



City of Phoenix

Mission Statement

To improve the quality
of life in Phoenix
through efficient
delivery of outstanding
public services.

Project Team

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Project Number

1240018

This report can be made
available in alternate
format upon request.

**Fire Department
Contract Audit - LION
First Responder Personal Protective Equipment
November 27, 2023**

Report Highlights

Contract Monitoring and Procurement

Vendor Invoices were mathematically accurate, but applied discounts were inconsistent.

Inspection and Warranty

Fire personnel inspect new equipment to ensure that there is no damage or defects. Fire reported that they have not made a warranty claim with vendor in the past two years; however, Fire did not maintain a file to document vendor performance.

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Executive Summary

Purpose

Our purpose was to determine if the Fire Department (Fire) had controls in place to ensure that a City vendor, LION First Responder Personal Protective Equipment (LION), complied with contract terms.

Background

On September 19, 2018, Fire entered into a five-year cooperative agreement with LION through National Purchasing Partners to purchase firefighter turnout ensembles (coats and pants). The original contract limit was for \$6.2M. On January 20, 2021, the Phoenix City Council approved an additional \$8.5M in funding, for a revised contract total of \$14.7M. The contract is due to expire on October 31, 2023, and will be extended for two years with an additional expenditure limit of \$4M. In fiscal year (FY) 2023, LION charged the City \$3,075 per firefighter turnout ensemble, \$1,941 for a coat and \$1,134 for pants. Each firefighter is issued two turnout sets.

The National Fire Protection Association (NFPA) provides industry guidelines for firefighter equipment. NFPA standards limit turnout ensembles' shelf life to ten years and recommend that departments thoroughly wash and inspect all gear after exposure to fire, chemical, or biological contaminants. Excessive washing could lead to a shorter life span of the ensembles, compelling Fire to purchase turnouts on a more frequent basis, long before the expiration of the ten years. LION estimates the average life span of turnouts is five to seven years.

Results in Brief

Vendor invoices were mathematically accurate, but applied discounts were inconsistent.

We obtained all LION invoices processed between September 2018 and July 2023 and selected 14% of the invoices for testing. During testing, discounts fluctuated between 32% and 47%, despite the agreed upon 35% in the contract. The inconsistent discounts resulted a \$2,800 net benefit to the City. Fire and LION personnel attributed the larger discount to the quantities ordered and the 30+ year relationship. Consistent discounts make budgeting and estimating contract utilization easier.

Fire personnel inspect the new gear to ensure that there are no defects or damage. Fire reported that they have not made a warranty claim with LION in the past two years; however, Fire did not maintain a file to document vendor performance.

We observed Fire Resource Management (FRM) personnel perform detailed turnout inspections to identify any defects and confirmed that serial numbers and manufacture dates were sewn into each garment. FRM staff reported that they have had no LION

returns in the past two years. However, FRM staff did not maintain a vendor performance file for LION to document any returns or repairs. In addition, staff reported that after a turnout has been issued and minor damage (e.g., broken zipper or loose stitching) occurs they contact the LION sales representative. Staff explained that LION has always been very responsive in coordinating with a local third-party vendor to repair the turnouts at no charge to the City.

Department Responses to Recommendations

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|---|---|
| Rec. #1.1: Develop a process to annually obtain the proper discount rate(s) from LION. | |
| Response: Vendor has agreed to provide a fixed pricing sheet per year with the fixed discount rate. We received the current pricing sheet for the year on 11/1/2023. | <u>Target Date:</u> 1/16/2024 |
| Rec. #1.2: Perform an inventory of all turnout pants and coats and appropriately update SAP. | |
| Response: Once staff completes the old and new cycle counts, staff will update SAP to reflect the current turnout inventory levels per A.R. 5.131. | <u>Target Date:</u> 1/16/2024 |
| Rec. #1.3: Identify obsolete turnout pants and coats in inventory and develop a process to remove them. | |
| Response: Staff is currently performing the cycle count of the old-style red zone turnouts. Once the cycle count is completed, staff will obsolete the turnouts in SAP. | <u>Target Date:</u> 1/16/2024 |
| Rec. #2.1: Develop a process to document vendor performance, including all warranty returns and repairs. | |
| Response: Fire created an Excel spreadsheet for vendor performance and warranty tracking. | <u>Target Date:</u> 1/16/2024 |
| Rec. #2.2: Establish procedures for documenting the turnout wash schedule and annual inspections. This would include the development of an electronic tracking system including serial numbers to properly track and monitor inspections for firefighter ensembles | |
| Response: Fire staff is building an electronic tracking system, PSTrax, to document the turnout wash schedule and annual inspections. | <u>Target Date:</u> 6/1/2024 |
| Explanation, Target Date > 90 Days: A new software program will be constructed to track data management appropriately. Estimate a 5-month lead time to completion. | |

1 – Contract Monitoring and Procurement

Background

Administrative Regulation (A.R.) 3.10 General Procurement Procedures sets guidelines for how departments should procure goods and services. In addition, *Section 3.2: Method of Invoicing* of the LION contract specifies the requirements for invoicing. Section 5.2.2 states all deliveries are to be made to the Fire Resource building located at 2625 S. 19th Avenue. Fire uses the City's accounting system (SAP) to track the turnout inventory.

The contract requires the following nine components be included on all invoices:

1. City Purchase Order number
2. Item part number and description
3. Unit Price extended and totaled
4. Quantity ordered, back-ordered, and shipped
5. Applicable tax
6. Invoice number and date
7. Requesting department name and "ship-to" address
8. Payment terms
9. Shipping terms

We reviewed Department procedures for contract monitoring to verify that turnout purchases were procured and monitored according to City Policy and that pricing for each piece of equipment was reasonable and reflected the contracted discounts. In addition, we correlated the turnout purchases to SAP inventory reports and recruit training classes and damage reports.

Results

Vendor invoices were mathematically accurate, but discounts and quoted prices were inconsistent.

We obtained the 72 invoices that were processed during the term of the contract. We judgmentally selected ten (14%) invoices for our testing. Our testing included recalculating unit prices, sub-totals, applicable discounts, sales tax, and totals. In our testing, nine invoices were accurately calculated in all testing groups. One invoice contained errors on the individual line-item sub-totals; however, the total was accurately calculated based on the items ordered.

During testing, we discovered that two invoices had invoice numbers that were not consistent with the numerical sequence of the other 70 invoices. LION was contacted

regarding the invoices. The inconsistencies were determined to be the result of a clerical error by LION, and they have since been corrected.

During our examination of unit prices, the amounts charged on eight of the ten invoices did not match the quoted prices received from LION. In the test sample, invoices submitted in 2021 and 2022 reflected the prices quoted for 2020. The City was consistently undercharged \$279 per set of turnouts (\$176 for the coat and \$103 for pants).

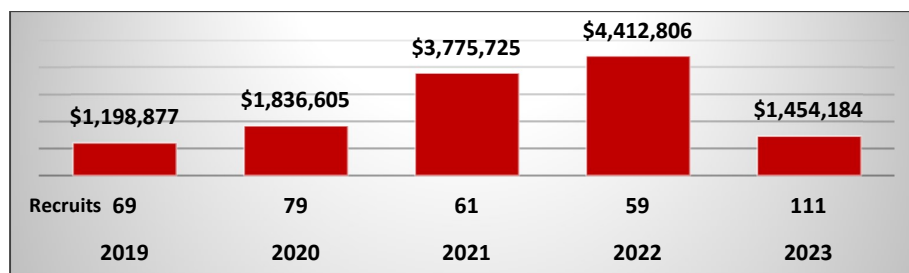
We compared the invoiced amounts to the current catalog price from LION to verify that Fire received the published discounted rate of 35%. On the invoices evaluated in 2020 and 2021, the discount per set of turnouts averaged 32%. However, starting in 2022, Fire received a 47% discount per set of turnouts. In the testing sample, the City saved \$2,800 with the increased discounts. Fire and LION personnel attributed the larger discount to the quantities ordered and the 30+ year relationship. Inconsistent discounts make invoice reconciliation and budgeting difficult.

Fire significantly increased LION purchases to supply all members with an enhanced cancer protection turnout, resulting in a large amount of obsolete turnout inventory.

Less than three years after Fire entered the contract with LION, the City Council approved additional funds to the contract that more than doubled the original amount. As of July 2023, \$12.7M of the contract had been spent with just over three months remaining on the contract term. In the past five years, Fire has purchased approximately 4,250 turnout sets at an average cost of \$2,645 per turnout ensemble. The \$12.7M included \$1M in taxes, and \$232,000 in other PPE purchases.

During our review, Fire stated that they budget \$3.8M annually for PPE gear, based on two recruit classes and normal replacement for expired or damaged turnouts. FRM staff initially explained that the increased spending was related to the hiring of more firefighter recruits; however, the recruit rosters did not support that statement. Staff later reported that the increased spending in FY21 and FY22 was related to the Department's decision to supply all firefighters one set of the upgraded RedZone turnout, which provided additional carcinogen protection.

LION Expenditures and Graduating Recruits



In FY21 and FY22, LION spending doubled because of the Department's cancer prevention efforts and the purchase of enhanced protection turnouts.

Starting in FY21, Fire only purchased the RedZone turnouts. We performed reasonableness testing by reconciling the \$12.7M spent in the past five years to the ending turnout inventory levels. In FY19, the beginning inventory of pants and coats was 391 and 135 respectively. Between FY19 and FY23, Fire purchased 4,239 pants and 4,267 in coats. During the same time frame Fire outfitted 379 new recruits with two turnout ensembles (758) and replaced 53 coats and 65 pants due to damage, wear, or loss. In addition, in FY21 the Department issued one new RedZone turnout set for each of the approximate 1,800 firefighters. At the end of FY23, SAP inventory records reflected 2,175 pants and 2,067 coats in inventory which totaled \$6.4M. These ending inventory numbers were reasonable based on the recruit classes and the issuance of a new RedZone turnout to all members.

In reviewing ending inventory amounts with FRM personnel, they indicated that some non-RedZone gear is reflected in SAP under the RedZone material tracking number. Therefore, SAP inventory numbers may not match what is on the shelf. In addition, warehouse staff reported that they have a large amount of obsolete turnout inventory since they are now only issuing RedZone models. Staff reported that they cannot return the items to LION and that they are attempting to use the gear for training purposes.

Fire procured all turnout equipment in accordance with City policies. The invoices we tested complied with contract requirements.

To perform our tests for contract compliance, we used the same ten invoices previously selected for invoice testing. For each of the sampled invoices, we verified that all nine invoice components referenced in *Section 3.2: Method of Invoicing* in the LION contract, were present. We also verified that all purchase orders were completed in accordance with *A.R 3.10 Section III*, regarding purchase orders and good receipts.

In addition, we reviewed the delivery address on all invoices processed during the contract. In 13% of the invoices, the delivery address reflected something other than FRM. However, that was an error by LION, and Fire confirmed that the shipments were delivered to FRM. There was an exception for two invoices for orders placed by and shipped to the Fire Training Academy. The invoices were for suspenders that the FRM doesn't keep in their inventory and are necessary for the turnouts used during training. Since the latest model of turnouts have built-in suspenders/fasteners, the FRM does not stock the suspenders for the academy.

Recommendations

- 1.1 Develop a process to annually obtain the proper discount rate(s) from LION.
- 1.2 Perform an inventory of all turnout pants and coats and appropriately update SAP.
- 1.3 Identify obsolete turnout pants and coats in inventory and develop a process to remove them.

2 – Inspection and Warranty

Background

Per section 5.2.4 of the LION contract, there is a two-year manufacturer warranty on turnout materials and workmanship from the date of acceptance by the City. Any defects of design, workmanship, or materials that would result in non-compliance with the contract specifications shall be corrected by the contractor (including parts, labor, and FOB delivery) without cost to the City.

NFPA standards limit turnout ensembles' shelf life to ten years and recommend that departments thoroughly wash and inspect all gear after exposure to fire, chemical, or biological contaminants. Excessive washing could lead to a shorter life span of the ensembles, compelling Fire to purchase turnouts on a more frequent basis, long before the expiration of the ten years. LION estimates the average life span of turnouts is five to seven years.

We interviewed Fire personnel and LION's representative to ascertain if procedures are in place to ensure that a thorough inspection of each ensemble is conducted upon delivery and that any observed defects are corrected by LION within a reasonable time. We also reviewed the inspection forms for all turnouts brought to the FRM for cleaning or inspection to determine if proper monitoring was being conducted in compliance with NFPA standards.

Results

Fire personnel inspected new turnouts for defects or damage. Fire reported that they have not made any warranty claims with LION in the past two years. However, Fire did not maintain a vendor file for LION which would capture any performance issues.

There were no LION deliveries anticipated during the audit. In exchange, we observed FRM personnel conduct a complete inspection of a new coat and pair of pants, as well as a used pair that was delivered to the FRM for washing. We observed and verified that personnel checked the seams (for loose stitching), the zippers, and the fasteners of each garment. The thermal liners in the coats and pants were removed to confirm the integrity of the liner was not compromised by loose stitching or tears. We also confirmed that a serial number and manufacture date were sewn into the liner of each garment. We reviewed and confirmed that the garments had yet to reach the imprinted expiration date.

We interviewed FRM personnel about their process when damage occurs after the turnout has been used. FRM staff explained that if a defect or damage (i.e., broken zipper, loose stitching) occurs after the turnout has been issued, they would contact the LION sales representative. The representative would make the determination based on the age of the garment to either have it repaired at Arizona PPE or have it replaced. All warranty submissions are initiated with a LION warranty form forwarded to LION

headquarters for processing. When the determination to repair an item is made, the turnaround time at Arizona PPE is 1 to 2 days, depending on the repair. Replacements can take several weeks and are tracked by LION and Fire personnel.

FRM staff reported that they have not had any LION returns in the past two years after initial receipt of delivery. However, FRM did not maintain any documentation of the returns for our review. FRM staff advised that they have had no issues with LION and returns. Staff agreed to start keeping track of all future LION returns to ensure all turnouts are accounted for and to document the number of repairs for each garment.

Fire personnel did not document annual turnout inspections in accordance with NFPA Standard 1851.

NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, section 6.3.3, states that advanced inspections of all protective ensemble elements shall be conducted annually, or whenever a routine inspection discovers potential damage. Section 6.3.4 adds that the findings of the advanced inspection shall be documented.

We requested the inspection forms for turnout ensembles. Fire personnel confirmed that inspections were conducted, and that they documented the examination on the daily logs. However, the paper logs provided minimal information regarding the inspections (date, last name, and station number). Due to the lack of an electronic tracking system of turnout gear by serial number, we could not determine if all turnouts were inspected and if the Department was complying with the NFPA standard.

Recommendations

- 2.1 Develop a process to document vendor performance, including all warranty returns and repairs.
- 2.2 Establish procedures for documenting turnout wash schedule and annual inspections. This would include the development of an electronic tracking system including serial numbers to properly track and monitor inspections for firefighter ensembles.

Scope, Methods, and Standards

Scope

We reviewed the LION contract for the period of September 2018 through July 2023.

The internal control components and underlying principles that are significant to the audit objectives are:

- Control Activities
 - Management should design control activities to achieve objectives and respond to risks.
 - Management should design the entity's information system and related control activities to achieve objectives and respond to risks.
- Monitoring activities
 - Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.

Methods

We used the following methods to complete this audit:

- Interviewed Fire Staff
- Reviewed the LION contract
- Reviewed SAP reports
- Recalculated invoices
- Reviewed NFPA standards
- Reviewed warranty process with LION and Fire

Unless otherwise stated in the report, all sampling in this audit was conducted using a judgmental methodology to maximize efficiency based on auditor knowledge of the population being tested. As such, sample results cannot be extrapolated to the entire population and are limited to a discussion of only those items reviewed.

Data Reliability

The SAP data used in testing for this audit was previously determined to be reliable through an independent audit review.

Standards

We conducted this performance audit in accordance with generally accepted government auditing standards. 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. Any deficiencies in internal controls deemed to be insignificant to the audit objectives but that warranted the attention of those charged with governance were delivered in a separate memo. We are independent per the generally accepted government auditing requirements for internal auditors.