



INTERNAL AUDIT REPORT

OPERATIONAL AUDIT Fishing & Commercial Operations - Maritime

January 01, 2016 – September 30, 2017

ISSUE DATE: February 23, 2018 REPORT NO. 2017-24



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EXECUTIVE SUMMARY

Internal Audit (IA) completed an audit of Fishing & Commercial Operations (F&CO) – Maritime, at Terminal 91, for the period January 01, 2016 – September 30, 2017. The audit was performed to determine whether the billing process operated effectively and efficiently, and whether customer billing was complete and accurate.

Terminal 91 has gone through new management and staffing challenges in 2016 and 2017 respectively. This has resulted in new management undertaking the significant challenge of stabilizing processes, hiring replacement staff, and training them on incumbent processes. By late 2017, the processes had been stabilized, allowing us to focus on the existing process and provide appropriate recommendations.

IA identified the following key issues during the course of our audit:

- The Maritime Operations Team and outsourced security personnel are responsible for manually observing, counting and measuring a constantly rotating clientele of marine vessels, land vehicles (i.e. trucks, cranes, fishnets, etc.) and storage. We observed this process to be manual, labor intensive and occasionally prone to error. Revenue leakage can be exacerbated if an individual is sick or out of the office, as limited observations/counts generally occur during that period.
- 2) Maritime Operations utilize a variety of internally developed Access databases and Excel spreadsheets to record billable activities. The billing process is at risk of error due to, a manual process and limited error checks. The process is also inefficient, labor intensive, and includes redundancies.

We extend our appreciation to the management and staff of the Maritime Operations Department, Seaport Finance and Budget Department, and Accounting and Financial Reporting Department for their assistance and cooperation during the audit.

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Glenn Fernandes, CPA Director, Internal Audit

RESPONSIBLE MANAGEMENT TEAM

Stephanie Jones Stebbins, Managing Director, Maritime Kenneth Lyles, Director, Fishing & Commercial Ops Kelli Goodwin, Manager, Maritime Operations Kelly Zupan, Director, Seaport Finance & Budget



BACKGROUND

Maritime Operations manages Terminal 91, which includes: Pier 90, Pier 91, an upland area with leased premises, and storage for trailers, containers, cranes, and fishing nets. The Terminal provides short-term and long-term moorage for fishing and commercial vessels, including tugs, barges, ferries, research vessels, and military and commercial vessels in lay-up or idle status; additionally, several leased buildings are housed at the Terminal.

Customers with short-term moorage needs are subject to the Port of Seattle (Port) Terminal Tariff; while those with long-term needs, who contract with the Port for a minimum number of berthing days in an agreement year, generally have a Preferential Use Agreement (PUA) with reduced rates. Customers are mainly billed for dockage, wharfage, consumption of electricity and water, forklift rental, security services, and yard use at the uplands of Terminal 91. Currently, there are approximately 150 customers.

Maritime Operations also manages dockage at Terminals 18, 28, and 69, and Piers 34 and 46 which provide additional commercial moorage.

Maritime Operations records vessel and billing activities in various Access databases and Excel spreadsheets; the Billing Specialist prepares the billing spreadsheet on a monthly basis, and manually enters the prepared information into PeopleSoft for invoicing upon the completion of Superintendents' review.

REVENUE GENERATED BY BILLING CATEGORY							
Billing Category	2015	2016	2017				
Dockage	\$2,388,826	\$2,246,035	\$2,271,232				
Wharfage	405,963	509,262	432,283				
Electrical	492,490	520,754	555,230				
Water	52,347	53,453	68,099				
Equipment Rental	211,635	181,070	252,515				
Security	126,592	106,136	101,736				
Yard Use	391,270	489,593	658,331				
Miscellaneous	5,251	6,644	9,469				
Total Revenue	\$4,074,375	\$4,112,945	\$4,348,895				

FINANCIAL HIGHLIGHTS

Data Source: PeopleSoft Financial



AUDIT SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards and the International Standards for the Professional Practice of Internal Auditing. 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.

The period audited was January 2016 – September 2017. We utilized a risk-based approach from the planning phase to the testing phase of our audit. We gathered information through document requests, research, interviews, observations, and analytical procedures. Our audit included the following procedures:

Customer Billing

- Created flow charts to obtain a comprehensive understanding of the customer billing process
- Reviewed customer aging reports to identify material delinquent balances
- Performed analytical procedures to evaluate revenue trends and to identify billing periods to test
- Agreed charge rates to various sources (e.g. tariff, Preferential Use Agreements, and City of Seattle electric and water rates)
- Validated charges had proper supporting documentation (e.g. electrical and water reading, electrical hook-up request, forklift rental forms, and wharfage declaration forms)
- Re-calculated charges to identify discrepancies
- Reviewed revenue accounts to verify inappropriate revenue recording

Reconciliation between Accrual Spreadsheet and PeopleSoft

- Created flow charts and identified reconciliations of spreadsheets to PeopleSoft
- Compared total billing in the monthly accrual worksheets with those in PeopleSoft

Accuracy and Completeness of Accrual Spreadsheet

- Created flow charts and identified spreadsheets that management uses to perform billing
- Verified the monthly accrual worksheets captured all vessel movements and billing information accurately



SCHEDULE OF FINDINGS AND RECOMMENDATIONS

1) RATING: HIGH

INEFFICIENT PROCESSES WHICH LACK SEGREGATION OF DUTIES

The Maritime Operations Superintendent normally counts inventories and nets in the uplands area once a day during week days and measures storage usage at month end. Outsourced Security personnel observe vessel arrivals and departures on an hourly basis and their observations are periodically recorded into an access database, which is then validated and updated with additional vessel activity, by the superintendent. Dockage at Terminal 18, 28, 34, 46 and 69 is self-reported and dependent on customers notifying the Maritime Operations Team; no validation mechanisms exist for this. The security personnel also count cranes and nets in the uplands on an hourly basis. For the uplands, the highest number from the counts, by inventory type, are billed to customers¹. For further information refer to Vessel Movement and Tariff Dockage process flows attached in Exhibit A.

The Superintendent also works normal business hours, thereby placing reliance on contracted security to perform hourly observations/counts during non-business hours. Security personnel are minimally trained employees with high turnover.

The Superintendent collects and reviews the counts from the security personnel along with the selfreported counts and measurement, prepares the monthly yard use billing, and reviews the invoicing once the Billing Specialist enters the billing information into PeopleSoft. A lack of segregation in the functions of collecting billing data, preparing billing, and authorizing billing can lead to manipulation and/or unintentional errors. For further information refer to Tariff Yard Use process flow attached in Exhibit A.

Observing/counting vessels and vehicles in a dynamic sea and land terminal, requires a solid process, experience, and physical presence or an equivalent electronic control. The current methodology is prone to mistakes, lacks segregation of duties, and is dependent on outsourced third parties.

Recommendations:

- Assess options of redesigning the current process; consider options that Maritime Operations deems reasonable and that would alleviate current burden/dependence on outsourced staff.
- Assess the appropriate staffing needs / roles and whether current staffing is adequate to perform tasks. Assess the level of dependence on outsourced security.
- Separate job functions relating to billing data collection and review, and invoice review and approval. (Segregation of Duties)

¹ Revenue loss from trailers parked in the uplands is inevitable because they are counted only once a day due to staffing limitations. The security personnel are not required to count trailers because it is not cost effective to train them to count due to their high turn-over rate.



Management Response/Action Plan:

Management agrees with the recommendations.

Redesigning the current process could help alleviate the current dependence on outsourced staff. Management has been working with Security and Information Communications & Technology (ICT) departments on the "Maritime Cameras Project" to assess the cost and viability of upgrading a number of existing cameras as well as installing new cameras in new locations. This discussion is underway and site visits are planned for late February 2018 to identify the feasibility of locations.

Management also agrees that there is a need to assess staffing levels and related level of dependence on outsourced security. The current security contract outlines several tasks that are beneficial to supplementing the existing Port staff of one manager and two superintendents. We acknowledge that there is risk should a future contract not include that same language. Management will conduct a cost/benefit analysis by end Q3 2018 to see if more FTEs on the Maritime Operations team make business sense. Management is also teaming up with other Port staff and evaluating the current security contract to see if changes need to be made. This evaluation should be complete by the end of Q3 2018.

Regarding the Segregation of Duties concerns, management is in the process of hiring a new Maritime Billing and Admin Specialist. Once this position is filled, procedures will be updated to implement the Separation of Duties.



2) RATING: HIGH

MANUAL BILLING PROCESS AT RISK OF ERROR

Maritime Operations utilize a variety of internally developed Access databases and Excel spreadsheets to record billable activities. Billing categories include: dockage, wharfage, electrical and water consumption, forklift rental, and security services. The billing process is at risk of error due to:

Billable data kept in the Vessel Activity Log Access database is copied via a "cut & paste function" to the monthly Vessel Log, an Excel spreadsheet used as a starting point for the monthly billing. This could lead to incorrect and/or missing billable data in the spreadsheet if the database is edited (e.g. changes to existing data, and new data entries) after the data is copied, and if the spreadsheet is not updated accordingly. For further information refer to the Tariff or PUA Dockage process flow attached in Exhibit A.

The process is inefficient and redundant in the following manner:

- The daily Activity Count Access database maintains daily information relating fish nets, forklift rentals, and vessel moves, which is duplicated from the other existing documentation (i.e. yard use log, forklift rental forms, and Vessel Activity Log Access database).
- Billing entries are manually entered into PeopleSoft for invoicing. In a given month, there can be several hundred invoice lines.
- Billing documentations (e.g. Wharfage Tonnage Declaration forms, Electrical Hookup forms, and customer invoices) are saved on a shared drive and on the department SharePoint site. In addition, each billing category from the monthly accrual spreadsheet is saved separately as an individual spreadsheet in a SharePoint site. This increases the risk of inconsistent or incorrect data and adds additional administration time to filing.

Recommendations:

Maritime Operations should continue with the planned implementation of new billing software. During this implementation, we recommend that Maritime Operations:

- Build the billable data source in the software, and have it directly linked to the monthly customer billing to avoid any miscommunication between the data source and actual billing.
- Enable an automated billing feed between the software and PeopleSoft to eliminate the manual invoicing of entries to PeopleSoft.
- Utilize the software as a depository to maintain necessary billing documentation, to reduce the administrative effort and time to archive documents.

Depending on time frame for the above longer term solution, we recommend the following short-term Opportunities:

- Explore the possibility of linking the Vessel Activity Log Access database to the monthly Vessel Log spreadsheet, so that the spreadsheet can be automatically updated when the databased is changed.
- Eliminate the Daily Activity Count Access database if the database is not used for any other purpose.
- Work with the AFR Billing department to design a mechanism of loading billing entries to PeopleSoft.
- Re-evaluate the archive process to determine what and where documents should be saved.



Management Response/Action Plan:

Management is working closely with the vendor, ICT and accounting in an effort to implement a holistic new vessel management software system to replace our manual processes. The items identified above in the recommendations will be highlighted to ensure every practical effort is made to incorporate the recommendations into the new billing/software system. We are cautiously optimistic that the new system will be implemented by Q1 2019.

Prior to implementation of the new vessel management system: Management is currently working with AFR to explore opportunities to reduce manual processing where possible. Possibilities may include uploading of information directly into PeopleSoft. We expect to have testing of this process completed no later than end of Q3 2018.

Linking the Vessel Activity Log Access database to the monthly Vessel Log Spreadsheet for automatic updating as the database is changed has been explored. The level of expertise required to change this process is beyond the capabilities of on-site staff and would have to be outsourced. Management has received an estimate that it would require months to create and test this link. No money has been budgeted in 2018 to implement this change. With the promise of the new vessel management system coming online within the next year, management has decided not to implement this recommendation.

Our team is currently in the process of hiring a new Maritime Billing & Admin Specialist. Once this position is filled and the employee is proficient in performing billing duties, this person will perform an overhaul and streamlining of our archiving process. We expect this will be completed by the end of Q1 2019.



3) RATING: MEDIUM

INCORRECT CUSTOMER BILLING

We tested 28 invoices from 20 customers (5 customers per month) for the months of May 2016, July 2016, June 2017 and July 2017, to verify billing completeness and accuracy. The table below highlights discrepancies found:

Month	Customer	Billing Type	Under-Billed Amount	Cause
May 2016	Foss Maritime	Dockage	\$254.50	Incorrect berth days
May 2016	Aleutian Spray Fishers	Dockage	\$732.00	Incorrect tariff rate
July 2016	Crowley Maritime	Dockage	\$688.00	Incorrect tariff rate
July 2017	Crowley Maritime	Forklift Rental	\$645.00	Missed billing

Although the results of the above testing were from a small sample, the high error rate (14% of invoices tested contained an error), indicated that an opportunity exists for a more effective review of data entered by the Billing Specialist.

In addition, from the 28 invoices tested, we identified four yard use charges and one electrical consumption charge that had billing discrepancies that we could not tie to the underlying supporting documentation (e.g. yard use spreadsheet, electrician reading). This indicated that someone made a mistake or a change without updating the source documents.

Recommendations:

- Where reasonable and practical, seek recovery of the under-billed amounts.
- Design appropriate new-hire training, emphasizing mistake-prone areas (e.g. counting of berth days by customer types, applying tariff rates between monthly and daily rates, etc.) and periodically re-enforce the billing rules to all staff.
- Consider implementing billing software, which incorporates billing rules and houses supporting documentation.

Management Response/Action Plan:

Management shall explore the viability of seeking recovery of the under-billed amounts.

Billing Training documentation has been created over Q3 & Q4 2017. This documentation is currently being tested and improvements are continuing to be included / added into newer revisions. Billing rule reinforcement for staff will be incorporated into staff touch-base meetings twice a year following the hire of our new Billing Specialist.

As mentioned above, management is working closely with the vendor, ICT, and AFR in an effort to implement a holistic new vessel management software system to replace our manual processes. Efforts are being made to ensure every practical effort is made to incorporate the audit recommendations into the new billing/software system. We are cautiously optimistic that the new system will be implemented by Q1 2019.



APPENDIX A: RISK RATINGS

Findings identified during the course of the audit are assigned a risk rating, as outlined in the table below. The risk rating is based on the financial, operational, compliance or reputational impact the issue identified has on the Port. Items deemed "Low Risk" will be considered "Exit Items" and will not be brought to the final report.

Rating	Financial	Internal Controls	Compliance	Public	Port Commission/ Management
HIGH	Large financial impact Remiss in responsibilities of being a custodian of public trust	Missing, or inadequate key internal controls	Noncompliance with applicable Federal, State, and Local Laws, or Port Policies	High probability for external audit issues and/or negative public perception	Important Requires immediate attention
MEDIUM	Moderate financial impact	Partial controls Not adequate to identify noncompliance or misappropriation timely	Inconsistent compliance with Federal, State, and Local Laws, or Port Policies	Potential for external audit issues and/or negative public perception	Relatively important May or may not require immediate attention
LOW/ Exit Items	Low financial impact	Internal controls in place but not consistently efficient or effective Implementing/enhancing controls could prevent future problems	Generally complies with Federal, State and Local Laws or Port Policies, but some minor discrepancies exist	Low probability for external audit issues and/or negative public perception	Lower significance May not require immediate attention
Efficiency Opportunity	ncy An efficiency opportunity is where controls are functioning as intended; however, a modification would make				



EXHIBIT A: PROCESS FLOW

Daily Vessel Movement at Terminal 91



* Dependent on Security



Tariff Moorage/dockage: applicable to customers needing spot moorage who don't have leases. This type of moorage is typically available at T18, T28, P34, P46, T69, and T91.



* Potential revenue loss if customer does not self-report.







Tariff or PUA Dockage – Manual Billing Process

