over contract monitoring and performance?
A  R1 As a result of some missing key contract provisions, the Crawford County’s contract with Rumpke does not provide all of the recommended industry best practice internal controls over contract monitoring and performance.

Q  Are landfill services cost effective to in-county residents?
A  The charge to in-county residents for landfill services encompass tipping fees established by the landfill operator per the lease agreement, generation fees and disposal fees established by the County SWMD, and the mandatory disposal fees that flow to the State treasury and local townships as required by the ORC. Because the possible ranges for these fees are limited by State statute or the operator lease agreement, there is little opportunity for an in-county resident to pay much less for the landfill services that are available. Based on a comparison of fees, among Crawford County and the peers, Crawford County’s landfill services were of average cost.

Q  Are the rates charged by the landfill reasonable and appropriate?
A  There are fixed disposal fees that must be paid to the State and the local host community (city or township) per the ORC. Generation fees and disposal fees charged by the SWMD can vary, yet the ORC establishes a limit on what those fees can be. The rates for these fees are generally in-line with those of various peer groups as determined through an analysis of rates charged by Crawford County and these peers.

Q  Is the payment rate of the contractor for tipping fees for out-of-county customers appropriate?
A  This objective could not be answered as written because neither Rumpke nor any private landfill operators surveyed would divulge their out-of-county tipping fees, as this information is considered proprietary and confidential. Data was available on in-district tipping fees, or the “gate rate”, so comparisons were made to various peer gate rate averages around the State, region, and nation instead in order to provide some feedback on tipping fees. The tipping fees charged by the operator of the Crawford County Landfill are reasonable and appropriate relative to other private operators in Ohio as well as the statewide, regional, and national averages.

Q  Does the landfill have an appropriate land-term plan and capital reserve?
A  R2. The County does not have a capital reserve plan or fund. It has funded its previous landfill costs through general obligation bonds and may choose to do so in the future, or it may be able to pay for those costs out of its reserves. The County is not obligated to maintain a capital reserve fund specifically for future landfill space needs; it must only meet the Auditor of State (AOS) Financial Assurance Test regarding reserve funds.
Assessment of internal controls related to lease contract monitoring of the private landfill operator was a specific objective of this performance audit, so internal controls were considered and evaluated when applicable to scope areas and objectives. The following internal control components and underlying principles were relevant to our audit objectives:

- Control environment
  - We assessed the County’s exercise of oversight responsibilities in regards to its internal control system over contracted landfill operations.
  - We assessed the County’s exercise of oversight responsibilities in regards to establishing an organizational structure, assigning responsibility, and delegating authority to achieve its objectives in regards to its landfill operations.

- Risk Assessment
  - We considered the County’s activities to assess fraud risks.

- Information and Communication
  - We considered the County’s use of quality information in relation to its tonnage reports and financial fee collection data.

- Control Activities
  - We considered the County’s compliance with applicable laws and contracts.

- Monitoring
  - We considered the County’s monitoring of the internal control system over contracted landfill operations.
  - We considered the County’s remediation of internal control deficiencies on a timely basis.

Internal control deficiencies that were identified during the course of the audit are discussed in the corresponding recommendation.

**Audit Methodology**

To complete this performance audit, auditors gathered data, conducted interviews with numerous individuals associated with the areas of County’s operations included in the audit scope as well as the private landfill operator, and reviewed and assessed available information. Assessments were performed using criteria from a number of sources, including:

- Peer SWMDs/Landfills;
- Industry Standards;
- Leading Practices;
- Statutes; and,
- Policies and Procedures.

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19 We relied upon standards for internal controls obtained from *Standards for Internal Control in the Federal Government* (2014), the U.S. Government Accountability Office, report GAO-14-704G
In consultation with the County, we selected SWMDs/landfills similar in total in-district waste and other demographics to form the peer groups for comparisons contained in this report. We also surveyed all SWMDs around the State for information related to their practices, policies, fees, etc. These peers are identified as necessary and appropriate within the section where they were used.
Appendix B: Other Analyses

In addition to the analyses contained within the report, we conducted a number of analyses that provide valuable information to understanding the operations of the Crawford County Landfill, but that did not result in a recommendation.

Peer Comparisons

Because Crawford County is the only publicly owned, but privately operated landfill in Ohio, identifying peers for comparison purposes is difficult. In order to provide the County context relating to the operations of the landfill, we conducted comparisons with several groups of landfills in Ohio.

Waste Origins

More than 80 percent of waste received by the Crawford County Landfill is from outside the county or District. Receiving a higher portion of out-of-county waste than in-county waste is very typical of SWMDs around the State that are either operated by private entities or have a similar amount of in-district direct haul tonnage as the Crawford County SWMD does. The same is not true of most government-operated landfills in the State. The following chart displays the percentage breakdown of waste in Crawford County relative to peer SWMDs with similar levels of in-district direct haul tonnage.

Comparison to SWMDs with Similar In-District DH Tonnage

<table>
<thead>
<tr>
<th>Category</th>
<th>Crawford Ratio</th>
<th>Peer Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-District Direct Haul Tonnage</td>
<td>17.6%</td>
<td>11.0%</td>
</tr>
<tr>
<td>In-District Transfer Waste Tonnage</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total In-District Tonnage</td>
<td>17.6%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Out-of-District Direct Haul</td>
<td>43.0%</td>
<td>44.7%</td>
</tr>
<tr>
<td>Out-of-District Transfer Waste Tonnage</td>
<td>39.4%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Total Out-of-District Tonnage</td>
<td>82.4%</td>
<td>88.9%</td>
</tr>
<tr>
<td>Out-of-State Tonnage</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Tonnage</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: OEPA
Note: Peers include Brown County, Logan County, Pike County, and Wyandot County SWMDs

Most other SWMDs with similar in-district direct haul tonnage levels reflect comparable levels of waste across all categories. Likewise, the following chart shows the percentage breakdown of waste in Crawford County relative to other single-county SWMDs that also have only one landfill and are operated by a private entity. Most SWMDs with only one landfill that are privately owned and operated have a similarly high percentage of waste that originates outside of the district.
Comparison to All Privately-Owned and Operated SWMDs with One Landfill

<table>
<thead>
<tr>
<th></th>
<th>Crawford Ratio</th>
<th>Peer Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-District Direct Haul Tonnage</td>
<td>17.6%</td>
<td>30.0%</td>
</tr>
<tr>
<td>In-District Transfer Waste Tonnage</td>
<td>0.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Total In-District Tonnage</td>
<td>17.6%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Out-of-District Direct Haul</td>
<td>43.0%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Out-of-District Transfer Waste Tonnage</td>
<td>39.4%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Total Out-of-District Tonnage</td>
<td>82.4%</td>
<td>64.4%</td>
</tr>
<tr>
<td>Out-of-State Tonnage</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Total Tonnage</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: OEPA

Note: Peers include Ashtabula, Athens-Hocking, Brown, Logan, Lorain, Mercer, Montgomery, Pike, Richland, and Wyandot SWMDs

Charges and Fees

As discussed in the report, a variety of fees are charged by landfill operators. These fees are generally identified by code and pinpoint who is to be paid and the allowable amount of charge, as seen in the following table.

<table>
<thead>
<tr>
<th>ORC</th>
<th>Type of Fee</th>
<th>Entity Being Paid</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>3734.57 (A)</td>
<td>Disposal</td>
<td>State Treasury</td>
<td>$4.75 / month</td>
</tr>
<tr>
<td>3734.57 (C)</td>
<td>Disposal</td>
<td>Township or City</td>
<td>$0.25 / month</td>
</tr>
<tr>
<td>3734.57 (B)</td>
<td>Disposal</td>
<td>Waste Management District</td>
<td>$1-2 In District; $2-4 Out of District; $1-2 Out of State</td>
</tr>
<tr>
<td>3734.573</td>
<td>Generation</td>
<td>Waste Management District</td>
<td>Up to $5 / ton</td>
</tr>
<tr>
<td>343.02 / 343.022</td>
<td>Contract</td>
<td>Waste Management District</td>
<td>Contract Dependent</td>
</tr>
<tr>
<td>N/A</td>
<td>Tipping</td>
<td>Operator of Landfill</td>
<td>Negotiation Dependent</td>
</tr>
</tbody>
</table>

We took these fees and compared the rates charged by Crawford County to those charged by several different peer groups. As shown in the following table, Crawford County charges slightly higher fees than the peer averages in every instance except for the contract fee and out-of-state disposal fee.
Tonnage and Rate Comparisons to Various Peer Groupings

<table>
<thead>
<tr>
<th></th>
<th>Crawford County</th>
<th>All SWMDs</th>
<th>Similar In-District</th>
<th>Single Co. 1 Landfill</th>
<th>Govt. Owned 1 Landfill</th>
<th>Privately Owned 1 Landfill</th>
<th>Private 1 Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-District DH</td>
<td>36,958</td>
<td>259,877</td>
<td>33,862</td>
<td>151,643</td>
<td>259,126</td>
<td>218,235</td>
<td>274,451</td>
</tr>
<tr>
<td>In-District TW</td>
<td>0</td>
<td>44,061</td>
<td>0</td>
<td>41,128</td>
<td>55,033</td>
<td>74,730</td>
<td>33,327</td>
</tr>
<tr>
<td>Total In-District</td>
<td>36,958</td>
<td>303,938</td>
<td>33,862</td>
<td>192,771</td>
<td>314,159</td>
<td>292,966</td>
<td>307,778</td>
</tr>
<tr>
<td>Out-of-District DH</td>
<td>90,186</td>
<td>129,671</td>
<td>137,973</td>
<td>73,378</td>
<td>29,966</td>
<td>14,194</td>
<td>170,088</td>
</tr>
<tr>
<td>Out-of-District TW</td>
<td>82,834</td>
<td>123,579</td>
<td>136,788</td>
<td>102,612</td>
<td>9,451</td>
<td>0</td>
<td>166,831</td>
</tr>
<tr>
<td>Total Out-of-District</td>
<td>173,020</td>
<td>253,249</td>
<td>274,760</td>
<td>175,990</td>
<td>39,417</td>
<td>14,194</td>
<td>336,919</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>0</td>
<td>214,792</td>
<td>313</td>
<td>79</td>
<td>8,745</td>
<td>0</td>
<td>289,969</td>
</tr>
<tr>
<td><strong>Total Tonnage</strong></td>
<td><strong>209,978</strong></td>
<td><strong>771,979</strong></td>
<td><strong>308,935</strong></td>
<td><strong>368,839</strong></td>
<td><strong>362,321</strong></td>
<td><strong>307,159</strong></td>
<td><strong>934,665</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>In-District Disposal Fee</th>
<th>Out-of-District Disposal Fee</th>
<th>Out-of-State Disposal Fee</th>
<th>Generation Fee</th>
<th>Contract Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2.00</td>
<td>$4.00</td>
<td>$1.00</td>
<td>$3.00</td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td>$1.53</td>
<td>$2.94</td>
<td>$1.53</td>
<td>$3.50</td>
<td>$0.87</td>
</tr>
<tr>
<td></td>
<td>$1.50</td>
<td>$3.00</td>
<td>$1.50</td>
<td>$1.50</td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td>$1.03</td>
<td>$1.94</td>
<td>$1.03</td>
<td>$2.33</td>
<td>$0.88</td>
</tr>
<tr>
<td></td>
<td>$0.85</td>
<td>$1.70</td>
<td>$0.85</td>
<td>$2.32</td>
<td>$1.54</td>
</tr>
<tr>
<td></td>
<td>$0.64</td>
<td>$1.29</td>
<td>$0.64</td>
<td>$2.31</td>
<td>$1.78</td>
</tr>
<tr>
<td></td>
<td>$1.35</td>
<td>$2.60</td>
<td>$1.35</td>
<td>$0.91</td>
<td>$0.41</td>
</tr>
<tr>
<td></td>
<td>$1.36</td>
<td>$2.55</td>
<td>$1.36</td>
<td>$1.55</td>
<td>$0.15</td>
</tr>
</tbody>
</table>

Source: OEPA

Note: Fee rates are those available for all SWMDs as of 2019. The Generation Fee rate in Crawford County increased to $4 per ton on January 1, 2021.

**Internal Controls**

Rumpke keeps track of daily waste and fees received and rolls those up into monthly reports that are ultimately sent to the OEPAs. Rumpke also sends these tonnage reports once a month to Crawford County. The current system in place is then to send Crawford County a fee collection letter a couple weeks later that contains all of the tonnages that were collected that month and the total payouts required to the County as outlined in the official landfill operator lease agreement.

The following table shows the increase in fee report collections since 2017 for the various types of fees outlined in the operator lease agreement, and how the average monthly revenue the County has received under Rumpke has been 25.9 percent higher than the amount received under Santek.
## Monthly Average Revenues under Santek vs. Rumpke

<table>
<thead>
<tr>
<th></th>
<th>Santek</th>
<th>Rumpke</th>
<th>Difference</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-County MSW</td>
<td>$30,394</td>
<td>$27,142</td>
<td>($3,252)</td>
<td>(10.7%)</td>
</tr>
<tr>
<td>Out-of-County MSW</td>
<td>$9,987</td>
<td>$20,617</td>
<td>$10,630</td>
<td>106.4%</td>
</tr>
<tr>
<td>Demo Material</td>
<td>$6,503</td>
<td>$7,393</td>
<td>$890</td>
<td>13.7%</td>
</tr>
<tr>
<td>Out-of-County Lessor</td>
<td>$9,597</td>
<td>$16,544</td>
<td>$6,947</td>
<td>72.4%</td>
</tr>
<tr>
<td>Exempt</td>
<td>$533</td>
<td>$86</td>
<td>($47)</td>
<td>(83.9%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$57,014</strong></td>
<td><strong>$71,782</strong></td>
<td><strong>$14,768</strong></td>
<td><strong>25.9%</strong></td>
</tr>
</tbody>
</table>

Source: Crawford County

Note: Shows averages under Santek from January 2017 through April 2018 and under Rumpke from April 2018 through June 2020.

The following table shows the growth in total annual revenue received by the County since 2017. It also reflects the computational errors made by Rumpke when summing up the totals on the fee letters and in calculating what those totals should have been based on the lease agreement rates.

### Received vs. Calculated Revenue

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-County MSW</td>
<td>$397,589</td>
<td>$313,383</td>
<td>$332,682</td>
<td>$175,484</td>
</tr>
<tr>
<td>Demo</td>
<td>$86,670</td>
<td>$83,877</td>
<td>$99,654</td>
<td>$33,477</td>
</tr>
<tr>
<td>Out-of-County MSW</td>
<td>$128,317</td>
<td>$174,010</td>
<td>$262,508</td>
<td>$151,613</td>
</tr>
<tr>
<td>Exempt</td>
<td>$5,902</td>
<td>$3,296</td>
<td>$459</td>
<td>$1,184</td>
</tr>
<tr>
<td>Out-of-County Lessor Fee</td>
<td>$93,823</td>
<td>$144,409</td>
<td>$206,971</td>
<td>$126,240</td>
</tr>
<tr>
<td><strong>Total Capacity Rental Fee Collected</strong></td>
<td><strong>$712,301</strong></td>
<td><strong>$718,872</strong></td>
<td><strong>$902,195</strong></td>
<td><strong>$487,998</strong></td>
</tr>
<tr>
<td><strong>Total Capacity Check of Sums²</strong></td>
<td><strong>$712,301</strong></td>
<td><strong>$718,975</strong></td>
<td><strong>$902,273</strong></td>
<td><strong>$487,998</strong></td>
</tr>
<tr>
<td><strong>Calculated Total³</strong></td>
<td><strong>$712,274</strong></td>
<td><strong>$718,795</strong></td>
<td><strong>$902,023</strong></td>
<td><strong>$487,998</strong></td>
</tr>
</tbody>
</table>

Source: Crawford County, Rumpke

¹ Mid-year total through June 2020

² Represents what the sum is when adding up the individual totals of each fee type shown in the fee report letters.

³ This is the total amount of fees that should have been paid to Crawford County if the individual formula outlined in the lease agreement had been calculated properly.
CRAWFORD COUNTY

AUDITOR OF STATE OF OHIO CERTIFICATION

This is a true and correct copy of the report, which is required to be filed pursuant to Section 117.26, Revised Code, and which is filed in the Office of the Ohio Auditor of State in Columbus, Ohio.

Certified for Release 5/27/2021