Winnipeg | Audit

Water and Waste Department Investigation –

Brady Road Resource Management Facility

August 2022

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INVESTIGATION SERVICES

The Audit Department provides investigation services based on information identified in reports submitted through the Fraud and Waste Hotline, audit projects, Council, Public Service or resident's requests.

The Fraud and Waste Hotline is a confidential and anonymous service accessible to everyone to make reports 24/7/365. We review every report that is received and will investigate when appropriate supporting information is provided.

A strong anonymous fraud and waste reporting system is one of the best mechanisms available for uncovering wrongdoing. There are many benefits to the City in having an effective reporting system, most importantly being the early detection and/or prevention of harmful misconduct. Other non-quantifiable benefits are strengthened internal controls, improved policies and procedures and increased operational efficiencies.

The City Auditor takes all fraud and waste reports seriously. Comprehensive investigations help to maintain public confidence; the public needs to feel confident that the City is committed to taking appropriate steps to address the fraud and waste allegations.

This is not an audit as defined by Generally Accepted Government Auditing Standards, but does conform to Audit Department standards for independence, objectivity and quality. The Audit Department performed the engagement following the Department's internal Audit Manual and Hotline Report Handling Procedures.

INVESTIGATION BACKGROUND

In July 2020, the Chief Administrative Officer (CAO) received and forwarded nine allegations related to the Water and Waste Department, particularly the Brady Road Resource Management Facility (BRRMF), to the City Auditor for review and investigation. During the period of the investigation, one additional allegation was received by the Audit Department.

The allegations involve contracts and operations of the BRRMF. It is important to note, that some of the allegations involved other City Departments and Water and Waste Department management had limited control or influence over the subject matter area.

CONCLUSIONS

The main objective of the investigation into the allegations is to obtain information and evidence in the evaluation of the merits of each allegation. We identified that five allegations were substantiated and in some cases have made recommendations to management. Two of the substantiated allegations involved other City Departments; Water and Waste Department management had limited control or influence over the subject matter area.

We further determined that five other allegations were unsubstantiated by the evidence we were able to obtain. In some cases, the allegation comprised an area of professional judgement where there is an absence of industry guidance.

We reviewed available City records related to the allegations. Administrative Standard No. AS006 Corporate Recordkeeping mandates the City to "create, identify, use, manage, retain, protect, preserve, or dispose of City records in compliance with the City's legal, fiscal, audit, operational, business continuity, privacy, and archival responsibilities and requirements, including this Standard." It also mandates the City to "generate, create, or maintain reasonably good quality, accurate, reliable, and authentic records that can be audited as required."

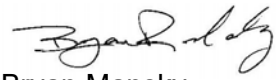
There were instances where we were not able to obtain complete and/or reliable records related to the allegations. We provided a disclaimer for readers in those specific allegations to identify information that was incomplete, unreliable, or not able to be obtained.

INDEPENDENCE

The Audit Department team members selected for the investigation did not have any conflict of interest related to the investigation's subject matter.

ACKNOWLEDGEMENT

The Audit Department wants to extend its appreciation to management and staff within the Water and Waste Department, Human Resource Services Department, Corporate Finance, Assets and Project Management Department, Planning, Property and Development Department, Winnipeg Parking Authority and the Winnipeg Fleet Management Agency, who assisted with this investigation.



Bryan Mansky

City Auditor

September 2022
Date

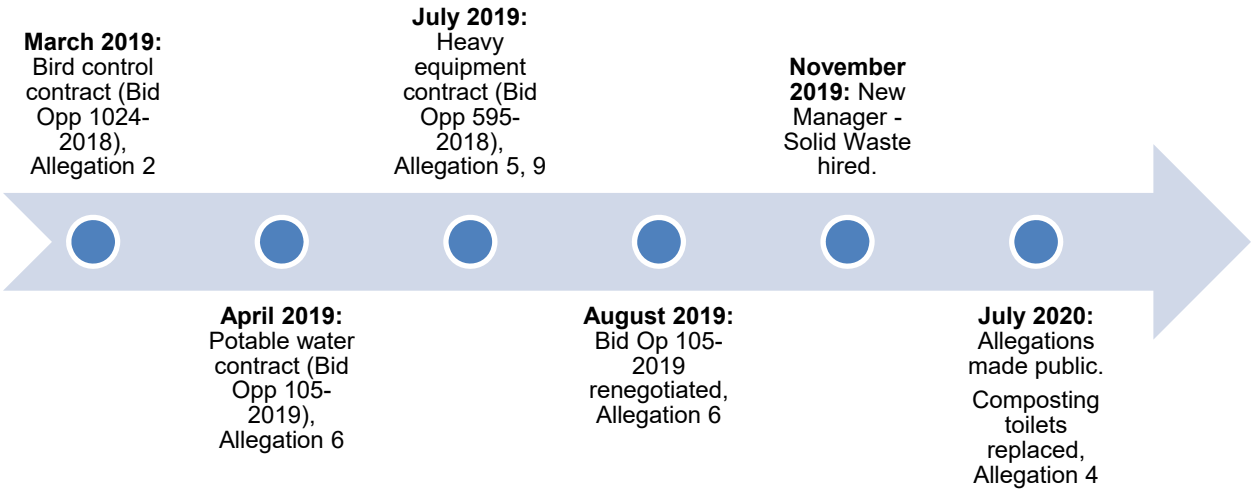
OVERVIEW

1.1 Overview of the Water and Waste Department and the Brady Road Resource Management Facility

- The City of Winnipeg's Water and Waste Department ("WWD")[1] provides utility services to Winnipeg residents. These services include:
  - Water supply and distribution;
  - Wastewater collection and treatment;
  - Land drainage and flood control;
  - Solid waste collection;
  - Solid waste disposal; and
  - Recycling and waste minimization.

- The Brady Road Resource Management Facility ("BRRMF")[2], formerly known as Brady Road Landfill, opened in 1973. This facility accepts both residential and commercial waste. It is the City of Winnipeg's only active landfill. The BRRMF operates under the Environmental Act Licence No. 3081 R issued on December 2013 and revised on April 2014. This facility is under the management of the WWD and its Solid Waste Division (collectively referred to as "management" or "BRRMF's management" in this report).

- Through discussions, we noted changes to management prior to the Audit Department's receipt of the allegations in 2020. We created a timeline to demonstrate the sequence of important events. Our discussions or interviews with "management" or "BRRMF's management" refer to the current management after November 2019.



[1] Website: https://www.winnipeg.ca/waterandwaste/dept/default.stm The website was viewed during the investigation.
[2] Website: https://winnipeg.ca/waterandwaste/garbage/bradyroad.stm The website was viewed during the investigation.

OBSERVATIONS

2.1 Allegation 1

The allegation states that the Brady Road Resource Management Facility (BRRMF) does not accept enough waste and materials to justify the use of the number and size of large dozers available at the facility. The City of Winnipeg has an existing contract, Bid Opportunity 595-2018, Hourly and Volume Rates for Hired Equipment Services for the Brady Road Resource Management Facility.

Observation

- BRRMF's management was unable to provide any past analysis to support the decision to procure the current dozer capacity.
- The BRRMF does not accept enough waste and other landfill materials to justify the current capacity of the dozers inventory.
- There is a lack of specific industry guidelines on selecting the appropriate size and number of dozers for the BRRMF's landfill and resource management operations.

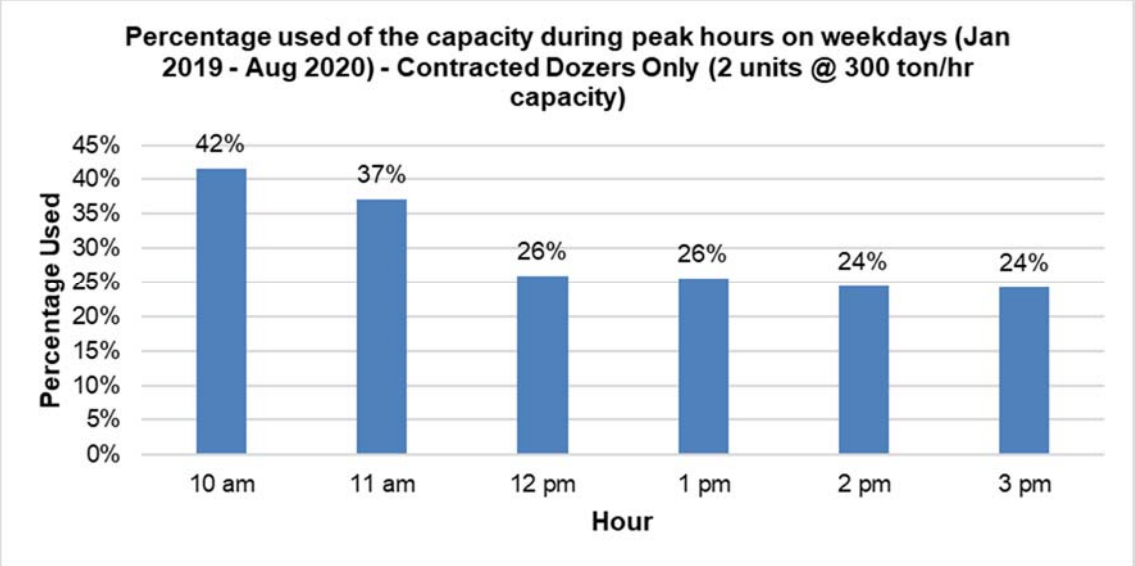
Analysis

- BRRMF dozer fleet consists of one City-owned dozer plus two additional dozers contracted under Bid Opportunity 595-2018.
- The cost of the City-owned dozer was $1,049,000 less a trade in value of $300,000 for a net purchase cost of $749,000.
- For the purpose of the analysis that follows we have not included the City-owned dozer in the following capacity utilization calculations. Several factors need to be considered when calculating the available capacity of the City dozer, to the point where we did not have confidence in the data we were able to obtain and thus the resulting assumptions. Some of the more material factors included: downtime related to fueling, weekly inspections, repairs[3], out of service (awaiting repair) and operator availability. The frequency, length and timing of downtime can vary considerably and materially impact capacity.
- The two dozers procured through Bid Opportunity 595-2018 are under contract for 5 years with an estimated contract value of $13,054,000 for the 5 year period. The contract is in its 3rd year at the time of this writing. According to the Bid Op 595-2018, all equipment bid and supplied under the contract must remain and be available for use on site at all times. The City only pays for the hours the equipment is operating. Equipment downtime related to inspections, fueling, etc. is completed off-hours at the contractor's expense[4].
- BRRMF management did engage an external consultant to advise on the estimated capacity of the facility dozer fleet. Management advised the audit team that the consultant estimated a total potential capacity of 300 tonnes for each piece of equipment. We do note that this is lower than the capacity identified by the reporter, but to maintain a conservative approach to the analysis we used the 300 tonnes per hour figure.

[3] Winnipeg Fleet Management Agency advised that their system tracks mechanic's time and does not distinguish whether the equipment was operable or not.

[4] During the period reviewed, January 2019 to August 2020, there were two contracts involved: 1. Bid Opportunity No. 1006-2011 Hourly and Volume Rates for Hired Equipment Services for the Brady Road Resource Management Facility (ended July 2019) and 2. Bid Opportunity No. 595-2018: Hourly and Volume Rates for Hired Equipment Services for the Brady Road Resource Management Facility (started July 2019). We have assumed all dozers had a similar capacity of 300 tonnes per hour.

- An additional consideration in the analysis is management advised that the dozer equipment will also perform other tasks, such as grading, road repairs, snow removal, and other site projects. We were not able to obtain any documented records to quantify this usage.
- The BRRMF operates 362 days per year and is open to the public for approximately 8 to 14 hours per day, depending on the day of the week and season. For the purposes of our analysis, we focused our analysis on the peak operational hours as defined by BRRMF management as being 10:00 AM to 3:59 PM, Monday through Friday. BRRMF's management discussed that although the equipment was required to be available for use at the facility, it is not the practice to have the equipment operating all day.
- The total operating week days for the review period January 2019 through to August 2020 equals 431 days[5]. We also assumed that the facility has enough storage area to temporarily store the tonnage that arrive on weekends.
- The tonnage data only includes materials that have been weighed. These materials were landfilled (e.g. garbage) and repurposed within the landfill (e.g. used for daily cover and road construction within the facility). We assumed that the dozers were used to push both materials landfilled and materials repurposed within the landfill during the peak hours.



- The above chart illustrates that the capacity utilization of the two contracted dozers ranges from 24% up to 42% during peak business hours. As noted previously the dozers are also utilized for other purposes such as grading and road repairs; however, no detailed records are maintained to be able to accurately include those usages in the capacity analysis.
- It is also important to note that the utilized capacity would decrease by some factor if the analysis included the City-owned dozer, but a lack of reliable data prevented the inclusion of that dozer.

[5] Weekends and closed statutory holidays were removed, result is 258 days in 2019 plus 173 days in 2020. We assumed that most of the landfilled materials arrive at the facility on the weekdays, and the facility receives less on the weekends.

January 2019 – August 2020	**Time[6]**					
	10 am	**11 am**	**12 pm**	**1 pm**	**2 pm**	**3 pm**
Max tonnage received on a given day[7]	550.82	488.88	429.22	409.98	457.70	380.60
Number of operating days[8] during the period reviewed when the facility used dozer capacity of:						
= and >90% (540 tonnes)	2	-	-	-	-	-
between 50% and 90%	86	37	17	24	17	10
= and <50% (300 tonnes)	343	394	414	407	414	421
Total Days	431	431	431	431	431	431

- Out of 431 total operating week days, the dozers:
  - Exceeded 90 percent capacity utilization during a one-hour time period on 2 occurrences.
  - Used between 50 percent and 90 percent of capacity during a one-hour time period on a maximum of 86 occurrences.
  - Were under 50 percent capacity for all of the remaining occurrences.
- We also reviewed excerpts from the Solid Waste Association of North America's (SWANA) Manager of Landfill Operations manual[9]. We noted that the excerpt contains general guidelines on selecting equipment for landfill operations. The excerpt recommends a combination of machines based on solid waste handled by the BRRMF. Many variables need to be considered such as daily tasks, equipment versatility, and future landfill demands in the decision-making process. The lack of specific guidelines or recommendations leaves room for the BRRMF's management to use professional judgment in deciding the size and number of dozers for the facility.

[6] Timing: 10 = 10:00 – 10:59, 11 = 11:00 – 11:59, etc.
[7] The highest tonnage received during that hour during the period reviewed.
[8] For this analysis, we counted the number of the BRRMF's operating days when it potentially used various ranges of dozer capacity. This analysis excludes weekends and other days when the facility is closed.
[9] Solid Waste Association of North America (SWANA) Manager of Landfill Operations (MOLO) Manual, Lesson 7 Landfill Operations

RECOMMENDATION 1			
We recommend the Water and Waste Department examine the Brady Road Resource Management Facility's future dozer utilization requirements. The analysis should include at a minimum: • forecast tonnage to be received by hour/day/week. • detailed hourly requirements of expected dozer usage (grading, road repairs, snow removal, etc.). • estimate of the City-owned dozer capacity (accounting for downtime and other key factors), if the dozer is to be retained. • other variables such as daily tasks, equipment versatility, and future landfill demands (as identified in SWANA guidance). This analysis, should form the foundation of a business case to identify the type and number of dozers the facility requires.			
RISK AREA	Business Process	**ASSESSMENT**	High
BASIS OF ASSESSMENT	Improved management information is necessary to support the number and size of dozers at the BRRMF.		
MANAGEMENT RESPONSE			
We recognize that based on volume calculations alone we appear to have more capacity than needed; however, operational capacity must have some redundancy to address major breakdowns or extended equipment down time on these key pieces of equipment. The City would be at risk if peak hour material volumes are backlogged and create subsequent issues with Provincial license requirements. Going forward, a comprehensive business case will be prepared as recommended by this report in order to document the equipment requirements.			
IMPLEMENTATION DATE	2023 Q3		

2.2 Allegation 2

The allegation suggests that the City has not considered other bird control methods when it procured the bird control contract (Request For Proposal, RFP, 1024-2018 Bird Control at the Brady Road Resource Management Facility, BRRMF). The allegation stated that terminating the contract could save the City $500,000 at the time when the allegation was made.

Observations

- Previous landfill management selected and implemented the contract, RFP 1024-2018, for vector control method using predatory birds at the BRRMF. We were unable to obtain any analysis completed by previous management to support the approach to bird control.
- The BRRMF's current management are exploring other methods of bird control. The Tender 55-2022, Bird Nest and Egg Management at Brady Road Resource Management Facility, replaced RFP 1024-2018 which expired in 2021. We noted that Tender 55-2022 appears smaller in scope than the previous contract.
- In the absence of the City entering into contract negotiations with the firm, it is not possible to accurately state what savings the City may have realized from terminating RFP 1024-2018.
- Therefore, the allegations were not substantiated.

Analysis

- Geese and seagulls, considered as vectors, roost, nest and feed off the landfills. These vectors can potentially carry waste materials offsite. Flocks taking flight at the same time also pose a risk to the equipment operators at the tipping areas due to reduced visibility.
- The BRRMF's Environment Act Licence No. 3081 R requires the facility to implement an action plan, which includes a vector control method. Previous landfill management implemented the bird control contract, RFP 1024-2018. We were unable to obtain any analysis to support the approach included in the bid opportunity.
- The RFP 1024-2018 consists of bird control services for three seasonal periods from 2019 to 2021. The work shall be done on an "as required" basis during the contract term and the total awarded contract value was $775,200. The scope of work included the use of birds of prey to harass and to deter seagulls and other birds from feeding on the active tipping faces and the use of a variety of deterrents and other methods to deter onsite nesting, and egg management strategy.
- Our analysis of the invoices show that the invoiced services align to the major components of the work per the RFP 1024-2018.
- Clause D2.5 of the RFP 1024-2018 and Clause C7.5[10] of the related General Conditions for the Supply of Services (2007-04-12) contain language enabling some changes to the work under the contract. However, discussions with Materials Management suggests there would be limitations on the changes. While savings could have been realized on some areas of the scope of work services provided within the contract, there could also have been increases in hourly rates of other scope of work items. In the absence of the City entering into contract negotiations with the firm, it is not possible to accurately state what savings the City may have realized.

[10] Clause C7.5 allows for a 20 percent reduction without additional costs from the contractor; however, after a 20 percent reduction the City may incur additional costs for the other items.

- The current BRRMF's management issued Tender 55-2022 focuses solely on bird nest and egg management control. BRRMF's management advised us that vector challenges and environmental conditions have changed over time, resulting in different methods to manage. The award amount is $52,500 for one season and is renewal for two additional seasons. This is a smaller scope of work than the previous bid opportunity. Management will also be exploring opportunities to try new, in-house bird management tactics. At the time of writing, the success and cost for the in-house tactics was not available.

RECOMMENDATION
No recommendation accompanies this analysis.

2.3 Allegation 3

The allegation suggests the Solid Waste Division plans to build a road costing $100,000 for a single employee to avoid parking fees. However, the allegation did not identify the individual who will benefit from the roadway construction.

Observations

- Through our site visit at the facility, we observed that the BRRMF has not built the road.
- BRRMF's management asserted that the planned roadway will provide an internal all-weather access route between the administration building and a refurbished building. This will benefit those employees requiring access to their operational equipment stored in the refurbished building.
- The Winnipeg Parking Authority (WPA) enforces parking rules at all parking lots at the BRRMF. Parking on site requires either a valid WPA-issued permit or payment through the Pay-by-Phone system.
- Therefore, the allegation was not substantiated.

Analysis

- We examined the planned construction of roadway between an existing, refurbished maintenance building (1675 Brady Road) and the new administration building (1777 Brady Road) at the Brady Road Resource Management Facility (BRRMF).
- BRRMF's management discussed that the roadway's purpose is to provide an internal all-weather access route between the newly constructed administration and the existing refurbished building. This access route will benefit those employees requiring access to their operational equipment stored in the refurbished building.
- We reviewed and compared the maps provided by the WPA and BRRMF's management to the engagement team. We noted the newly built administration, 1777 Brady Road, and the refurbished service, 1675 Brady Road, buildings. These two buildings are different, but adjacent to each other on the maps. Parking lots also appear to be present in both locations on the maps.
- During our site visit at the facility on July 27, 2022, we observed and confirmed the existence of the buildings and parking locations at 1675 Brady Road and 1777 Brady Road. We also observed that the BRRMF has not built the road.
- The WPA discussed that all parking on site at the BRRMF require either a valid WPA-issued permit or payment through the Pay-By-Phone system. WPA also added that all other parking on site is subject to enforcement by the WPA.
- We reviewed the records of WPA's enforcement activities at the BRRMF between August 2020 and August 2021 and found that WPA visited the locations during random business hours.

RECOMMENDATION
No recommendation accompanies this analysis.

2.4 Allegation 4

The allegations suggest that management had replaced composting toilets worth $100,000 with conventional toilets after less than a year of usage. These toilets were located in the Brady Road Resource Management Facility (BRRMF)'s administration building.

Observations

- The composting toilets were installed during the construction of the BRRMF's administration building which was completed in 2019.
- The composting toilets were removed and replaced with conventional ones in July 2020 due to health and safety concerns.

Analysis

- Municipal Accommodations, now under the Assets and Project Management Department, is primarily responsible for the construction and the ongoing maintenance of the BRRMF's administration building. The BRRMF's management worked with Municipal Accommodations during the design and determination of the specifications of the BRRMF's administration building. The staff from Municipal Accommodations, who worked directly on the construction project, have since left the City.
- The composting toilets were chosen because these toilets are an environment-friendly solution to address the lack of sewer or water connections at the Brady site. BRRMF's management did assert to us that the City opted to install composting toilets to lead by example by building a "LEED certified" building. The Assets and Project Management Department discussed that the City's Green Building Policy governed many of the building design decisions in order to obtain LEED Certification and advised that the composting toilets were chosen to enhance the points allocated for the certification process.
- We conservatively estimated the total costs, including the installation, of the composting toilets to be between $57,600 and $93,600[11]. The actual costs could differ from this identified range. The toilets were part of a larger lump sum contract, thus we are unable to obtain actual costs.
- BRRMF's management identified composting toilet issues with Municipal Accommodations prior to replacing the toilets. The identified issues included that the composting toilets were not able to handle the amount of waste for the staff complement and were unusable for a period of time due to regular cleaning requirements.
- Municipal Accommodations confirmed that the composting toilets were removed and replaced with conventional toilets in July 2020. During our site visit at the facility on July 27, 2022, we observed that the facility has conventional toilets.
- At the time of our analysis, BRRMF's management were installing conventional toilets and estimated total conversions costs would be $10,000 - $12,000.

RECOMMENDATION
No recommendation accompanies this analysis.

[11] We used the Class C Type 3 estimate document. According to the Cost Estimate Classification Appendix of the 2020 Adopted Capital Budget, the accuracy of Class 3 estimate is -20% to 30%.

2.5 Allegation 5 & 9

The allegations suggest that there were significant over payments on the heavy equipment contract at the Brady Road Resource Management Facility (BRRMF). The allegations further suggest that there were some payments made on the heavy equipment contract for work not done. However, the allegations did not provide specific details on the over payments or the paid work but not done.

Observation

- The majority of the transactions tested with the heavy equipment contractors had proper supporting documentation during the periods reviewed. The total invoiced amount reviewed related to the two heavy equipment contracts was $1,369,821. We identified isolated transactions where we could not obtain proper support, and the invoiced amount was less than $10,500 in total (approximately 0.77 percent of the total invoiced amount reviewed).
- Our analysis show management has made some improvements to the tracking and record-keeping for the BRRMF heavy equipment contracts.

Analysis

- The contract associated with Bid Opportunity 1006-2011 (Hourly and Volume Rates for Hired Equipment Services for the Brady Road Landfill) ended in July 2019. The allegation did not identify specific transactions or periods where over payments occurred. We tested transactions for May, June and July 2019.
- A new Bid Opportunity 595-2018 (Hourly and Volume Rates for Hired Equipment Services for the Brady Road Landfill), was issued and awarded in December 2018. The allegation did not identify specific transactions or periods where over payments occurred. We tested transactions for August, September and December 2019 and February and April 2020.
- The Bid Opportunities 1006-2011 and 595-2018's scope of work includes the supply of heavy equipment, such as dozers, excavators, and rock trucks. The contractors also provide the operators to operate the heavy equipment.
- Through our detailed testing we observed the following:
    - Some areas where processes appear to have improved include: a listing of daily work tickets is retained and transferred to a summary sheet with reconciliation to invoice and foreman signatures were evident on all work tickets selected.
    - We identified three areas for improvement which include:
        - The hours (or quantity) and the total dollar amounts did not always reconcile to the invoices for our testing of 595-2018. The total dollar differences range between $700 and $ 7,500. Our analysis shows that the differences indicate underpayments for the selected months. We caution readers on interpreting these sample differences. The selected samples are non-statistical and cannot be extrapolated to calculate overall net impact of the differences over the life of the contract.
        - Seven percent (7%) of the 42 work tickets tested for 595-2018 had different operating hours on the work ticket, when compared to the spreadsheet listing the work tickets. The hour difference ranged from 3.5 to 7.5 hours. The calculations of hours were clerically accurate for all other work tickets tested.

- The listings of work tickets do not include the unique work ticket numbers. The work ticket numbers will ease management review for duplicate entries and possible duplicate payments. Our analysis shows no duplicate entries in the listing of the selected months.

RECOMMENDATION 2			
We recommend for the Water and Waste Department to include the unique work ticket number in the work ticket listing. Additionally, management should reconcile the work ticket summary to invoices to identify potential discrepancies during the remaining contract term of Bid Opportunity 595-2018.			
RISK AREA	Business Process	**ASSESSMENT**	High
BASIS OF ASSESSMENT	The Brady Road Resource Management Facility (BRRMF) may be inaccurately paying on the heavy equipment contracts.		
MANAGEMENT RESPONSE			
We will implement steps as outlined in the recommendation to ensure this process is improved.			
IMPLEMENTATION DATE	2023 Q2		

2.6 Allegation 6

The allegations suggest that the 2019 potable water contract for the Brady Road Resource Management Facility (BRRMF) was overestimated.

Observation

- The 2019 potable water contract, Bid Opportunity 105-2019, is a City-wide contract administered by the Materials Management Division.
- We found that the BRRMF's tank sizes and estimated volume usage were overestimated in the bid opportunity. The BRRMF incurred a total of $5,510 for the potable water between April 2019 and March 2020. The renegotiated contract resulted in delivery surcharges of $3,230 for this period.

Analysis

- The 2019 potable water contract, Bid Opportunity 105-2019, is a City-wide contract administered by the City's Materials Management. This contract includes the BRRMF and other City facilities, such as Little Mountain Park and La Barriere Park. The allegations discuss the BRRMF and not the other City facilities. For this reason, we have focused our work on the BRRMF; the other City facilities covered by the contract were out of scope.
- We found that the tank sizes and the estimated volumes were overestimated in the previous Bid Opportunity 105-2016, and the current Bid Opportunity 66-2020.
- Materials Management used the available information from Bid Opportunity 105-2016 in creating Bid Opportunity 105-2019. The estimated annual volume of 280,000 gallons for BRRMF in the contract is six times greater than the actual volume of 45,600 gallons received in 2019-2020.
- After receiving complaints from the contractor, Materials Management renegotiated the contract under Bid Opportunity 105-2019. The original rate per gallon for the BRRMF prior to the renegotiations was only $0.05 per gallon. The new rate remained at $0.05 per gallon but added a delivery surcharge of $95. Materials Management communicated the changes to the affected City facilities which started in August 2019. Materials Management stated that the previous contractor did not raise the issue about the volumes or tank sizes.
- Our analysis show that water was delivered 52 times to the BRRMF between April 2019 and March 2020. The actual deliveries were more frequent than the estimated 40 deliveries stated in the Bid Opportunity 105-2019. However, the total volume delivered in the same period was 45,600 gallons, significantly lower than the estimated total annual volume of 280,000 gallons (7,000 gallons x 40 deliveries) included in Bid Opportunity 105-2019. On average, the BRRMF received 877 gallons per delivery between April 2019 and March 2020.
- We found that the cost per gallon and the delivery surcharge to the BRRMF align to the renegotiated contract terms of Bid Opportunity 105-2019 during August 2019 – March 2020.
- The BRRMF incurred delivery surcharges for 2019-20 totaling $3,230; the delivery surcharges equate to 59 percent of the total amount paid for potable water.
- BRRMF management have since communicated the accurate tank sizes and delivery volumes to Materials Management.

RECOMMENDATION
No recommendation accompanies this analysis.

2.7 Allegation 7

The allegation suggests that the litter control fences, purchased from a contractor, were ineffective.

Observation

- The Environment Act Licence No. 3081 does include some language on litter control using portable fences; it does not provide the specifications required for the litter fences.
- We were not able to identify any industry guidance that detailed optimal specifications for litter control fences. Specifications of litter control fences is an area for professional judgment. Therefore, the allegation was not substantiated.

Analysis

- Clause 48 of the BRRMF's Environmental Act Licence No. 3081 states, "The Licencee shall position fencing, including adequate portable littler fences around the active area or other locations where unloading or handling of material occur, to prevent litter or other material from collecting or escaping from the boundaries of the Development." The litter control fences described in the contracts align with the characteristic of portability described in the licence.
- We reviewed Bid Opportunities 418-2013 and 395-2020, the Supply, Delivery and Assembly of Litter Fencing to Brady Road Resource Management Facility.
- The BRRMF's management discussed that the portable litter fences in the allegation were purchased in 2013. The scope of work included the one-time supply, delivery, and assembly of 20 portable litter fencing to the BRRMF.
- According to the BRRMF's management, the original fences have reached their end of life, and BRRMF's management created a tender to procure the replacement fences in 2020. We reviewed the new tender documents, noting a similar scope of work.
- The specifications of the fences differ between the replacement and original fences. The replacement fences appear to be smaller (2.5 m x 7.3 m x 3.7 m) than the original (2.4 m or 3.9 m with outriggers x 4.5 m x 7.3 m). During our site visit at the facility on July 27, 2022, we observed the original and replacement fences. The replacement fences appear smaller than the original.
- Although the licence requires portable litter fences, it does not provide the specifications, such as size, fencing material, and the adequate number of portable litter fences. This lack of guidance leaves room for professional judgment in deciding the fence specifications. Therefore, we cannot conclude on the effectiveness of the portable litter fences.
- BRRMF management did assert to us that they believe the new portable litter control fences work as intended. They added that the new fences are more robust than the old ones. The current BRRMF management discussed that they based the new fences' features on information from other landfills. The current BRRMF management was not aware of previous management's rationale for specifications of the old fences.

RECOMMENDATION
No recommendation accompanies this analysis.

2.8 Allegation 8

The allegation suggests that the Solid Waste Division allows the double dipping of recent retirees.

Observation

- Our analysis show that the four retired employees were rehired in compliance with the City's Protocol. The Water and Waste Department's Human Resources Division was able to provide 25 out of 26 extension letters. As of August 2022, the four rehired retirees no longer work for the City.
- The WAPSO Collective Agreement Schedule L, *Letter of Understanding: Engagement of Part-Time Employees*, allows part-time employees to earn sick leave time. The rehire letters incorrectly stated the employees would not accrue sick leave; however, PeopleSoft show records of sick leave accruing for the rehired retires and had no negative impact.
- Therefore, the allegation was not substantiated.

Analysis

- The Administrative Standard No. HR-009 City of Winnipeg Staffing Protocol, *Re-employment of Retired or Severed City of Winnipeg Employees Protocol*, allows City departments to rehire retirees within established guidelines.
- We reviewed the supporting documentation, provided by Water and Waste Department's Human Resources Division, for the four rehired retirees. There were 25 extension letters provided for the four rehired retirees. However, we were not able to obtain one rehired retiree's extension letter for one employment period. We also noted the following:

Rehired Retiree	Gap[12]	Employment Duration[13]	Criteria #1: Approval[14]	Criteria #2: Limited period	Compliant to the *Protocol*?
Employee 1	None	60 months	Yes	Yes	Yes
Employee 2	None	40 months	Yes	Yes	Yes
Employee 3	1 Period	28 months	Yes[15]	Yes	Yes
Employee 4	None	17 months	Yes	Yes	Yes

- BRRMF's management discussed that they were not able to locate the letter, and the staff responsible for the extension letters at that time has retired.
- The WAPSO Collective Agreement Schedule L, *Letter of Understanding Engagement of Part-Time Employees* also allows rehiring retirees as part-time employees and provides some additional guidance.

[12] Both the rehire and extension letters indicate the start and the end dates of employment. The extension letter extends the end date from the initial rehire letter up to a certain date. However, we were not able to obtain the extension letter related to an employment period after the end date on the initial rehire letter. We identified this as a "gap" between the dates noted from the rehire and extension letters.
[13] Approximated: termination date minus the rehire effective date, rounded to the nearest whole number
[14] We noted that the rehire and extension letters contain the signatures of the Managers of Solid Waste Division and Human Resources Division. BRRMF's management discussed that these managers were the designated approvers. The Director of the Water and Waste Department was also copied in these letters. Therefore, the rehiring of retired employees followed the appropriate authorization process.
[15] Insufficient documentation. We were not able to obtain an extension letter for a time during the employment period.

- We verified the four rehires' union membership and extracted reports directly from PeopleSoft. We reviewed the number of hours worked per week during the four rehires' employment[16]. Our analysis show that their average weekly hours of 21-27 hours are within the parameters of the rehire letter[17] and the collective agreement[18].
- We found an error on the letters of rehire offer through discussions with the Water and Waste Department's Human Resources Division. The rehire letter does not allow accrual of sick leave time. However, the WAPSO Collective Agreement Schedule L allows part-time employees, including retired City of Winnipeg employees rehired on a part-time basis, to earn sick leave time. We reviewed the PeopleSoft Time Code Reports of the four rehired retirees, noting that they earned or used sick leave time.

RECOMMENDATION 3			
We recommend for the Corporate Human Resource Services Department to review letter templates annually (or as appropriate) to ensure alignment with the current union agreements or other governing authorities. Specifying the dates of the latest template version may help identify templates that require updating in the future.			
RISK AREA	Human Resources	**ASSESSMENT**	Moderate
BASIS OF ASSESSMENT	The WAPSO Collective Agreement Schedule L, *Letter of Understanding: Engagement of Part-Time Employees*, allows part-time employees to earn sick leave time. The rehire letters incorrectly stated the employees would not accrue sick leave; however PeopleSoft show records of sick leave accruing for the rehired retires and had no negative impact.		
MANAGEMENT RESPONSE			
The Corporate Human Resource Services Department agrees with the results and associated recommendations. Existing letter templates will be reviewed and updated to reflect current Collective Agreement language. This will be actioned asap by the Corporate Recruitment team and a proper letter of offer will be circulated to the HR Community for future use. The letters may need to be vetted by multiple parties prior to circulation such as Human Resource Managers, Labour Relations, etc. but the matter will prioritized and actioned as quickly as we can.			
IMPLEMENTATION DATE	2023 Q1		

[16] We reviewed the PeopleSoft time records between the original rehire dates and termination dates for the three out of the four rehired retirees. For Employee 1, we only reviewed the PeopleSoft time records between the original rehire date and December 2020.
[17] The rehire letters state that the weekly hours must be less than 28 hours.
[18] The WAPSO Collective Agreement Schedule L states less than 35 hours per week.

2.9 Allegation 10

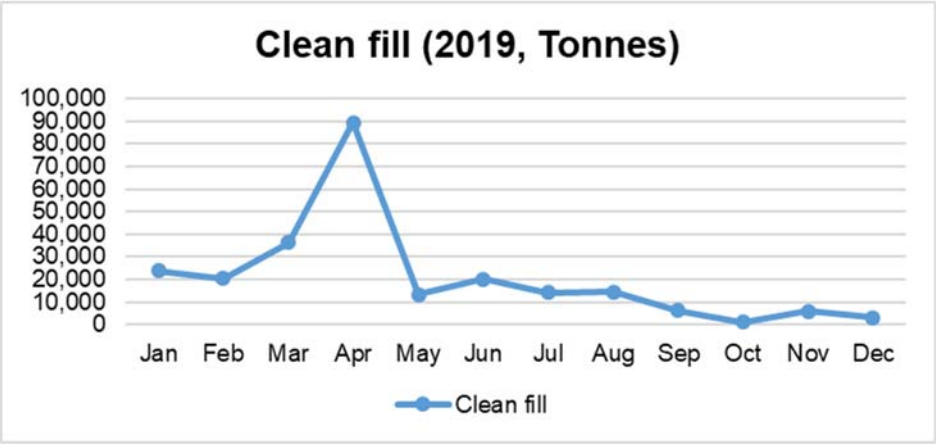
The allegation states that the Brady Road Resource Management Facility (BRRMF) does not have the protocols or processes for accepting clean fill at the facility.

Observation

- BRRMF's management asserted that BRRMF has processes related to clean fill; however, the screening processes are currently not documented other than through training materials provided to current and new employees. These processes include screening for clean fill at the scale houses and active tipping areas, procedures and requirements for pre-arranged clean fill, and recordkeeping.
- The BRRMF previously accepted clean fill in excess of the industry-recommended ratios. BRRMF's current management has limited the clean fill accepted by the facility. The clean fill received decreased by 53 percent between 2018 and 2020.

Analysis

- Clean fill includes concrete without metal, brick, asphalt, clay, soil or earth, and sod. These materials are free from root mat, glass, concrete chunks, pressure-treated lumber, steel girders, metal, trash, and other contaminants.
- BRRMF's management discussed that clean fill primarily comes from other City departments, such as Public Works, and local heavy construction projects. BRRMF's management added that clean fill is used for daily and intermediate cover and an important resource material for filling the clay deficit of the BRRMF.
- In prior years, BRRMF received a significant amount of clean fill, well in excess of the facility's needs. Acceptance of clean fill has been restricted by current management since July 1, 2019. The BRRMF website informs commercial customers when the facility accepts clean fill and the fee policy.
- Our analysis confirms clean fill tonnage dropped from July 2019 as shown on the graph below.



- Industry recommendations for garbage-to-clean fill ratio vary from 3:1 to 4:1.
- The tonnages below are rounded to the nearest whole number. The average monthly clean fill decreased over the three years – 23,277 tonnes (2018), 20,764 tonnes (2019), and 10,941 tonnes (2020). While the facility reduced the accepted volume of clean fill received, it still accepts more than the industry-recommended ratios.

Year	Garbage (Tonnes)	Clean Fill at 4:1 Ratio (Tonnes)	Clean Fill at 3:1 Ratio (Tonnes)	Clean Fill Received (Tonnes)	Difference (Clean Fill Received & 4:1 Ratio, Tonnes)	Difference (Clean Fill Received & 3:1 Ratio, Tonnes)
2018	326,942	81,736	98,082	279,320	197,585	181,238
2019	319,099	79,775	95,729	249,166	169,392	153,437
2020	344,946	86,237	114,982	131,296	45,059	16,314

- The BRRMF's management discussed that their informal analysis for assessing the facility's clean fill needs involve reviewing the estimated clean fill tonnage coming in and physically observing the available clean fill pile on site to determine the facility's short-term needs.
- Management discussed the screening process when clean fill arrives at the facility's active tipping faces and identified some SWANA materials provided to employees as training materials. Aside from the SWANA materials, there are no other formally documented procedures to guide and monitor staff activity.
- We reviewed the Solid Waste Association of North America's (SWANA) *Landfill Operations Basics, Spotting and Waste Screening,* training material*.* The training material applies to the general operations of the landfill. Although the training material was not specific to clean fill, the BRRMF could encounter soil contaminated with prohibited wastes, such as radioactive and toxic waste.
- During our site visit at the facility on July 27, 2022, BRRMF's management showed us the radiation detectors located at the scale houses. They discussed that these detectors emit a noise when loads include radioactive materials, such as medical and dental wastes and equipment, smoke detectors, potash, and nuclear waste.
- The SWANA Landfill Operations Basics training material also suggested the following:
  - "Establish procedures to screen for prohibited wastes"
  - "Define procedures for wastes that need special handling"
  - "Define alternate disposal systems for prohibited wastes"
  - "Develop public information program to implement the program"
  - "Screen waste at site to determine program effectiveness"
  - "[Maintain] records at the landfill site during its active life. Load checking records should include all load checking events, whether or not prohibited wastes were found."
  - "Notification requirements – notify proper authorities if prohibited waste is discovered."
- We also noted from the training material, "All employees have the responsibility to help exclude prohibited wastes."

RECOMMENDATION 4			
We recommend the Water and Waste Department establish and document procedures related to staff screening clean fill for prohibited wastes, considering the suggestions in the SWANA training material. We also recommend the Department develop a process to formally monitor staff's compliance to the documented processes.			
RISK AREA	Business Process	**ASSESSMENT**	Moderate
BASIS OF ASSESSMENT	Clean fill is an important resource material for landfill operations. However, the facility has accepted an excessive amount of the material over the years. The lack of documented processes related to clean fill increases the risk for the facility to accept excess in the future and incur additional costs for movement of the clean fill.		
MANAGEMENT RESPONSE			
We agree with the recommendation and have already taken steps necessary to correct this going forward. The Department will develop and document a process for management of clean fill. It should be noted that the industry recommended clean fill ratio may not necessarily always apply to a municipally operated landfill, as clean fill capacity limits can directly impact other Civic departments.			
IMPLEMENTATION DATE	2023 Q3		

APPENDIX 1 – Methodology

MANDATE OF THE CITY AUDITOR

The City Auditor is a statutory officer appointed by City Council under *The City of Winnipeg Charter*. The City Auditor is independent of the Public Service and reports directly to Executive Policy Committee, which serves as the City's Audit Committee.

The City Auditor conducts examinations of the operations of the City and its affiliated bodies to assist Council in its governance role of ensuring the Public Service's accountability for the quality of stewardship over public funds and for the achievement of value for money in City operations.

Once the report has been communicated to Council, it becomes a public document.

SCOPE

The work included reviewing and testing the nine allegations received by the Chief Administrative Officer and the allegation received by the Audit Department. The scope of the work we performed also focused on the associated business processes.

APPROACH AND CRITERIA

The work performed in relation to this project does not constitute an audit conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS). The work performed does conform to Audit Department standards for independence, objectivity and quality. We believe we have performed sufficient work in satisfaction that the evidence obtained provides a reasonable basis for our findings and conclusions.

In investigating each allegation, we interviewed individuals from several departments including: Water and Waste, Corporate Finance, Planning, Property and Development, Assets and Project Management, Winnipeg Parking Authority and Winnipeg Fleet Management Agency.

We obtained and analyzed evidence from a variety of sources including: applicable sections of the Environmental Act Licence No 3081, bid opportunity documents, employment contracts, City administrative standards and collective agreements, contracts with external vendors and associated transactions, PeopleSoft records and various other records maintained by BRRMF.

The investigation also included a review of industry standards, as applicable to the allegation.

Non-statistical samples were also selected for testing procedures related to specific allegations. For tested transactions, we directly obtained and reviewed any available support from PeopleSoft. We also analyzed non-financial data, such as tonnage. The business processes associated to the allegations were also reviewed.