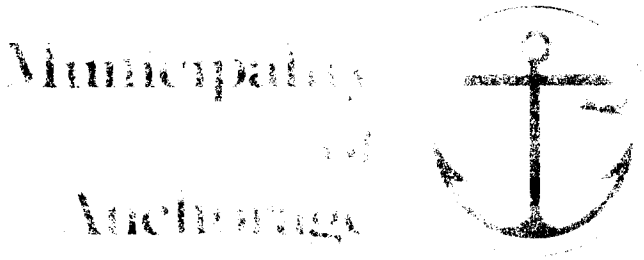

May 2, 2002

Internal Audit Report 2002-5
Vehicle Maintenance
Port of Anchorage

Introduction. The Port of Anchorage (Port) is responsible for the operation and maintenance of Port facilities and equipment in the Municipality of Anchorage. In order to accomplish this, the Port maintains a fleet of twenty-four vehicles and two boats. The Operations/Maintenance Section is responsible for the operation, maintenance and repair of all vehicles, heavy equipment and non-leased facilities such as, boom cranes, buildings, offices, the Ship Creek facility, and parking lots.

Scope. Our audit objective was to evaluate the vehicle and heavy equipment maintenance program at the Port. Specifically, we determined if all repair and maintenance were documented, if preventive maintenance was accomplished, if the purchase of parts and fuel was properly controlled, and if tools and shop equipment were accounted for. The audit was conducted in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review, and accordingly, included tests of accounting records and such other auditing procedures as we considered necessary in the circumstances. The audit was performed during the period of December 2001 through January 2002.

Overall Evaluation. Vehicles and equipment were generally maintained in a good condition. However, vehicle maintenance records were not automated, preventive maintenance was not scheduled as required, and fuel was not properly controlled.

FINDINGS AND RECOMMENDATIONS

1. Vehicle Maintenance Records Not Automated.

a. Finding. The Port does not utilize an automated vehicle maintenance system to document and track repairs and maintenance performed on their vehicles. Instead, work orders are filed in binders set up for each vehicle as a historical file of work performed. These binders also contained daily inspection reports, part's invoices and other documentation pertaining to each vehicle. Current binders are stored in a bookcase in the Vehicle Maintenance Supervisor's office. As the bookcase fills up, older binders are moved to a storage room. While this system provides a good historical record for each vehicle, it does not provide an efficient nor effective means for tracking maintenance trends, future maintenance requirements or other information required for proper vehicle management. The preventive maintenance schedule also was not automated and was tracked on a white board in the maintenance office.

b. Recommendation. Port personnel should consider automating the vehicle maintenance records. We suggest that the Fleet Services Division be contacted to determine if the Port could be included on the GEMS 2000 system. GEMS 2000 is a maintenance management system used by both Fleet Services and the Public Transportation Department to track maintenance and parts.

c. Management Comments. Management stated, "Port personnel Stuart Greydanus, Director of Operations, Harry Finch, Manager of Finance and Administration and Stan Mead Maintenance Supervisor, met with Fleet Services personnel Ron Collins, Administrator, John Pickett, Programmer Analysis and Al Watson General Foreman to discuss the GEMS 2000 System. Ron Collins explained in detail the GEMS 2000 System and how it has made Fleet Services more efficient tracking parts and

maintenance. Ron Collins stated that he could incorporate the Port into the GEMS 2000 system for $100.00 per month. The Port would have to install infrastructure to get this system operational. Ron Collins stated that Fleet Services would help the Port setup the GEMS 2000 System. The Port is in the process of incorporating the GEMS 2000 System into our maintenance management system to track maintenance and parts."

d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

2. **Preventive Maintenance Program Not Adequate.**

a. **Finding.** The preventive maintenance program was not adequate to insure that all vehicles were serviced timely. We found that the maintenance shop employees maintained a board that listed all vehicles requiring preventive maintenance.

Of the twenty-four vehicles and four pieces of equipment listed on this board, only four had an indication as to when the next service time was for the equipment. Of these, one of the servicing times was not based upon the manufacturer's recommended service times. In this instance, the board indicated that the servicing interval for the transmission on one of the loaders was every 2,000 hours of use. The manufacturer's maintenance book indicated that this servicing should be performed every 1,000 hours of use. The remaining vehicles and equipment had no indication as to when the next servicing was due. In discussions with maintenance shop staff, the servicing times for this equipment was not based upon the manufacturers' recommended servicing time. We tested a sample of 13 of these vehicles and found that 7 (53.8%) of the vehicles had not been maintained within manufacturers' recommended servicing intervals.

Failure to adequately maintain vehicles and equipment timely could result in overall increased costs. The increase in costs could be the result of undue wear on the vehicle, failure to recognize a problem, or over-maintaining the vehicle.

b. **Recommendation.** A preventive maintenance program should be maintained for all Port vehicles. The maintenance schedule should be in accordance with the manufacturers' recommended maintenance schedule and should include a system for suspensing required maintenance to ensure that inspections and work are performed when required.

c. **Management Comments.** Management stated, "Port personnel Stuart Greydanus, Director of Operations, Harry Finch, Manager of Finance and Administration and Stan Mead Maintenance Supervisor, met with Fleet Services personnel Ron Collins, Administrator, John Pickett, Programmer Analysis and Al Watson General Foreman to discuss the GEMS 2000 System. Ron Collins explained in detail the GEMS 2000 System and how it has made Fleet Services more efficient tracking parts and maintenance. The Port is in the process of incorporating the GEMS 2000 System into our maintenance management system to track maintenance and parts."

d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

3. **FleetOne Bulk Fuel Card Not Used Properly**.

a. **Finding.** FleetOne Bulk Fuel Cards were not always used for their intended purpose. Our review of six months of purchases with the two maintenance shop bulk fuel cards revealed that five out of the six purchases were for fuel for Port vehicles. Bulk fuel cards are for purchases of fuel for equipment other then vehicles, such as boat motors, chain saws, and so forth. Fuel for vehicles should be purchased with the

FleetOne Fuel Cards assigned to each vehicle so that fuel usage and miles driven can be monitored through the fuel card reports. Using bulk fuel cards for vehicles distorts the fuel use for the vehicle and makes the fuel usage reports inaccurate.

b. **Recommendation.** Bulk fuel cards should not be used to purchase fuel for vehicles. If a vehicle fuel card is lost or misplaced, the loss should be reported and a replacement should be obtained.

c. **Management Comments.** Management stated, "The Port has ordered an additional Fuel Man card for the 8 each Port Maintenance vehicles. These additional Fuel Man cards will remain locked up in Stan Meads locker. In the event an employee loses or misplaces a card, Stan Mead can issue a new card without any delays and order a new card to replace the lost card."

d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

4. On-site Diesel Fuel Tank Not Secured.

a. **Finding.** The security over the on-site diesel fuel tank required strengthening. The pump on the tank was not locked or otherwise secured to restrict use by only authorized personnel. Even though the tank is located within the Port area, the area is open to all personnel working at the Port, including Tote and CSX employees. Our reconciliation of fuel usage from the tank for the period January through September 2000 revealed a 1,560 gallon shortage. Port personnel were advised of this discrepancy in December 2000 and a recommendation was made at that time to secure the tank. Our review of the security during this audit revealed that the tank was still unsecured but a manual log of fuel usage had been implemented. Our reconciliation of fuel usage for the period December 2000 through November 2001

revealed a much smaller difference of 50 gallons. The Maintenance Supervisor does not believe that this difference is due to unauthorized use but simply a lack of documentation by his staff.

b. **Recommendation.** The Maintenance Supervisor should closely monitor the fuel usage to determine if the variance does not begin to get larger again. If shortages are detected, then the pump should be locked to restrict access only to authorized personnel.

c. **Management Comments.** Management stated, "On April 9, 2002 the Port contracted with Arctic Service and Maintenance to install a Phoenix FL6 Fuel Control System. With the Phoenix FL6 Control System, the Port knows where all fuel goes no matter when it's pumped, 24 hours a day. This system improves record keeping and fuel management. It provides security against theft and automatically keeps track of all transactions. It produces total product dispensed each day, accumulates information on card number, date and time of access, amount fueled and tracks totals by cardkey."

d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

Discussion With Responsible Officials. The results of this audit were discussed with appropriate Municipal officials on March 26, 2002.

Audit Staff:
Eric Kaehler, CIA