

SOLID WASTE DEPARTMENT  
OFFICE OF ENVIRONMENTAL COORDINATION  
MCKAY BAY REFUSE TO ENERGY FACILITY  
AUDIT PROGRAM GUIDE

The Solid Waste Department provides solid waste collection and disposal including resource recovery and recycling services to over 86,000 city customers. More than 350,000 tons of solid waste is processed annually. Eighty percent (80%) of the total is received at the McKay Bay Refuse to Energy Facility (Facility) where processible waste is separated and then incinerated to produce electricity.

The City contracted with Waste Management, Inc. for the operation and maintenance of the Facility. This twenty (20) year contract was subsequently assigned to Wheelabrator McKay Bay ( WMB), a subsidiary of Waste Management.

In the past, the Facility's operations have been criticized in the annual reports, required by the bond documents, of the independent consulting engineers as well as prior Internal Audit Department reports. The criticism originated from energy production levels dropping close to a point where the City would lose excess capacity revenues received from Tampa Electric Company and possibly be liable for repayments of early receipts. The cause for the low production was determined to be due to a lack of reasonable and proper preventive maintenance.

According to the engineer's annual report for Operating Year 8 (FY92), dated May 10, 1993, WMB hired a new plant manager who was exhibiting "a positive change in operating practices and a desire to address the deficiencies at the Facility."

#### SCOPE

The audit period is from October 1, 1991 to September 30, 1993, Operating Year 8 (FY92) and Year 9 (FY93).

#### PLANNING

1. Prepare and send an entrance letter to Manager of Auditee Division.
2. Prepare a planning program and include a time budget for the preliminary survey work.
3. Conduct an in house review of the following:
  - a. Prior internal audit reports and management comments,
  - b. The annual budget and Mission & Management Statement of Auditee Department, and
  - c. Charter, Organization Chart, and any Procedure Manuals.
4. Schedule and hold an entrance conference with the Auditee. Obtain the name of the departmental contact person, and secure a place from which to conduct the field work portion of the audit.

5. Begin Preliminary Survey by interviewing the appropriate personnel in the Auditee Department. Document the interviews with narratives in the work file.
6. Review and document Internal Control System. (Include control points, such as the location within the system of approvals, authorizations, segregation of duties, supervision, reconciliations, computer-generated error and edit listings, exception reports, etc.)
7. After gaining an understanding of various functions, conduct several transaction walk-throughs. Revise documentation as necessary.
8. Prepare a survey memo listing the strengths and weaknesses of the system. Discuss the areas of greatest risk and exposure to the City. Also, include suggested audit objectives and test procedures. Discuss with Audit Supervisor and the Deputy Director.
9. Prepare the audit program and include a time budget and estimated completion date. Index the work file and turn in for review.
10. Clear review notes and revise the audit program, if necessary.

#### OBJECTIVES

The objectives of this audit are to determine whether:

1. reasonable and proper preventive maintenance is occurring at the Facility in order to maintain its production capabilities and useful life;
2. electrical production levels are no longer in jeopardy of falling below the City's contractual obligations to the power company;
3. the provisions of the contracts with the operator of the Facility and the power company are properly being monitored;
4. the independent consulting engineer's conclusions and recommendations made in their annual reports are being addressed in a timely manner; and
5. the "technical information" as described in the Operation and Maintenance Contract is up to date and "sufficiently detailed to enable the City to operate and maintain the Facility . . ."

#### OBJECTIVE 1:

Determine whether reasonable and proper preventive maintenance is occurring at the Facility in order to maintain its production capabilities and useful life.

1. Prepare a random sample of days during the audit period and calculate the availability of the Facility.
2. Determine the reasons for any outages which occurred during the sampled days (scheduled vs. unscheduled outages).
3. For scheduled outages obtain activity reports detailing the maintenance and examine for reasonableness. For unscheduled outages, determine the cause

for the outage. Determine compliance with manufacturer's recommended preventive maintenance schedule for any component failures.

4. Request a "dump" of all outstanding work orders and review for reasonableness and timeliness.
5. Summarize and conclude.

OBJECTIVE 2:

Determine whether electrical production levels are no longer in jeopardy of falling below the City's contractual obligations to the power company.

1. Obtain all TECo statements and the City engineer's reconciliations of the statements for the audit period.
2. As considered necessary, recalculate the reconciliations.
3. Obtain list of anticipated down time for preventive maintenance for FY94.
4. Determine if the down time will have an significant impact on electrical production.
5. Summarize and conclude.

OBJECTIVE 3:

Determine whether the provisions of the contracts with the operator of the Facility and the power company are properly being monitored.

1. Obtain schedules used to monitor provision of the applicable contracts.
2. Verify or recalculate data, as considered necessary.
3. Summarize and conclude.

OBJECTIVE 4:

Determine whether the independent consulting engineer's conclusions and recommendations made in their annual reports are being addressed in a timely manner.

1. Obtain annual reports for the audit period.
2. Schedule out the conclusions and recommendations made by the independent consulting engineers.
3. Determine the actions taken of the conclusions and recommendations.
4. Summarize and conclude.

OBJECTIVE 5:

Determine whether the "technical information" as described in the Operation and Maintenance Contract is up-to-date and "sufficiently detailed to enable the City to operate and maintain the Facility . . ."

1. Request access to the "technical information" as described in Paragraph 6 of the Operation and Maintenance Contract.
2. Review data and test as considered necessary to conclude on the objective.
3. Summarize and conclude.

WRAP-UP

1. Complete and index workpapers.
2. Clear review notes.
3. Prepare a preliminary draft of the audit report.
4. Prepare requests for auditee responses.
5. Schedule and hold exit conference.
6. Incorporate auditee responses into the final audit report.
7. Present the audit report to the Mayor.