

City of Tampa
Internal Audit Department
Audit Program Guide
AWTP – Preventive Maintenance – Audit 04-21

Budget Hours	Audit Procedures	Done By	W/P Ref.
<i>Background</i>			
	The Plant uses a Total Maintenance Program that is divided between preventive and corrective measures. Preventive maintenance is performed on a scheduled routine basis either monthly, quarterly, semi-annually or annually, depending upon the equipment and what has been determined to be the most efficient method. The goal is to become more preventive than reactive in repairs. Specifically, there is an attempt to achieve an 80% Preventive to 20% Corrective balance.		
<i>Statistics</i>			
	For fiscal year 2003 (October 2002 through September 2003) more than 20,000 preventive maintenance work orders were completed.		
<i>Planning the Audit</i>			
	<ol style="list-style-type: none"> 1. Print Quality Control Package and process Auditor Assignment and Independence Statement page. 2. Prepare and send an entrance letter to applicable personnel in the area under review. 3. Conduct an in-house review of the following: <ol style="list-style-type: none"> a) Financial Data b) Internal Policy & Procedures Manuals c) Applicable Rules, Laws and Regulations, and d) Prior internal audit reports and management comments 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 fieldwork 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, 		

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Audit Program (cont.)

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	<p>supervision, reconciliations, computer-generated error and edit listings, exception reports, etc.)</p> <p>7. After gaining an understanding of various functions, conduct transaction walk-throughs. Revise documentation.</p> <p>8. Assess the reliability of computer-processed data –</p> <p>(a) Identify all computer-generated data that will be used during the audit.</p> <p>(b) Determine how the data will be used in the audit. If used as the sole evidence supporting a finding or as corroborative or supporting evidence – assess the data’s reliability by performing steps (c) to (g). If it will be used as background information – cite the data’s source and no further work is required.</p> <p>(c) Document how the data is used in decision-making and the extent of users’ reliance on the data.</p> <p>(d) Review any evaluations of the system, application and data performed by an independent third party (e.g., external auditor’s management letter).</p> <p>(e) Identify and document any input, processing and output controls and controls over data adjustments.</p> <p>(f) Test the identified controls and data elements that will be used during the audit by tracing a sample of data records to the source documents and a sample of source documents to the database.</p> <p>(g) Summarize the test work and results and conclude on the data’s reliability.</p> <p>9. Prepare a risk analysis listing the strengths and weaknesses of the system and reference risk assessments to audit objectives.</p> <p>10. Prepare the audit program and include a time budget and estimated completion date. Index the preliminary survey file and turn in for review. The Planning Checklist page of the Quality Control Package should be completed by the Audit Supervisor.</p> <p>11. Clear review notes and revise the audit program, if necessary.</p>		
	<i>Audit Scope</i>		
	Based on the work performed during the preliminary survey and the assessment of risk, the audit period will cover the operations of the Treatment Plant from October 2002 through September 2003.		

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<i>Audit Objectives</i>			
	<ol style="list-style-type: none"> 1. Determine if equipment currently under warranty was maintained in compliance with manufacturer’s recommended standards. 2. For equipment, not currently under warranty, determine if the frequency of maintenance is deemed cost effective and efficient. 		
<i>Objective 1:</i> Determine if equipment was maintained in compliance with manufacturer’s recommended standards.			
	<ol style="list-style-type: none"> 1. Obtain a listing of equipment currently under warranty and using a random number generator, select a sample of 10 to review work orders completed. 2. Review all work orders issued and completed for the sampled equipment to include testing for: <ol style="list-style-type: none"> a. Manufacturer’s required maintenance frequency b. PMC2000 maintenance frequency c. Types of maintenance performed agrees with manufacturer d. Tasks performed as required 3. Discuss any audit findings with the Audit Supervisor, Deputy Director and Audit Director. After receiving their approval discuss audit findings with Auditee management. 4. Summarize and conclude. 		
<i>Objective 2:</i> For equipment, not currently under warranty, determine if the frequency of maintenance is deemed cost effective and efficient.			
	<ol style="list-style-type: none"> 5. Using random number generator, select 15 equipment items that were not under warranty during the audit period. 6. Review for the following: <ol style="list-style-type: none"> a. Frequency of maintenance b. Manufacturer’s recommended frequency c. Any corrective maintenance performed d. Type of corrective maintenance e. Evaluate rationale for maintenance other than frequency recommended by manufacturer 7. Review costs for preventive maintenance vs. corrective or replacement and evaluate. 		

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	<p>8. Discuss any audit findings with the Audit Supervisor, Deputy Director and Audit Director. After receiving their approval discuss audit findings with Auditee management.</p> <p>9. Summarize and conclude.</p>		
<i>Audit Wrap Up</i>			
	<p>10. Complete and index working papers.</p> <p>11. Prepare a preliminary draft of the audit report.</p> <p>12. Clear review notes.</p> <p>13. Forward draft to auditee and request responses within 10 working days.</p> <p>14. Incorporate auditee responses into the final audit report.</p> <p>15. If requested, schedule and hold exit conference.</p> <p>16. Send final report to reproduction and make one (1) unbound copy.</p> <p>17. Prepare Release Memo, Staff Summary Sheet and City Council Agenda Item Cover Sheet.</p> <p>18. Provide Audit Supervisor with ten (10) bound and one (1) unbound copy of the final report.</p> <p>19. Upon release by the Mayor <u>and</u> its appearance on the City Council's Draft Agenda, distribute final report to auditee and place the report, audit program and risk analysis files in the appropriate folders on the share drive for posting to IAD's web site.</p> <p>20. Have the Deputy Director complete the Quality Control Checklist of the Quality Control Package.</p>		