

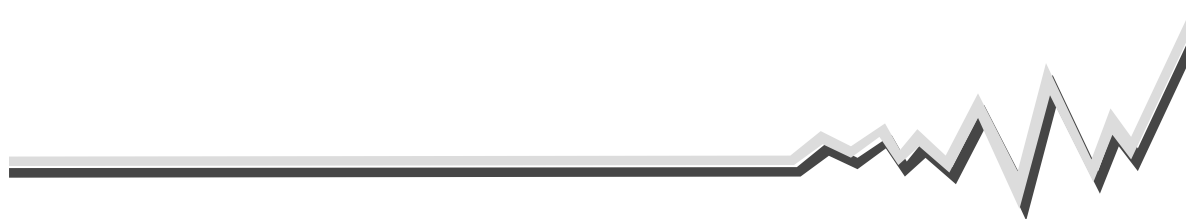


Veterans Affairs
Canada

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Audit of the Ste. Anne's Hospital Modernization and Renovation Project

Final: October 2009



Canada[!]



*This report was prepared by the
Audit and Evaluation Division*

ACKNOWLEDGEMENT

The Audit and Evaluation Division would like to acknowledge the efforts of those who provided input to the audit, with particular thanks to staff engaged in the Ste Anne's Hospital Modernization and Renovation Project.

This audit was carried out jointly by a team comprised of personnel from Veterans Affairs Canada's internal audit services and consultants from KPMG LLP.

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Glossary

CCHSA	Canadian Council on Health Services Accreditation
CEAA	Canadian Environmental Assessment Act
FAA	Financial Administration Act
HMC-M	Hospital Management Committee - Modernization
MPR	Management Planning Report
MPAC	Modernization Project Advisory Committee
NPMS	National Project Management System
PSC	Project Steering Committee
PWGSC	Public Works and Government Services Canada
RPD	Renovation Project Directorate
SAH	Ste-Anne Hospital
SSA	Specific Service Agreement
SAHMRP	Ste-Anne Hospital Modernization and Renovation Project
VAC	Veteran Affairs Canada

1 Executive Summary

This section summarizes the findings with respect to the internal audit of the Ste-Anne's Hospital (SAH) Modernization and Renovation Project (SAHMRP) and should be read in conjunction with the body of this report.

1.1 Introduction

The decision to conduct this audit was approved by the Veterans Affairs Canada (VAC) Audit and Evaluation Committee on April 2, 2007 and, as set out in the 2007-2010 Audit and Evaluation Plan. The intent of this audit is to provide a comprehensive and in-depth analysis of the SAHMRP, and falls under the on-going internal audit activities performed at every phase of the project as requested by the VAC Deputy Minister in 2002.

1.2 Audit Objectives

The audit combined six key audit objectives as approved by the VAC Audit and Evaluation Committee:

- To clarify the roles of Public Works and Government Services Canada (PWGSC) and VAC as they relate to management of the Ste. Anne's Hospital Modernization and Renovation Project;
- To assess the financial controls and delegated authorities surrounding the Modernization and Renovation Project;
- To assess the rigour applied to the disbursement of funds;
- To assess the extent to which the progress of activities are in compliance with the plans, schedules and budget;
- To evaluate the integrity and accuracy of project reports;
- To assess project and risk management systems and plans being used in relation to established frameworks.

The audit objectives were subsequently broken down in 12 sub-objectives with related criteria as detailed in Appendix A.

1.3 Scope

In recognition that a special examination was done in 2006, our examination focused on the period of April 1, 2006 to March 31, 2008. VAC/SAH retained the services of PWGSC Real Property Branch to assist them in the planning and implementation of the project, including the management of the contractors and experts' contracts. Bidding and selection activities in relation to the contractors and experts are excluded from our scope.

1.4 Audit Strategy

The audit approach involved reviewing relevant documentation in relation to VAC/SAH policies, procedures and processes in relation to the SAHMRP project management, and practices with respect to compliance with several related Government policies. In addition, we conducted 37 interviews with selected members of VAC/SAH management and staff. We performed substantive tests of details of 129 contract transactions for the 2006-2008 fiscal years in relation to commitment and disbursement of funds; we also performed substantive tests of details of 24 contracts (including 41 related transactions) for the 2006-2008 fiscal years in relation to contract administration and management.

1.5 Main Findings

Within the limitations of the procedures performed, our consultations and review of documents, the audit revealed that the substantial majority of the criteria were met. We found that an experienced team was in place to manage the project. Overall, we observed that the project was very well managed by a very dedicated and diligent management team.

We did not find significant areas of weaknesses, but we identified certain areas for improvements which are aligned with VAC/SAH and/or Government policies and framework in relation to risk management, project management, financial administration, contracting, and with recognized project management practices as per the Project Management Institute.

- Some aspects of the design of VAC *Financial Spending Authority* are not in compliance with Treasury Board *Policy on Delegation of Authorities*.
- We found a limited number of cases where FAA Sections 32, 33 and 34 certifications were not performed in accordance with the FAA directives and VAC *Financial Spending Authority*.
- The processes selected by the management team in relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; occupational hygiene, health and safety; site protection and material management; and environmental matters are documented but not in an overall project management plan which would assist the Project Leader in its monitoring activities.
- As the project evolved and new committees were established, the 2001 *Project Management Framework* document defined at the onset of the project was not subsequently updated to reflect the specific roles, responsibilities and accountabilities of all the committees.
- A risk management framework of all project components was documented in 2001, with risk identification, impact and likelihood of risks and mitigation actions. As the project unfolded, risks and mitigating actions were further defined and updated as documented in various documents. However, no overall

risk management framework encompassing all project related risks was subsequently prepared to help ensure all risks are identified and measured, to determine if current controls/risk mitigation strategies are well aligned to the risks, and additional controls in response to residual risk exposure are identified.

- Our consultations revealed a lack of clear definition of roles and responsibilities of the Technical Services and the Security Services in relation to the implementation and maintenance of the integrated security system.
- Project Steering Committee meetings did not take place on a quarterly basis as indicated in a response to a recommendation of the 2006 *Ste- Anne's Hospital Modernization Project Review Engagement* report.

1.6 Auditors' Opinion

The Audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* as defined by the Institute of Internal Auditors, and with the *Internal Auditing Standards for the Government of Canada* as required under the Treasury Board's *Policy on Internal Audit*.

In the auditors' opinion, the Ste-Anne's Hospital Modernization and Renovation Project is well managed and features effective internal controls. However, minor improvements required were noted regarding the rigor applied in the commitment and disbursement of public funds, risk management practices, and the clarity of roles and responsibilities. The evidence gathered in this audit is sufficient to provide senior management with a high level assurance of the results of the audit.

In the auditors' professional judgement, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the accuracy of the opinion provided in this report. This opinion is based on a comparison of the conditions, as they existed at the time, against pre-established audit criteria that were agreed on with management. The opinion is only applicable to the entity examined and for the scope and time period covered by the audit.

1.7 Recommendations

As the SAHMRP is expected to be completed by the end of August 2009, we have segregated our recommendations in two categories:

- Recommendations to be implemented prior to the completion of the project; and
- Recommendations for consideration in future projects

1.7.1 Recommendations to be Implemented Prior to Project Completion

R1 VAC Director General of Finance should review the department's *Financial Spending Authority* with respect to the role of clerks in Section 34 certification in light of the Treasury Board *Policy on Delegation of Authorities*, and should communicate required changes to SAH. (See page 21) (Essential)

- R2 The SAH Finance Director should clearly communicate the necessity for proper FAA Sections 32, 33 and 34 certifications. Evidence of an employee being in acting position should be retained to support the entitled delegated authority. (page 25) (Important)**
- R3 The SAH Administrative Services Director should define the roles and responsibilities of the SAH Technical Services and SAH Security Services over the new integrated security system implementation and maintenance so that both parties clearly understand their respective roles. (Page 62) (Essential)**

1.7.2 Recommendations for Consideration in Future Projects

- RFa The Project Leader should prepare a project management plan to summarize all the subsidiary management plans established at the onset of the project in relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; communication, occupational hygiene, health and safety; site protection and material management; and environmental matters. The overall plan should be updated as changes in processes take place. (Page 38) (Essential)**
- RFb As new committees are established, the project charter and related terms of reference for each committee should be updated to reflect their respective roles, responsibilities and accountabilities. (Page 40) (Important)**
- RFc An overall risk management framework encompassing all project components should be documented and updated to help ensure all project risks are identified, and are measured to determine if the current controls/risk mitigation strategies are well aligned to the risks, and to identify additional controls that may be needed in response to residual risk exposure. (Page 54) (Essential)**
- RFd The Project Steering Committee meetings should be scheduled at least every three months. (Page 77) (Essential)**

Significance of Recommendations

To assist management in determining the impact of the observations, the following definitions are used to classify observations presented in this report.

Risk Rankings for Audit Recommendations	
Critical	Relates to one or more significant weaknesses for which no adequate compensating controls exist. The weakness results in a high level of risk.
Essential	Relates to one or more significant weaknesses for which no adequate compensating controls exist. The weakness results in a moderate level of risk.
Important	Relates to one or more significant weaknesses for which some compensating controls exist. The weakness results in a low level of risk.

2 Auditors' Opinion

This internal audit provides assurance on VAC's overall project and financial management of the Ste-Anne's Hospital Modernization and Renovation Project. The Audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* as defined by the Institute of Internal Auditors, and with the *Internal Auditing Standards for the Government of Canada* as required under the Treasury Board's *Policy on Internal Audit*.

The examination phase of this audit was conducted during the period of January through April, 2009.

In the auditors' opinion, the Ste-Anne's Hospital Modernization and Renovation Project is well managed and features effective internal controls. However, minor improvements required were noted regarding the rigor applied in the commitment and disbursement of public funds, risk management practices, and the clarity of roles and responsibilities. The evidence gathered in this audit is sufficient to provide senior management with a high level assurance of the results of the audit.

In the auditors' professional judgement, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the accuracy of the opinion provided in this report. This opinion is based on a comparison of the conditions, as they existed at the time, against pre-established audit criteria that were agreed on with management. The opinion is only applicable to the entity examined and for the scope and time period covered by the audit.

The following table summarizes the findings of this audit. All the audit criteria were either "met" or "met with exception". Please refer to the body of this report for further details regarding the audit findings.

Sub-Objectives	Number of Audit Criterion	Met	Met with Exception	Not Met
1. Assess compliance with Treasury Board submission.	3	2	1	
2. Assess the financial management practices and delegated authorities surrounding to the SAHMRP.	6	5	1	
3. Assess the rigor applied in the commitment and disbursement of public funds.	3	1	2	
4. Assess the extent to which the progress of activities is in compliance with the plans, schedules and budgets as revised in December 2006.	6	6		
5. Evaluate the integrity and accuracy of project reports.	3	3		

6. Assess the overall project management and governance framework.	10	8	2	
7. Assess human resources management.	4	4		
8. Assess the risk management practices and plans related to the SAHMRP, including occupational hygiene, health and safety risks site protection and material management.	13	11	2	
9. Assess contract management.	3	3		
10. Assess communications management.	3	3		
11. Assess sustainable development and environmental protection management.	5	5		
12. Assess VAC head office involvement in the SAHMRP.	1		1	

3 Introduction

3.1 Background and Context

Located in the municipality of Ste-Anne de Bellevue, in Quebec, the SAH is a long-term care and geronto-psychiatric facility administered by VAC. Its mission is to provide veterans with the best possible care and maintain their dignity and independence. Prior to the SAHMRP, the Hospital consisted of 14 buildings that were built between 1940 and 1969 and accommodated 550 patients.

Due to issues associated with age and condition of the buildings and electromechanical systems, as well as challenges faced by the Hospital in meeting provincial standards and regulations for long-term care facilities and federal Labour Code Standards, a Treasury Board submission was put forward in 2001 to request capital funding of \$67.7M for the SAHMRP. In December 2005, Treasury Board approved additional capital funding of \$46.55M including \$10M for unforeseen contingencies.

The SAHMRP includes two components: 1) the construction/renovation undertaking funded under the capital budget as approved by Treasury Board and 2) the transition activities funded under the SAH operating budget.

In 2002, the VAC Deputy Minister asked that an on-going internal audit of the SAHMRP be done at every phase of the project. From June 2002 to March 2003, VAC Audit and Evaluation Division developed a project management and monitoring framework entitled *Summary of Key Items Submitted by Audit and Evaluation for Consideration by Modernization Project Management* to help ensure that project management would be consistent with the established project management framework, risk management strategies and plans, and that key project milestones and activities would be completed as planned and reported.

In 2006, VAC Audit and Evaluation Division performed a review of the SAHMRP which led to the *Ste- Anne's Hospital Modernization Project Review Engagement* report.

The 2009 internal audit of SAHMRP was approved by the VAC Audit and Evaluation Committee on April 2, 2007 and, as set out in the 2007-2010 Audit and Evaluation Plan. The intent of this audit is to provide a comprehensive and in-depth analysis of the SAHMRP management.

3.2 About the Audit

The objectives of the audit as approved by the VAC Audit and Evaluation Committee are:

- To clarify the roles of PWGSC and VAC as they relate to management of the Ste. Anne's Hospital Modernization and Renovation Project;
- To assess the financial controls and delegated authorities surrounding the Modernization and Renovation Project;

- To assess the rigour applied to the disbursement of funds;
- To assess the extent to which the progress of activities are in compliance with the plans, schedules and budget;
- To evaluate the integrity and accuracy of project reports;
- To assess project and risk management systems and plans being used in relation to established frameworks.

During the development of the internal audit plan, the original audit objectives were further broken down to provide an independent assessment of 12 sub-objectives as detailed in Appendix A.

3.2.1 Audit Criteria

The audit criteria in support of each audit sub-objective are detailed in Appendix A. The audit criteria were selected in reference to criteria identified in the 2006 review engagement, to recognized practices in project management and with reference to relevant Government of Canada policies, including Treasury Board *Policy on Delegation of Authorities*, *Risk Management Policy*, *Contracting Policy*, *Management of Major Crown Projects*, *Project Management*, *Policy on Management, Resources and Results Structures*, *Occupational Safety and Health Policy*, and *Operational Security Standard on Physical Security*, the *Communication Policy of the Government of Canada*, the *Hazardous Wastes Management: Canadian Directions*, the *Canadian Environmental Assessment Act (CEAA)*, the *Financial Administration Act (FAA)*, and with VAC policies and directives including, *Financial Spending Authority*, *Delegated Authorities Manual*, *Manager's Reference Guide to Contracting for Services*, *Environmental, Health and Safety Policy*, *Sustainable Development Strategy (2007-2009)*.

The audit criteria define the standards against which the SAHMRP's processes and practices were assessed.

3.2.2 Scope

In recognition that a special examination was done in 2006, our examination largely focused on the period of April 1, 2006 to March 31, 2008. VAC/SAH retained the services of PWGSC to assist them in the planning and implementation of the project, including the management of the contractors and experts' contracts. Bidding and selection activities in relation to the contractors and experts are excluded from our scope.

3.2.3 Audit Strategy

The audit was conducted in accordance with the approach detailed in the internal audit plan approved by VAC Audit and Evaluation Division on March 4, 2009. Each criterion was examined in accordance with the methodology detailed in the internal audit plan. The evidence was gathered in accordance with the Treasury Board's internal audit policy, guidelines and procedures, and the audit was conducted in

accordance with the International Standards for the Professional Practice of Internal Auditing.

The audit approach involved reviewing relevant documentation in relation to VAC/SAH policies, procedures and processes in relation to the SAHMRP project management, and practices with respect to compliance with several related Government policies. In addition, we conducted 37 interviews with selected members of VAC/SAH management and staff.

As detailed in the following table, we performed substantive test of details of 129 contract payments for the 2006-2008 fiscal years in relation to commitment and disbursement of funds, selected by VAC Audit and Evaluation Division using a statistical sampling method. We also performed substantive tests of details of 24 contracts for the 2006-2008 fiscal years in relation to contract administration and management for which a total of 41 contract payments were examined in relation with criterion 3 to 6; these 24 contracts were selected using a risk-based approach.

Audit Sample – 2006-2008						
	Number Audited				Value Audited	
	Sample	Population	% Audited		Sample	Population
			% Audited			% Audited
Substantive Tests - Commitments and Disbursement of Funds						
Contract Payments Examined	129	1,388	9.29%		\$3,58M	\$53,3M
						6.72%
Substantive Tests - Contract Administration and Management						
Contract Payments Examined in Relation to 24 Contracts	41	1,388	2.95%		\$11,24M	\$53,3M
						21.07%

The audit criteria examined in our substantive tests in relation to commitments and disbursement of funds are detailed in Appendix B. Appendix C summarizes the audit criteria with respect to our substantive tests in relation to contract administration and management.

4 Findings and Recommendations

Our findings, categorized by each audit sub-objective, are provided below. Under each sub-objective, a table summarizes our assessment of each audit criterion under three categories as follows:

- **Met** – Criterion exists and is evident.
- **Met with Exception** – Criterion partially exists and/or performance is not documented or evident.
- **Not Met** – Criterion does not exist or is not evident.

4.1 Sub-Objective 1 – Assess Compliance with Treasury Board Submission

4.1.1 Summary of Findings

We expected to find that Treasury Board Project Approval Guidelines in relation to documenting project objectives and risks have been followed, and that conditions of the Effective and Revised Effective Project Approvals are met. The following table summarizes our findings by audit criteria.

Audit Criteria	Met	Met with Exception	Not Met
1. The objectives and outcome of the modernization project are documented and communicated.	√		
2. The risks and management mitigation actions relating to project objectives are identified and monitored.		√	
3. Conditions of the Effective Project Approval and Revised Effective Project Approval of December 2006 are met (scheduling, costing, etc.).	√		

4.1.1.1 ***Audit Criteria: The objectives and outcome of the modernization project are documented and communicated.***

According to the Treasury Board *Project Approval Policy*, departments seeking Treasury Board Preliminary Project Approval must submit the cost objective and all other objectives that have been deemed by the department, in consultation with the Treasury Board, to be sufficiently critical to require specific authority by the Treasury Board. Once approved, these objectives serve as the project baseline for monitoring by the Treasury Board.

Departments seeking Treasury Board Effective Project Approval must include in their submission detailed project objectives, including a cost objective, a schedule objective, a performance objective, and when applicable an industrial and regional benefit objective and other national objectives.

Finding

The objectives and outcome of the modernization project are documented in the Preliminary Project Approval, Effective Project Approval and Revised Effective Project Approval submissions to Treasury Board, and communicated to stakeholders.

Our review of the Preliminary Project Approval, Effective Project Approval and Revised Effective Project Approval submissions to the Treasury Board revealed that the project objectives are documented in accordance with Treasury Board *Project Approval Policy*.

We found that the objectives and outcome of the modernization project are also documented in the *Project Management Framework* document developed in October 2001 and revised in June 2002, and communicated to the SAHMRP team. These objectives were also communicated in presentations to the Project Steering Committee (PSC).

The project objectives include: 1) eliminating risks to the health and safety of patients and employees; 2) adequately meeting the changing needs of the clientele; 3) complying with federal and provincial standards for long-term care facilities; and 4) optimizing the use of the existing buildings.

4.1.1.2 Audit Criteria: The risks and management mitigation actions relating to project objectives are identified and monitored.

According to the Treasury Board *Project Approval Policy*, departments seeking Treasury Board Preliminary Project Approval must include in their submission results of the risk assessment conducted for the selected option. The level of detail of the project risk assessment is to be appropriate for the type of project. According to the Treasury Board *Integrated Risk Management Implementation Guide*, a risk management process includes risk identification, risk assessment, risk response and monitoring and evaluation.

Finding

A risk management framework was prepared in 2001 summarizing key project risks. As the project unfolded, project risks and required mitigating actions in relation to construction, transition, communication, health and safety, security and environmental matters were identified. Our consultations revealed that project risks are monitored by management and committees.

Risks identified relate to health and safety issues of staff and patients supporting the urgency of the project, while the risks and proposed mitigation measures relate to governance, health and safety, and construction.

According to management, mitigation measures identified were implemented. These included:

- The implementation of a management structure;
- Increased residence monitoring of PWGSC;
- The on-site presence of a Health and Safety Officer to coordinate project-related occupational health and safety activities;
- The implementation of a two-phase tendering process for the tower renovation; and
- Retaining a litigation expert to address possible contractors' claims.

We noted that a risk management framework was prepared in 2001 summarizing key risks.

We observed that PWGSC identified and documented the operating risks, impact and likelihood, mitigating actions and related contingency provisions of the construction packages in distinct risk management frameworks. Construction risks and their impact on the contingency provisions are monitored closely by the PWGSC Senior Project Manager and RPD Project Director.

Risks in relation to other project components, such as, transition activities, human resources, occupational hygiene, occupational health and safety, and communications were identified, updated and assessed through various committees, working groups, questionnaires to managers, surveys and consultations and by consultants. For example, the 2002 *Ste-Anne Hospital Renovation and Expansion Environmental Assessment* report identifies risks in relation to health and safety and environmental matters; 2003 *SAH Security Examination report* provides information on security risks; and the 2008-2009 and 2009-2010 *Integrated Human Resource Plans* include a human resource risk management framework.

Our consultations revealed that risks were addressed through the implementation of risk mitigating actions integrated into the day to day management of the hospital's activities and monitored by management. In addition, project risks are monitored by related committees, such as, the Transition Committee, Vigilance Committee, the Project Finance Coordination Committee and the Site Safety Committee. The hospital also has a Quality and Risk Manager responsible for addressing clinical and safety risks. The Hospital Management Committee – Modernization (HMC-M) is the key mechanism through which SAHMRP activities are communicated across various functional areas, and allows for an integrated approach to project risk management.

4.1.1.3 Audit Criteria: Conditions of the Effective Project Approval and Revised Effective Project Approval of December 2006 are met (scheduling, costing, etc.)

According to the Treasury Board Effective Project Approval and Revised Effective Project Approvals, VAC is required: to conduct the project within a budget not exceeding \$114.25M; and to complete the project by September 2009.

Finding

Conditions of the Effective Project Approval and Revised Effective Project Approval of December 2006 are met. The project is expected to be completed within the established timeframe and within the December 2006 budget of \$114.25M if the remaining contingency of \$3M is sufficient to cover any required settlement as a result of a claim from the new pavilion contractor.

Out of the \$10M contingency reserve approved by the Treasury Board, \$7M has been allocated to project activities as detailed in the table presented in Section 4.2.1.1 and \$3M remains in the contingency provision. SAH received a claim from the new pavilion contractor which amount has not yet been confirmed by PWGSC as the claim is currently being analyzed. It is therefore unknown if the claim is valid, and if the remaining contingency of \$3M is sufficient to cover any required settlement.

According to project management, it is expected that the construction activities of the project will be completed by the end of October 2009. The project team will remain in position until March 31, 2010 to complete project closing activities. Regular reporting on the progress is provided and discussed at various management committee meetings, such as, the PSC and the HMC-M.

4.2 Sub-Objective 2 – Assess Financial Management Practices and Delegated Authorities Surrounding the Project

4.2.1 Summary of Findings

We expected to find that financial management practices and controls are defined, documented and communicated properly; distinct accounts were used to track project costs; financial spending authority in relation to authorizing expenditures, contracting, account verification, performance certification and payment of expenditures; budgetary control and cost management; and reporting. The following table summarizes our findings:

Audit Criteria	Met	Met with Exception	Not Met
1. Project budgets reflect the total expected costs and lifespan of the project, and incorporate contingencies for unexpected costs and cost overruns.	√		
2. An accounting system is in place to track renovation and transition project costs.	√		
3. Quarterly reporting and monitoring of project costs is performed, with analysis of variances, required corrective actions, and impact on forecasted costs.	√		
4. Options are developed in the event of possible shortfalls in the contingency funds.	√		
5. Key controls over the contracting process (authorization of expenditures, contracting, account verification, performance certification and payment of expenditures) are identified and documented.	√		
6. Delegated authorities for financial transactions related to the SAHMRP are defined and consider segregation of duties (expenditure initiation, contracting, performance certification and payment of expenditures).		√	

4.2.1.1 Audit Criteria: Project budgets reflect the total expected costs and lifespan of the project, and incorporate contingencies for unexpected costs and cost overruns.

Projects with budgets that include a provision for contingencies are more expected to be carried out within their overall budget.

Finding

The original construction budget has changed significantly from \$67.7M to \$114.25M. The budgets incorporate contingencies for unexpected costs and cost overruns.

Changes to the capital budget approved by the Treasury Board are illustrated in the table below.

	Original Estimate March 2001 \$	Revised Estimate February 2003 \$	Revised Estimate December 2005 \$	Revised Estimate December 2006 \$
Power Plant Package 1	10.0M	10.4M	11.4M	12.8M
New Pavilion Package 2	16.0M	19.0M	24.5M	26.5M
Tower Renovation Package 3 and Temporary Relocation to 8th Floor - Package 8	29.0M	38.3M	59.55M	62.85M
Basiliaire 1 and 2	4.5M	Eliminated	Eliminated	Eliminated
Edith – Temple Pavilion	6.0M	Eliminated	Eliminated	Eliminated
Site	2.2M	Eliminated	Eliminated	Eliminated
Outdoor Repairs of Paths and Terraces - Package 6 and Elevator and Garden - Package 9			3.8M	5.0M
Security Systems – Package 5 and Control Centre – Package 7			5.0M	4.1M
Contingency				3.0M
Total	67.7M	67.7M	104.25M	114.25M

Transition activities are expected to total \$16.9M over the project period of which approximately \$2M is funded by the SAH Foundation and the remaining by the SAH operating budget. These costs are not included in the above table.

Increased funding to December 2005 from \$67.7M to \$104.25M is mostly explained by:

- Bids received in November 2003 in relation to the new pavilion being higher than expected.
- Bidders being asked to re-submit bids on a reduced project including the reduction of 14 rooms (116 rooms rather than 130 in the new pavilion) postponing the contracting process. Construction award of the new pavilion was signed at \$18.9M on July 15, 2004;
- Two additional packages of renovation, not factored in the original costing being found necessary: 1) remove, reorient and repair certain terraces and paths because of construction work or because they were condemned for being dilapidated, and considered a source of danger for the residents, and 2) update security systems;
- Delays in issuing the new pavilion contract resulted in postponing the tower renovation as both packages could not be done concurrently. Labour, energy and material cost increases took place and costs were higher than initially budgeted; and
- Project schedule delays in the new pavilion construction which resulted in additional expert fees.

Our review of documentation reveals that construction contingencies are included in the revised budget of \$104.25M to consider risks associated with the project, such as, presence of asbestos, site contamination and inflation in the Montreal region.

As required by the Treasury Board, VAC submitted a business case to Treasury Board in 2006 to have access to the additional \$10M reserve as contingency amounts were deemed insufficient to cover the construction risks. Reasons in support of the request include:

- A claim filed by the power plant contractor associated with delays in completing the contract, along with related costs - \$1.4M;
- Site conditions, coordination of work, other unforeseen events and related costs in relation to the new pavilion - \$2M;
- The tower renovation contract was awarded to the lowest bidder at \$46.2M – December 19, 2006. This meant insufficient budget for the tower renovation contract and related contingencies - \$3.3M;
- A remaining \$3M contingency provision set aside for any exceptional contingencies; and
- Other - \$0.3M

Budgets for transition activities are set up each year and monitored by the Transition Coordinator. The Finance Directorate is keeping track of actual and cumulative costs of the transition activities over the lifespan of the project.

4.2.1.2 Audit Criteria: An accounting system is in place to track renovation and transition project costs.

The SAHMRP includes two components: 1) the construction/renovation funded under the capital budget and 2) the transition activities funded under the SAH operating budget. We expected to find distinct construction and transition expenditure accounts in the financial system to record project related costs to help ensure expenses are allocated to the proper budget.

Finding

An accounting system is in place with distinct expenditure accounts to track renovation and transition project costs.

We found that SAH financial accounting system is set up to accommodate cost accounting of the capital project expenditures and transition expenditures funded under the operating budget. Responsibility and cost centers for the construction and transition expenditures are identified in the SAH financial system accounting plan to monitor in greater detail the SAHMRP expenditures.

4.2.1.3 Audit Criteria: Quarterly reporting and monitoring of project costs is performed, with analysis of variances, required corrective actions, and impact on forecasted costs.

An important aspect of cost control is to identify the magnitude of the variances, the cause of variances and their impact on forecasted costs, in order to determine if any corrective actions are required.

Finding

SAHMRP costs are monitored three times per year, with analysis of variances, performed for construction and transition activities as requested by SAH Finance Directorate. In addition, the Renovation Project Directorate (RPD) and PWGSC uses other means to monitor project costs, including the reporting by PWGSC Senior Project Manager of costing information in their monthly progress reports and weekly monitoring of construction costs by the RPD Project Coordinator.

We found that the budget mechanisms in place at the hospital are applied to the SAHMRP. Yearly budgets are set up for the capital project and the transition activities. Three times a year, SAH Finance Directorate provides the RPD Project Director responsible for the capital project and the Transition Coordinator with their actual and budgeted costs for variance analysis and reporting of their annual expenditure forecasts for the current fiscal year. Explanations must be provided for all variance between initial budget and revised forecasts in excess of \$500.

In addition, the RPD Project Coordinator established a customized financial database to track construction commitments and payments in order to have access to more timely information tailored to their needs. The information is reconciled every week by the RPD Project Coordinator with the SAH financial system. The benefits of the customized financial database, as explained by the RPD Project Coordinator, are to:

- Avoid delays between the time a commitment is approved and is recorded by SAH Procurement Officers in the SAH financial system allowing for more timely information;
- Allow to break down expenses in cost categories that are slightly different from the available SAH financial system expenditure categories, providing a budget/cost monitoring tailored to their needs; and
- Avoid delays between the time the contractors and experts' invoices are sent to PWGSC and are recorded in the SAH financial system, allowing for more timely information.

It was also noted that PWGSC Senior Project Manager submits on a monthly basis progress reports covering financial and operational aspects of the project to the RPD Project Director in support of her project monitoring functions. Financial information includes percentage of completion by work activity, budgeted and actual construction costs, payments to contractor, nature and value of change orders.

Cumulative costs of the transition activities and the construction costs over the years are tracked on Excel spreadsheet by the Finance Directorate and the RPD Project Coordinator respectively.

4.2.1.4 Audit Criteria: Options are developed in the event of possible shortfalls in the contingency funds.

Planning for contingencies should be part of an overall cost management plan to help ensure the project is completed within the overall budget

Finding

Contingency provisions were included in the SAHMRP budget. In the event of possible shortfalls in the remaining balance in the contingency funds, management believes a submission for additional funding would need to be put forward to Treasury Board.

Our consultations revealed that throughout the life of the project, all required options were considered and actions taken to bring the expected costs of the overall project within the revised approved budget.

The tower renovation is in the process of being completed. A contingency provision estimated at \$7M is included in the tower-renovation cost estimates, and it is expected that cost of change orders will remain within the established provision.

An amount of \$3M still remains in the overall budget for other contingencies which include a claim filed by the pavilion contractor which value has not yet been

confirmed by PWGSC. No options have been developed in the event of possible shortfalls in the contingency funds. According to the RPD Project Director, VAC/SAH will need to request additional funding from Treasury Board in such event.

4.2.1.5 Audit Criteria: Key controls over the contracting process (authorization of expenditures, contracting, account verification, performance certification and payment of expenditures) are identified and documented.

When key controls over the contracting process are identified and documented, contracting activities are more likely to comply with Treasury Board *Contracting Policy* and withstand public scrutiny, and to be carried out successfully.

Finding

Key controls over the contracting process (authorization of expenditures, contracting, account verification, performance certification and payment of expenditures) are identified and documented.

We found that procedures and controls in relation to authorization of expenditures, contracting, account verification, performance certification and payment of expenditures are identified and documented in VAC *Delegated Authorities Manual*, VAC *Manager's Reference Guide to Contracting for Services*, VAC *Financial Policy and Procedures Manual, Section Contracting* and in the financial control framework developed specifically for the SAHMRP with financial spending authority for Sections 32, 33 and 34 and contracting. Our consultations revealed that the financial control framework was updated as needed to reflect changes in project personnel.

Our review of the SAHMRP financial control framework revealed some opportunities for improvement to comply with Treasury Board *Policy on Delegation of Authorities* as further discussed hereunder in the following section.

4.2.1.6 Audit Criteria: Delegated authorities for financial transactions related to the SAHMRP are defined and consider segregation of duties (expenditure initiation, contracting, performance certification and payment of expenditures).

The Treasury Board *Policy on Delegation of Authorities* indicates that departments spending authority must be delegated to responsibility centre managers in relation to their budgetary responsibility. Spending authority consists of four elements: expenditure initiation, commitment authority, contracting and confirmation of contract performance and price. Furthermore, it indicates that the objective of expenditure initiation authority is to give operational managers the primary responsibility for initiating expenditures charged to their budgets.

Finding

Delegated authorities for financial transactions related to the SAHMRP are defined and consider proper segregation of duties. However, we identified the need for a review of the delegated authorities extended to clerks in relation to Section 34 certification in order to comply with the Treasury Board Policy on Delegation of Authorities.

The Treasury Board *Policy on Delegation of Authorities* stipulates that in assigning responsibility to individuals involved in the expenditure process, a deputy head must ensure that the following functions are kept separate:

- Procurement;
- Certification of the receipt of goods and the provision of services;
- Determination of entitlement, verification of accounts, and preparation of requisitions for payment or settlement; and
- Certification of requisitions for payment or settlement pursuant to section 33 of the FAA.

It was noted that the SAHMRP financial control framework allows for proper segregation of duties. However, we observed that the financial control framework allows clerks to certify purchases of goods for which they do not have budgetary responsibilities which does not appear to be in compliance with the spirit of the Treasury Board *Policy on Delegation of Authorities*. According to management, this practice is in accordance with VAC *Financial Spending Authority* approved by the Minister.

The Treasury Board *Policy on Delegation of Authorities* indicates that departments must review and update all delegated authorities, including electronic delegation matrixes, specimen signature documents and validation and authentication processes in use in departments and in offices of PWGSC at least annually. We found that throughout the project, the specimens of signature of all delegated authorities were not updated annually but this practice has now been implemented since last year.

The above findings were also noted in the preliminary report *Examination of the Finance Directorate's Financial Control Framework - Quebec* issued by Audit and Consulting Canada in April 2008 along with other examples of areas to be considered to improve the VAC/SAH financial control framework design.

Recommendation

R1 VAC Director General of Finance should review the department's *Financial Spending Authority* with respect to the role of clerks in Section 34 certification in light of the Treasury Board *Policy on Delegation of Authorities*, and should communicate required changes to SAH. (Essential)

4.3 Sub-Objective 3 – Assess the Rigor Applied in the Commitment and Disbursement of Funds

4.3.1 Summary of Findings

We expected to find that: SAH and PWGSC's roles and responsibilities in relation to account verification, performance certification and payment of expenditures were defined and documented; the activities complied with the directives set out in the FAA Sections 32, 33 and 34, VAC *Financial Spending Authority* and VAC *Delegated Authorities Manual*; and project expenditures were recorded under the proper accounts.

The following table summarizes our findings.

Audit Criteria	Met	Met with Exception	Not Met
1. VAC/SAH and PWGSC's roles and responsibilities in relation to account verification, performance certification and payment of expenditures are defined and documented.	√		
2. Expenditure initiation, account verification, performance certification and payment of expenditures are in accordance with the directives set out in the Financial Administration Act Sections 32, 33 and 34, VAC <i>Financial Spending Authority</i> and VAC <i>Delegated Authorities Manual</i> .		√	
3. Non-integrated items (furnishings, computer systems, interior decoration, etc.) are recorded under the proper transition accounts.		√	

4.3.1.1 Audit Criteria: VAC/SAH and PWGSC's roles and responsibilities in relation to account verification, performance certification and payment of expenditures are defined and documented.

Documentation of roles and responsibilities of key project stakeholders in a Project Charter is part of recognized project management practices. It serves as a reference for accountabilities and authorities. As PWGSC has been retained for their project management services under the SAHMRP, we expected to find an agreement between VAC/SAH and PWGSCS clearly describing the services to be provided.

Finding

Services to be provided by PWGSC are defined in the Specific Service Agreement (SSA) signed on an annual basis. SAH and PWGSC's detailed responsibilities in relation to account verification, performance certification and payment of expenditures are documented in their respective departmental manuals.

We found that SAH and PWGSC's roles and responsibilities are briefly summarized in the *Project Management Framework* document developed in 2001. A SSA is signed annually between VAC/SAH and PWGSC, listing the services to be provided. These services included: project conception, technical and functional program, selection of experts, call-ups, contracting, construction, quality control, and preliminary and final certificates of completion.

The PWGSC *National Project Management System* (NPMS) and other departmental manuals serve as the framework under which PWGSC manages the capital project and performs contract administration.

The PWGSC Senior Project Manager is responsible for the account verification, performance certification in relation to the contractors and experts' contract payments. Our consultations revealed that jointly with the experts, he performs an independent review of the preliminary and final contractors' request for payments to determine whether the amounts being billed are consistent with the amounts expected to be charged for the work that had been completed. Under the review process in place for construction contracts, experts assess the percentage of work reported in the preliminary request for payment against each of the cost component of the lump-sum contract and related change orders for reasonableness. Any required changes are communicated to the contractors by the experts, and a final request for payment is then prepared and approved by the PWGSC Senior Project Manager for payment.

According to management, PWGSC subsequently invoices SAH electronically, and submits SAH with appropriate supporting documentation to facilitate the RPD Project Director's review of the PWGSC invoice which includes the contractors and experts' contract payments. Once reviewed, comments are forwarded by the RPD Project Director in writing, if any. Our consultations revealed that both the PWGSC Project Manager and RPD Project Director perform frequent site visits to assess the amount of work completed to facilitate their invoice reviews prior to approval.

With respect to other contracts paid by SAH, responsibilities of SAH personnel in relation to account verification, performance certification and payment of expenditures are defined in the *VAC Manager's Reference Guide to Contracting for Services*, *VAC Delegated Authorities Manual* and in *SAHMRP Financial Spending Authority*.

4.3.1.2 Audit Criteria: Expenditure initiation, account verification, performance certification and payment of expenditures are in accordance with the directives set out in the Financial

Administration Act Sections 32, 33 and 34, VAC Financial Spending Authority and VAC Delegated Authorities Manual.

The FAA Sections 32, 33 and 34, the SAHMRP *Financial Spending Authority*, VAC *Delegated Authorities Manual* set the framework for the SAHMRP expenditure initiation, account verification, performance certification and payment of expenditures.

Finding

Within the limitations of the sample drawn, we found a high level of compliance with FAA Sections 32, 33, 34 and VAC Financial Spending Authority and VAC Delegated Authorities Manual. However some areas for improvements were noted.

The results of our substantive tests of details are summarized below and in Appendix B, and were validated with management. The results reveal a high level of compliance and we did not find significant areas of weaknesses.

- FAA Section 32 certification by authorized delegated authority as per VAC *Financial Spending Authority* (93.80 percent);
- FAA Section 34 certification by authorized delegated authority as per VAC *Financial Spending Authority* (96.90 percent);
- FAA Section 34 certification was done in accordance with related directive (99.22 percent);
- FAA Section 33 certification by authorized delegated authority as per VAC *Financial Spending Authority* (99.22 percent);
- Proper performance of Section 33 after Section 34 certification by the delegated authority as per VAC's *Financial Spending Authority* (93.02 percent); and
- Payment agrees to invoice amount (100 percent).

With respect to Section 32 certification, we noted eight instances of non-compliance out of 129 cases:

- Four instances where FAA Section 32 certification was performed by individuals who did not have the delegated authority as per the established delegated authorities;
- Two instances where Section 32 certification was not performed; and
- Two instances where evidence could not be provided to support that the individual was in an acting position entitling him the Section 32 delegated authority.

In relation to Section 34 certification, we noted five instances of non-compliance out of 129 cases:

- One instance where the certification was not performed by the proper delegated authority;
- One instance where no evidence was available to support certification;

- Two instances where evidence could not be provided to support that the individual was in an acting position entitling him the Section 34 delegated authority.
- One instance where Section 34 was certified but the account verification was not properly performed as a result of a double billing on the invoice that was not identified;

We also noted ten instances out of 129 cases, where weaknesses were noted in Section 33 certification as follows:

- One instance where a cheque was issued even though proper Section 34 was not performed;
- One instance where an Interdepartmental Settlement was processed prior to Section 34 being performed;
- One instance where Section 34 in relation to an Interdepartmental Settlement was not dated: therefore we were unable to determine if Section 33 was performed after Section 34;
- Three instances where performance of Section 33 was not properly performed as a result of non-compliance with respect to Section 34 certification;
- Four instances where the transactions paid from the “departmental bank account” were not recorded in the system and certified for Section 33 within the prescribed time of four days as per VAC/SAH policy.

Recommendation

R2 The SAH Finance Director should clearly communicate the necessity for proper FAA Sections 32, 33 and 34 certifications. In addition, evidence of an employee being in acting position should be retained to support the entitled delegated authority. (Important)

4.3.1.3 Audit Criteria: Non-integrated items (furnishings, computer systems, interior decoration, etc.) are recorded under the proper transition accounts.

Distinct accounts to track construction and transition costs help ensure expenses are allocated to the relevant budget, and allows for proper budget monitoring. Integrated equipment items are expected to be recorded under the capital expenditures while the non-integrated items are to be recorded under the SAH operating budget.

Finding

Non-integrated items (furnishings, computer systems, interior decoration, etc.) are recorded under the proper transition accounts.

We found that distinct construction and transition accounts were set up in the SAH financial accounting plan to help ensure expenditures are allocated to the proper budget and to facilitate budget management.

Within the limitations of the sample drawn, we found that project expenses are recorded under the proper expenditure accounts. Our testing revealed a high compliance rate of 94.57 percent in this regard. However, our testing revealed instances of minor hospitality expenses not in compliance with the Treasury Board Hospitality Policy, and these were brought to the attention of management at the conclusion of the audit.

4.4 Sub-Objective 4 – Assess the Extent to which the Progress of Activities is in Relation to Plans, Schedules and Budgets as Revised in December 2006

4.4.1 Summary of Findings

We expected to find that procedures have been established to help ensure the project is progressing in accordance with the plans, schedules and budgets set out in the 2006 Revised Effective Project Approval. The following table summarizes our findings:

Audit Criteria	Met	Met with Exception	Not Met
1. Project VAC/SAH and PWGSC's responsibilities with respect to the management of plans, schedules and budgets are documented.	√		
2. Assessment of project status, progress against scheduled milestones/delivery dates, reasons for delays, required remedial actions and impact analysis on budget and project activities is performed on a monthly basis.	√		
3. Cost overruns, change orders and missed milestones are examined.	√		
4. A change order process is defined, including rationale for change order, review, approval, log, verification and impact analysis on project activities and lifecycle.	√		
5. The progress of activities is in accordance with the plans, schedules and budgets and this progress is regularly communicated to VAC stakeholders.	√		
6. An intervention system (intervention group with terms of reference) has been developed to minimize the impact of any possible delays on clients, visitors and hospital staff.	√		

4.4.1.1 Audit Criteria: Project VAC/SAH and PWGSC's responsibilities with respect to the management of plans, schedules and budgets are documented.

Finding

VAC/SAH and PWGSC's responsibilities with respect to the management of plans, schedules and budgets are documented.

As explained, we found that VAC/SAH and PWGSC's roles and responsibilities are briefly summarized in the 2001 *Project Management Framework* document and in the SSAs which document services to be provided by PWGSC under the SAHMRP.

Under the responsibility of the RPD Director, PWGSC is responsible for the development and monitoring of the following subsidiary project plans: project scope management; project time management; quality management; construction risk management; contractors and experts procurement and financial management, site safety management, and environmental management. The NPMS manuals provide guidance to the PWGSC project management team on project management matters such as project integration, quality, cost, scope, human resources etc.

A Transition Coordinator is responsible for the planning, coordination and monitoring of all transition activities and related budget. An integrated transition plan is prepared and updated to facilitate the coordination of the transition activities as the construction activities unfold.

4.4.1.2 Audit Criteria: Assessment of project status, progress against scheduled milestones/delivery dates, reasons for delays, required remedial actions and impact analysis on budget and project activities is performed on a monthly basis.

Assessment of project status, progress against scheduled milestones/delivery dates, reasons for delays, required remedial actions and impact analysis on budget and project activities are part of recognized schedule and cost management practices found in sound project management processes.

Finding

Assessment of project status and progress, causes of delays, required remedial actions and impact analysis on budget and project activities is performed on an on-going basis, and discussed in the bi-weekly RPD team meetings and bi-weekly contractors' meetings.

A Master Schedule for the construction/renovation activities was prepared at the onset of the project and is updated to reflect major changes in the timetables of the construction/renovation packages. Project Schedules with detailed tasks to be undertaken and timing are submitted by the contractors.

The audit found that frequent formal and informal communications and bi-weekly RPD team meetings and bi-weekly contractors' meetings take place, where project progress, including any delays or deficiencies, are discussed and required action if deemed necessary is identified. Monthly status reports submitted by the PWGSC

Senior Project Manager to the RPD Project Director summarize operational and financial aspects of the construction undertaking.

As illustrated in the table below, delays were encountered in the delivery of certain construction packages. For example, a one year delay was experienced in the power plant construction and a nine-month delay occurred in the new pavilion construction. Delays were also experienced in packages 7 and 9 performed by the new pavilion contractor.

	Contract Award Date	Initial Contractual Completion Date	Revised Completion Date	Delay
Power Plant Package 1	August 2003	August 31, 2004	June 2005	Approximately one year delay
New Pavilion Package 2	July 15, 2004	September 15, 2005	June 27, 2006	Nine-month delay
Tower Renovation Package 3 and Temporary Relocation to 8th Floor - Package 8	December 19, 2006	August 19, 2009	September 1, 2009	Expected to be on schedule
Outdoor Repairs Outdoor Repairs of Paths and Terraces - Package 6	April 19, 2006	November 30, 2006	August 30, 2007	Expected to be on schedule
Elevator and Garden - Package 9	March 13, 2006	November 30, 2006	June 29, 2007	Seven-month delay
Security Security Systems – Package 5	May 9, 2006	March 31, 2008	September 2009	Expected to be on schedule
Control Centre – Package 7	March 13, 2006	November 30, 2006	June 29, 2007	Seven months delay

Our review of documentation reveals that the impact of the above construction delays was analyzed and considered in the revised budget which was submitted to Treasury Board in November 2006.

Our consultations revealed that as the tower renovations were unfolding, possible delays were at times identified by the contractor but he was successful in readjusting the work schedule, and no delays are currently expected.

In addition, an integrated corporate transition plan was developed and is updated as needed to account for internal activities in relation to clinical aspects, communication, human resources, financial resources, material resources and other matters.

4.4.1.3 Audit Criteria: Cost overruns, change orders and missed milestones are examined.

Examining reasons for cost overruns, impact of change orders and missed milestones are recognized practices in schedule and cost management.

Finding

Cost overruns, change orders and missed milestones are examined by the RPD Project Director and PWGSC Senior Project Manager as part of their on-going project monitoring activities.

As explained, the RPD Project Director is made aware of possible time changes in the construction project through several means: informal communications by PWGSC and the contractors; bi-weekly RPD team meetings, bi-weekly contractors' meetings; the submission of Project Schedules by the contractors; and monthly status reports submitted by the PWGSC Senior Project Manager. Our consultations revealed that missed milestones are discussed between the RPD and PWGSC teams and the contractors for their possible impact on the overall project timing and costs.

In addition, we understand that specific controls have been put in place over the change order process in order to help remain within the established contingency budget and timeframe, such as:

- The retention of experts (architects, mechanics and electrical experts, engineers) under the responsibility of PWGSC to assess the change orders and their estimated costs;
- The approval of the change orders by PWGSC Senior Project Manager;
- The approval of the change orders by the RPD Project Director;
- The approval of all change orders in excess of \$25,000 require the PWGSC Regional Director approval; and
- Regular visits of the construction site by the experts and the PWGSC and RPD management team members.

Actual costs are examined as part of the SAH budgetary mechanisms in place where construction and transition costs are monitored three times per year, with analysis of variances in excess of \$500 between budget and revised forecast. In addition, other means are used to monitor project costs, including the reporting by PWGSC Senior Project Manager of costing information in their monthly progress

reports and weekly monitoring of construction costs by the RPD Project Coordinator.

4.4.1.4 Audit Criteria: A change order process is defined, including rationale for change order, review, approval, log, verification and impact analysis on project activities and lifecycle.

The cost management process is expected to include a defined change order process, including rationale, review, approval, log, impact analysis on overall project budget and scheduling.

Finding

A change order process is defined, including rationale for change order, review, approval, log, verification and impact analysis on project activities and lifecycle.

According to management, a rigorous process is in place in relation to change orders. Change directives are first issued by the experts or the contractor. A proposed change order is submitted to the contractor for a price quote. The proposed change order and quote are examined by the PWGSC Senior Project Manager and experts. Once approved, it is submitted to the RPD Project Director for approval. A change order with an authorization number is then issued by PWGSC with the agreed price and description of work which serves as the reference document for billing purposes. All change orders in excess of \$25,000 require the PWGSC Regional Director approval.

Our consultations revealed that the required changes are monitored closely by both PWGSC Senior Project Manager and the RPD Project Director, and options are discussed if change directives may have an impact on the project schedule.

All authorized change orders are documented in spreadsheets maintained for each contract, summarizing the change order authorization number, description, estimated cost by the expert, estimated cost by the contractor, approved change order amount, cumulative value of the change orders. Change order information in relation to each construction package is also reflected in the respective construction risk management framework, and monitored against the overall contract contingency provision.

4.4.1.5 Audit Criteria: The progress of activities is in accordance with the plans, schedules and budgets and this progress is regularly communicated to VAC stakeholders.

Finding

The project is expected to be completed within the budget if the remaining contingency of \$3M is sufficient to cover any required settlement as a result of a claim from the new pavilion contractor. The Project is expected to be completed within the established timeframe.

Our consultations revealed that the project management team has been successful in ensuring that the project continues to be aligned with the plans, schedules and budgets. According to PWGSC, the project is proceeding on schedule and is expected to be completed by September 1, 2009. In August 2009, the contractor is expected to confirm the completion date.

Our consultations revealed that the capital project is now reported to have an anticipated cost of no more than \$111.25M prior to a claim from the new pavilion contractor which value has not yet been confirmed by PWGSC. A \$3M reserve is available for this contingency. Transition activities are expected to total \$16.9M for the project period of which approximately \$2M is funded by the SAH Foundation and the remaining by the SAH operating budget.

Regular reporting on the results of project performance, including key construction and transition activities, issues and related strategies and action plans is provided and discussed at various management committee meetings, such as, the PSC, the HMC-M, the Finance Coordination Committee, the Transition Committee and the Coordination Committee. Quarterly reports submitted by the RPD Project Director to the Project Leader, the PSC Committee members and the VAC Audit and Evaluation Division also provide relevant information to senior management on the project progress and milestones.

As explained, project progress is also discussed informally between the RPD Project Director and PWGSC Senior Project Manager as needed, and formally at the bi-weekly RPD team meetings and bi-weekly contractor meetings. PWGSC Senior Project Manager also submits to the RPD Project Director monthly project progress reports.

4.4.1.6 Audit Criteria: An intervention system (intervention group with terms of reference) has been developed to minimize the impact of any possible delays on clients, visitors and hospital staff.

As part of preventive measures in relation to the transition activities, we expected to find an intervention system to help minimize the impact of any possible delays on clients, visitors and hospital staff.

Finding

A Coordination Committee has been developed to implement measure to help minimize the impact of any possible delays on clients, visitors and hospital staff.

A Coordination Committee was implemented in 2005 with the following responsibilities:

- Coordinate with project stakeholders that the facilities are ready and equipment received prior to moving the patients.
- Develop jointly with HMC-M measures to minimize impact on clients, visitors and hospital staff in the event of moving delays; and

- Oversee all moving activities to help ensure they are well coordinated and done safely.

The above measures help minimize the impact of delays on clients, visitors and hospital staff.

4.5 Sub-Objective 5 – Evaluate the Integrity and Accuracy of Project Reports

4.5.1 Summary of Findings

We expected to find that controls are identified to help ensure information presented in the project reports is accurate, and that 2007-2008 financial and operational information presented in the quarterly project reports was based on information from the SAH financial system and was consistent with minutes of the project committees' meetings. The following table details our findings:

Audit Criteria	Met	Met with Exception	Not Met
1. Controls are identified to help ensure information presented in the project reports is accurate.	√		
2. Financial information provided in the quarterly project reports correspond to data as per accounting system.	√		
3. Facts reported in the quarterly project reports are consistent with information in the minutes of the project committees' meetings.	√		

4.5.1.1 *Audit Criteria: Controls are identified to help ensure information presented in the project reports is accurate.*

Controls need to be identified to help ensure information presented in the project reports is accurate; these may include review, reconciliation, and others as deemed necessary.

Finding

Key controls are identified to help ensure information presented in the project reports is accurate.

Our consultations revealed that the financial information reported by the RPD Project Director in the 2007-2008 project reports is issued from the customized financial database maintained by the RPD Project Coordinator. The control in place to help ensure the information reported in the project reports is accurate consists of the reconciliation performed on a weekly basis by the RPD Project Coordinator between the financial information in the customized financial database maintained by the RPD and the SAH financial information system.

4.5.1.2 *Audit Criteria: Financial information provided in the quarterly project reports correspond to data as per accounting system*

Progress reports provided to management need to be based on accurate information for effective decision making.

Finding

Financial information provided in the March 31, 2008 project report for fiscal year 2007-2008 corresponds to information as per the SAH financial system.

We compared the financial information reported by the RPD Project Director in the March 31, 2008 quarterly report in relation to the 2007-2008 capital costs with the financial information in the SAH financial system (Summary by Cost Center and Account Analysis Report), and found them to be in agreement.

4.5.1.3 *Audit Criteria: Facts reported in the quarterly project reports are consistent with information in the minutes of the project committees' meetings.*

Progress reports provided to management need to be based on accurate information for effective decision making.

Finding

No inconsistencies were noted between the operational information provided in the 2007-2008 quarterly project reports and the information in the minutes of the contractors' meetings and of the PSC, HMC-M, and the Modernization Project Advisory Committee (MPAC) meetings for the related period.

The quarterly project reports submitted by the RPD Project Director provide highlights of the progress of each construction package activities, with information on milestones achieved. It also provides financial information, including both budgeted and actual expenditures. Quarterly reports sent to VAC Audit and Evaluation are also accompanied with: copies of minutes of PSC HMC-M, and MPAC meetings; copies of minutes of the Vigilance Committee; copies of minutes of contractors' meetings; and communications and memos from the SAH Executive Director.

We compared the construction project information provided in the 2007-2008 quarterly project reports with the information in the minutes of the contractors' meetings and of the PSC, HMC-M, and the MPAC meetings for the related period, and did not find any inconsistencies.

4.6 Sub-Objective 6 – Assess the Overall Project Management and Governance Framework

4.6.1 Summary of Findings

We expected to find the use of recognized project management practices in the management of the SAHMRP project, such as, establishing a project management framework with a governance structure, processes, definition of roles and responsibilities, the use of a Master Schedule and detailed Project Schedules in time management and the implementation of a quality assurance plan.

Our findings are detailed in the table below:

Audit Criteria	Met	Met with Exception	Not Met
1. A project framework is established with governance structure, and processes, policies and procedures in relation to project integration, cost management, project schedule management, contract administration, quality management, risk management, information system, human resources and environmental, health, safety and security.		√	
2. Roles, responsibilities and accountabilities of the SAHMRP/PWGSC management team and committees are defined and documented.		√	
3. The governance structure includes: a Project Leader directly accountable to the Deputy Minister; a Senior Project Manager reporting to the Project Leader responsible for the day-to-day management of the project; and a Senior Project Advisory Committee.	√		
4. Project plans include targeted milestones and deliverables, including the amount of funding secured.	√		
5. The Master Project Schedule is reviewed on a monthly basis and adjusted as required. Impacts on forecasted funding, costs, commitments and other requirements are identified, and options are developed as needed.	√		

Audit Criteria	Met	Met with Exception	Not Met
6. A quality assurance plan is developed and documented to monitor quality issues that may impact the achievement of the project objectives and/or result in changes in scope, and allow for sufficient and timely inspections and resolution of problems throughout the life of the project.	√		
7. PWGSC and consultants' quality assurance activities are monitored by the SAHMRP Project Director.	√		
8. Global and annual contractor performance targets and indicators address cost, time, quality and scope.	√		
9. Performance indicators are reviewed regularly against performance targets, and project plans are adjusted accordingly.	√		
10. The project framework allows for quarterly reporting of project costs, project status, progress and issues to VAC/SAH and HSAMRP management.	√		

4.6.1.1 Audit Criteria: A project framework is established with governance structure, and processes, policies and procedures in relation to project integration, cost management, project schedule management, contract administration, quality management, risk management, information system, human resources and environmental, health, safety and security.

A project management framework provides a structure in which the project will operate. Such framework includes developing a project charter; a scope statement; a project management plan with selected processes in relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; communication, occupational hygiene, health and safety; site protection and material management; and environmental matters.

Finding

A project management framework is in place with processes in relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; communication, occupational hygiene, health and safety; site protection and material management; and environmental matters. However the subsidiary management plans in relation to each of these

project components are not summarized in an overall project management plan.

The *Project Management Framework* document prepared at the onset of the project serves as the project charter with a description of the project objectives and secured funding; organizational structure and lines of communication; and description of key management and staff's roles, responsibilities and accountabilities.

Our consultations revealed that the PWGSC NPMS manuals and other departmental manuals are the general framework under which PWGSC provides its project management services. The NPMS manuals describe, amongst others, processes in relation to integration; cost management; quality management; human resources; communication; risks and procurement; safety management; environmental management; and financial and claims management.

In addition, the SAH project management team also identified project management processes. For example:

- A financial management framework is specifically defined for the project with SAH *Financial Spending Authority* for commitment, contracting, certification of goods/services and payments;
- Distinct accounts are set up in the SAH financial system for reporting purposes on the SAHMRP activities;
- The hospital process in relation to cost and budget monitoring is applied to the project;
- A customized financial database is maintained by the RPD Project Coordinator with a reporting process to senior management; and
- Detailed processes are identified in relation to transition activities, human resources management, communication, occupational health and safety and security of patients and staff.

We observed that no overall project management plan was prepared summarizing all the subsidiary management plans in relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; communication; occupational hygiene, health and safety; site protection and material management; and environmental matters. An overall plan serves as a consolidated source of project information and helps ensure all project processes from initiation to close out have been considered and integrated, and becomes a reference document for new project management personnel.

Recommendation for Consideration in Future Projects

RFa The Project Leader should prepare a project management plan to summarize all the subsidiary management plans established at the onset of the project in relation to project integration; cost management; project

schedule management; contract administration; quality management; risk management; information system; human resources; communication; occupational hygiene, health and safety; site protection and material management; and environmental matters. The overall plan should be updated as changes in processes take place. (Essential)

4.6.1.2 Audit Criteria: Roles, responsibilities and accountabilities of the SAHMRP/PWGSC management team and committees are defined and documented.

Finding

A governance structure with an overview of the roles, responsibilities and accountabilities of the SAHMRP/PWGSC management team and key committees is documented in the Project Management Framework developed at the onset of the project. Detailed responsibilities of stakeholders are documented in their respective departmental manuals. As the project evolved and new committees were established, the project framework was not updated to reflect these changes.

As documented in the 2001 *Project Management Framework* document, a governance structure is in place with a Project Leader directly accountable to the Deputy Minister; an RPD Project Director responsible for planning, defining and managing the construction/renovation project and reporting to the Project Leader; a PWGSC Senior Project Manager reporting to the RPD Project Director; and a Transition Coordinator, also reporting directly to the Project Leader, who is responsible for planning, coordinating and monitoring all transition activities in relation to the project.

Three key management committees are established to provide support to the SAHMRP management team.

- The PSC provides direction to the Project from a national and strategic planning perspective. It is chaired by the Deputy Minister of VAC and comprises senior VAC and SAH managers as well as representatives from PWGSC, Justice Canada and Treasury Board Secretariat.
- The MPAC provides a forum on planning and implementation; reviews and analyzes user requirements, conceptual design, and implementation strategies; advises the Project Leader; helps ensure coordination between stakeholders; monitors project progress; and makes appropriate recommendations. It is chaired by the Project Leader who is the Executive Director, and comprises of SAH managers, the hospital ombudsman and representatives from stakeholders group.
- The HMC-M helps in the integration of all project activities. In its role, the Committee determines the strategic project direction in accordance with the mission, vision and goals of the hospital; reviews and approves recommendations from the MPAC; helps ensure coordination between units; and provides ongoing advice regarding clinical and technical matters. It is

chaired by the Project Leader who is the Executive Director of the hospital and comprises members of SAH management team (Directors, clinical program coordinator, Project Director, Transition Coordinator, Hospital and Clinical Risk Management Coordinator).

Several additional committees are established to address financial and operational aspects of the project, such as, the: Finance Coordination Committee; Transition Committee; Vigilance Committee; Site Safety Committee; Contingency Committee; Recuperation of equipment Committee; Coordination Committee; and 10 sub-committees in relation to the moving of the prosthetic units to the Souvenir pavilion. We found that as the project evolved and new committees were established, the 2001 *Project Management Framework* document was not updated to reflect the specific roles, responsibilities and accountabilities of these committees.

Our consultations revealed that the project activities are also addressed at some hospital committees: Management Committee, Finance Committee, Health and Safety Committee and Human Resource Committee.

As part of her responsibilities, the RPD Project Director coordinates the project management activities with the PWGSC management team, and provides relevant project information to the Project Leader and key stakeholders, to assist them in the coordination of the construction/renovation activities with hospital and transition operations. Her direct team includes a Project Coordinator and a Site Coordinator.

The SSA signed on an annual basis between VAC/SAH and PWGSC defines the services to be provided under the SAHMRP. A project charter serving as a Memorandum of Understanding between VAC/SAH and PWGSC for the implementation of the SAHMRP was not prepared as currently recommended in the PWGSC NPMS manuals because this directive was not in effect at the time. Such charter outlines project management and governance roles, detailed responsibilities and accountabilities of PWGSC and its client.

The PWGSC Project Management Team includes a Senior Project Manager reporting to the RPD Project Director, a Project Manager (engineer), a Project Officer (site technician) and a Health and Safety Officer (consultant).

Our consultations revealed a good communication process between the RPD Project Director and the PWGSC Senior Project Manager, and the Project Leader. These stakeholders commented that their respective roles and responsibilities in relation to the project are well understood, and communication and coordination mechanisms met their needs.

Recommendation for Consideration in Future Projects

RFb As new committees are established, the project charter and related terms of reference for each committee should be updated to reflect their respective roles, responsibilities and accountabilities. (Important)

4.6.1.3 Audit Criteria: The governance structure includes: a Project Leader directly accountable to the Deputy Minister; a Senior Project Manager reporting to the Project Leader responsible for the day-to-day management of the project; and a Senior Project Advisory Committee.

According to the Treasury Board *Management of Major Crown Projects*, a governance structure need to be established with a Project Leader directly accountable to the Deputy Minister and a Senior Project Advisory Committee.

Finding

The governance structure includes a Project Leader directly accountable to the Deputy Minister, a Project Manager reporting to the Project Leader responsible for the day-to-day management of the project, and a Senior Project Advisory Committee.

We found that the governance structure is established in accordance with Treasury Board *Management of Major Crown Projects* directives with a PSC, a Project Leader directly accountable to the Deputy Minister, and a Project Director responsible for planning, defining and managing the construction/renovation project and reporting to the Project Leader. A Transition Coordinator, also reporting directly to the Project Leader, is responsible for planning, coordinating and monitoring all transition activities in relation to the project.

4.6.1.4 Audit Criteria: Project plans include targeted milestones and deliverables, including the amount of funding secured.

As part of recognized project management practices, project plans should be established at the onset of the project to identify secured funding and all project related processes, such as, relation to project integration; cost management; project schedule management; contract administration; quality management; risk management; information system; human resources; communication; occupational hygiene, health and safety; site protection and material management; and environmental matters. To help timely completion of a project, a project time management process need to be implemented with activity definition, sequencing, duration estimating, schedule development and schedule control.

Finding

As noted, subsidiary project management plans are not integrated into an overall management plan. Sources of funding of construction and transition activities are determined. The project time management plan does include the development of a Master Schedule and the use by the contractors of Project Schedules.

A Master Schedule for the construction/renovation activities was prepared at the onset of the project with key milestones for the construction packages and timing; the schedule is updated as major changes occur.

According to management, all contractors provided the RPD and PWGSC teams with Project Schedules with revisions as necessary. According to management, the level of details varied from one contractor to the other. We observed that Project Schedules prepared by the tower renovation contractor, include detailed tasks to be undertaken and timing. In addition, we were informed that each week, the contractor submits his work plan for the upcoming week to enable management to coordinate on a timely basis required actions with SAH technical services or other stakeholders as needed.

In addition, an integrated corporate transition plan was developed and updated throughout the project to account for internal activities in relation to clinical aspects, communication, human resources, financial resources, material resources and other matters.

Distinct integrated activity plans were also prepared in relation to the power plant, the new pavilion, the control centre, the elevator and access to garden and the tower renovation to account for related transition activities, such as, equipment requirements, temporary installations and relocation of patients.

Funding for the capital project was approved by the Treasury Board as documented in the Effective Project Approval and Revised Effective Project Approvals. Transition activities are funded through the SAH operating budget.

4.6.1.5 Audit Criteria: The Master Project schedule is reviewed on a monthly basis and adjusted as required. Impacts on forecasted funding, costs, commitments and other requirements are identified, and options are developed as needed.

The existence and regular update of a defined Master Project Schedule, including key milestones and critical decision points, is a leading practice in project planning and management. It provides a rigorous and prudent approach to project scheduling management.

Finding

The Master Project schedule is reviewed and adjusted as significant changes occur. Impacts of changes on forecasted funding and costs are identified, and options are developed as needed.

Our consultations revealed that frequent formal and informal communications, including bi-weekly RPD team meetings, bi-weekly contractors' meetings and monthly status reports submitted by the PWGSC Senior Project Manager allow the RPD Project Director to be aware of changes that may impact the overall Master Schedule. We understand that as part of his project management practices, the tower renovation contractor submits an updated Project Schedule when important changes occur.

As explained, a strict process is in place surrounding change orders and the validation of additional costs. Proposed change orders and estimated costs are assessed by the experts and require approval of both PWGSC Senior Project

Manager and the RPD Project Director, and PWGSC Regional Director if in excess of \$25,000.

Our consultations revealed that options are examined if the change order will have a significant impact on timing and/or costs. According to management, such a situation did arise during the tower renovation where options were discussed and an action plan was agreed which allowed the project to remain on schedule.

4.6.1.6 Audit Criteria: A quality assurance plan is developed and documented to monitor quality issues that may impact the achievement of the project objectives and/or result in changes in scope, and allow for sufficient and timely inspections and resolution of problems throughout the life of the project.

As part of recognized project management practices, quality management processes should be identified and implemented. These should include quality planning, and performing quality assurance and quality control.

Finding

A quality management plan is in place to monitor quality issues with timely inspections and resolution of problems throughout the life of the project.

Our consultations revealed that several initiatives took place at the front end of the project to clearly identify the project requirements and quality standards, which were integrated into the project designs.

Quality assurance activities include amongst others frequent on-site visits by the experts to monitor construction work in relation to contract design and specifications, commissioning of equipment, interim and final certificates of completion. List of deficiencies are documented with preliminary certificate of completion which required signature of PWGSC, the experts and the RPD Project Director. Final certificate of completion is issued once deficiencies are resolved.

In addition, according to management, experts are required to submit to PWGSC Senior Project Manager their written comments on each request for payment submitted by the contractor, to confirm that the work conducted by the contractor conforms to the reported percentage of completion, specifications and quality requirements.

Required remedial actions and/or changes to the initial request for payment are provided to the contractor, and a revised request for payment is subsequently issued by the contractor, if needed.

4.6.1.7 Audit Criteria: PWGSC and consultants' quality assurance activities are monitored by the SAHMRP Project Director

According to the organizational structure in place, the RPD Project Director is ultimately responsible for the overall management of the construction component of the project, and is expected to monitor the quality control work performed by PWGSC and the experts' team.

Finding

PWGSC and experts' quality assurance activities are monitored by the RPD Project Director.

Our consultation revealed that the RPD Project Director monitors the implementation of the quality assurance plan as described above using several means:

- Prior to approving PWGSC invoices in relation to charges for request for payments paid to contractors, the RPD Project Director examines the copy of the contractors' requests for payments for the authorized signature by the PWGSC Senior Project Manager, and may provide comments to PWGSC as deemed necessary;
- The RPD Project Director performs frequent site visits to assess quality of work;
- The RPD Project Director participates to the bi-weekly RPD team meetings and bi-weekly contractors' meetings allows her to be informed and to monitor quality aspects of the project; and
- The RPD Director signs the preliminary and final certificates of completion.

4.6.1.8 Audit Criteria: Global and annual contractor performance targets and indicators address cost, time, quality and scope.

As part of quality planning, relevant performance targets and indicators in relation to cost, time, quality and project management should be identified and included in the contract terms to help ensure clear understanding of expectations. In addition, according to VAC *Manager's Reference Guide to Contracting for Services*, project authorities are to evaluate the effectiveness of the work provided by completing a post contract evaluation to help ensure that true value for money has been received.

Finding

Contractor performance targets and indicators are identified and address cost, time, quality and scope. An overall evaluation of the contractor performance is completed at the end of the contract.

Our consultations revealed that project requirements, timing and quality standards were integrated into the project designs, specifications and contract terms.

In addition to the quality assurance program, a formal contractor evaluation is conducted at the end of the construction by PWGSC.

The evaluation covers five performance criteria:

- Quality of workmanship to assess the quality of the materials and equipment incorporated in the work in relation to the requirements set out in the plans and specifications;
- Timing, to rate the timeliness of completion compared to the original or amended contract completion date;

- Project management to assess how the project as described in the drawings and specifications was managed, including co-ordination, quality control, effective schedule development and implementation;
- Contract management to rate compliance with contract administration provisions in the contract; and
- Health and safety to evaluate the effectiveness of how the occupational health and safety provisions were managed and administered.

According to PWGSC, the results of the evaluation are communicated verbally to the contractor and required remedial action on future jobs is discussed with the contractor.

4.6.1.9 Audit Criteria: Performance indicators are reviewed regularly against performance targets, and project plans are adjusted accordingly.

Performing quality assurance activities helps ensure a contractor complies with defined quality standards, and allows for the identification of ways to eliminate causes of unsatisfactory performance and to resolve deficiencies in a timely manner.

Finding

Performance indicators are reviewed regularly against performance targets, and project plans are adjusted accordingly.

We were informed that experts are on site on a permanent basis to examine compliance by the contractors to standards documented in the plans and contract specifications. Deficiencies, if any, are reported to the contractors for immediate correction. Performance targets are also examined when work is almost completed for the purpose of issuing the interim and/or final certificate of completion.

Our consultations revealed that overall performance and possible impact on scheduling is also closely monitored by both PWGSC Senior Project Manager and the RPD Project Director through their discussions with the experts and site visits, and is discussed in the bi-weekly RPD team meetings and bi-weekly contractors' meetings, as needed.

4.6.1.10 Audit Criteria: The project framework allows for quarterly reporting of project costs, project status, progress and issues to VAC/SAH and SAHMRP management.

Information and communication is a key component of a project management framework where processes need to be identified and implemented to provide the critical links between management and information.

Finding

The project framework allows for the submission of monthly and quarterly project reports by the PWGSC Senior Project Manager and the RPD Project Director respectively on project costs, project status and issues.

We found that PWGSC Senior Project Manager submits construction progress reports on a monthly basis to the RPD Project Director. These reports cover financial and operational aspects of the project, such as: project scheduling; percentage of completion by work activity; key issues; comments on causes of delays; a comparison of actual and estimated completion date of key milestones; budgeted and actual construction costs; payments to contractor; and type of change orders (resulting from an SAH requirement, a site condition or coordination matter).

In addition, reporting by the RPD Project Director on the project progress to VAC and SAH senior management takes two primary forms: 1) a quarterly project report is submitted to the Project Leader, the PSC Committee members and the VAC Audit and Evaluation Division, and 2) reporting of construction activities at the HMC-M meetings which serve as a platform to update management on key activities and events, project schedule, project costs, and risk management elements. Project matters may also be discussed informally between the RPD Project Director and Project Leader as needed.

According to management, updates on the transition activities are also reported to the HMC-M meetings. Monthly reports and updates to the integrated corporate transition plan are distributed to HMC-M committee members.

Our consultations revealed that financial risks, operating budgets and variances, and procurement are discussed at the project finance coordination committee meetings. Other operational project matters are also discussed in the respective project committees: Vigilance Committee, Transition Committee, Coordination Committee, Site Safety Committee etc.

Discussions on strategies and action plans, construction project progress, transition activities are also held at the PSC meetings.

4.7 Sub-Objective 7 – Assess Human Resources Management

4.7.1 Summary of Findings

We expected to find that: risks in relation to human resources are identified and mitigated actions defined; a support program is in place to support employees during the construction project; a plan has been developed to manage absenteeism/staff shortages as a result of the project; and a plan and mitigation around succession planning have been developed. Our findings are summarized in the following table.

Audit Criteria	Met	Met with Exception	Not Met
1. The risks in relation to human resources are identified and management mitigation actions are defined.	√		
2. A support program including reporting of complaints is established to deal with physical, moral and psychological problems resulting from the SAHMRP.	√		
3. A plan is in place to manage absenteeism/staff shortage problems as a result of the SAHMRP.	√		
4. A plan and mitigation around succession planning have been developed.	√		

4.7.1.1 Audit Criteria: *The risks in relation to human resources are identified and management mitigation actions are defined.*

The SAHMRP is unique in the sense that the renovation work is taking place in an occupied hospital facility where quality services needs to continue to be provided to patients at all times. In this more complex environment, it becomes important to have proper mechanisms in place to manage human resources risks, and to develop proper mitigation practices to address these risks.

Finding

The risks in relation to human resources are identified and management mitigation actions defined.

We found that human resources risks, issues and workforce needs were identified using different means and data collection tools, such as, surveys, working groups, consultations, face to face meetings, management meetings, etc.

Our findings demonstrated that the Human Resources Directorate developed a workforce strategy and integrated human resources multi-year plans with measures to address human resources related risks and workforce requirements. We also

found that a documented risk management framework with risk identification, assessment of impact and likelihood and mitigation actions was included in both the *2008-2009 and 2009-2010 Integrated Human Resource Plans*.

According to management, the Human Resources Directorate is responsible for the implementation of the workforce strategy, and the integrated human resources multi-year plans are followed up by the HMC-M. The plans are also considered in the integrated corporate transition plan which is updated as needed as the project unfolds.

As a result of the SAHMRP, a new Pavilion specialized in Alzheimer Care was built and an entire tower was renovated, which resulted in several changes to the staff and patient environment. For example, all patients are now living in private rooms and have been moved into new settings to improve their quality of life and care.

The transition team implemented different programs to address the impact of these changes on SAH personnel and patients. For example, the programs ‘Evolving towards Change’ and ‘Transforming Ideas Together’ were put together to help ensure that risks around changes were identified, and that mitigating actions were implemented to minimize or eliminate any negative impact the project may have on SAH staff and patients.

We found that the Canadian Council on Health Services Accreditation (CCHSA) classified the Program ‘Evolving towards change’ in their 2005 accreditation report as a “Good Practice” with a mention that the model could be used for various changes that organizations may be facing. Our consultations revealed that the hospital staff and patients have in general adapted well to their new environment.

The integrated human resource plan is updated on a yearly basis to account for the current and future human resource needs for the entire hospital. The 2009-2010 Plan demonstrates the Hospital readiness for the “after project” phases – the succession phase - and tables the SAH human resource needs for the year to come.

4.7.1.2 Audit Criteria: A support program including reporting of complaints is established to deal with physical, moral and psychological problems resulting from the SAHMRP.

As the SAHMRP is taking place in an occupied environment, it becomes important for management to obtain feedback from people who are impacted by the project to help in the identification of additional risk areas, and to address any concerns or complaints by implementing required actions.

Finding

Support programs including reporting of complaints are established to deal with physical, moral and psychological problems resulting from the SAHMRP.

Our consultations revealed that the SAH has maintained open lines of communication with staff and patients to help ensure that their concerns and complaints are addressed in a timely manner. As previously mentioned, the SAH

has implemented many sub-committees where employees and managers can share their concerns and patients concerns, and where timely decisions can be taken.

The SAH has also implemented a communication plan including newsletters, the “Missive”, the “Missive Express”, the Intranet, interactive screens, etc. to help ensure that hospital employees and patients are informed on a daily basis of important issues and progresses made in the SAHMRP.

A face to face communication strategy was also implemented for communications made by management to be distributed to all hospital personnel in a unique and timely manner. Under the face to face communication strategy, SAH Directors must pass and discuss management messages with staff in a timely manner, and bring back to management any concerns or questions that may arise from such messages. This strategy has proven to be very effective to address employees and patients’ concerns at all levels of the organization.

We also observed that some support programs are in place to address any problems or concerns raised by employees or patients may or may not be related to the SAHMRP. For health and safety problems or concerns, employees are directed to discuss them with their managers or with the on-site Health and Safety Officer.

The SAH Health and Safety Committee is responsible to examine all problems, concerns or issues that relate to health and safety in the workplace. Our review of the SAH 2004-2008 annual reports on health and safety activities did not reveal any significant change in the number of annual complaints received from employees.

We also found that an on-site patients’ ombudsman is responsible to receive, evaluate, investigate and render decisions in a timely manner (7 days maximum) on any complaint, issue or problem coming from patients. His role is to help ensure that patients receive adequate and quality care by the SAH staff. Our consultations with the ombudsman and our review of his annual reports revealed a decreased in the total number of complaints received from patients in the last 3 years, from 121 to 75 complaints.

However, we found that the number of complaints directed to the ombudsman over the past three years directly related to the SAHMRP increased from 3 to 37, mostly attributable to the tower renovations and their impacts on patients (noise, adaptation to a new environment and new equipment, changes in personnel and services and follow-up, etc.).

4.7.1.3 Audit Criteria: A plan is in place to manage absenteeism/staff shortage problems as a result of the SAHMRP.

As the SAH is a long term care facility where elderly patients’ require constant care and support, chiefs and managers need to be very vigilant about having sufficient staff in their respective sections to provide adequate and good quality care to patients when needed. In a changing work environment where renovations are taking place while services to clients must continue, a plan to adequately manage

absenteeism and staff shortage problems is an essential component of being able to provide proper care and support to the patients.

Finding

A plan is in place to manage absenteeism/staff shortage problems as a result of the SAHMRP.

We found that integrated human resources multi-year plans were prepared by the Human Resource Directorate to manage the human resources needs over the project period. Our consultations revealed that the management of absenteeism and staff shortage problems is done directly by the Human Resource Directorate. They developed an approach to regularly manage absenteeism and staff shortage problems as part of the hospital human resource management strategy. According to management, problem cases were investigated and were deemed not to be in relation to the SAHMRP.

4.7.1.4 Audit Criteria: A plan and mitigation around succession planning have been developed.

A project human resource management plan includes the processes that organize and manage the project team, including human resources planning, acquiring the project team, developing the project team and managing it. Planning include, amongst others, obtaining the human resources needed to complete the project, and developing a succession plan in the event of project team members' departures.

Finding

A plan and mitigation strategy around succession planning is not developed but was envisaged by senior management.

Our consultations revealed that there were very little changes in the construction project team during the life of the project. The RPD Project Director has been in the position since the inception of the project. In the event of her departure prior to completion of the project, senior management would have envisaged external contracting to fulfill her role and/or discuss other options with PWGSC.

There was a change in the PWGSC Senior Project Manager just as the project was moving into tower renovation phase. PWGSC was responsible for the selection of the new team member. Our consultations revealed that the transition went well as the new PWGSC Senior Project Manager continued to apply the project management methodology detailed in the PWGSC NPMS manuals, under the supervision of the RPD Project Director.

4.8 Sub-Objective 8 – Assess Risks Management Practices and Plans Related to SAHMRP, including Occupational Hygiene, Health and Safety, and Site Protection and Material Management

4.8.1 Summary of Findings

We expected to find that an overall risk management framework has been established, including the identification of risks and mitigation activities and update throughout the project, and that an integrated approach was used to manage project risks, including occupational hygiene, health and safety, and site protection and material management.

Our findings are detailed below:

Audit Criteria	Met	Met with Exception	Not Met
Overall Risk Management and Plans			
1. A risk management framework for the SAHMRP is established, and includes the identification of short-term and long-term operation risks and management mitigation actions.		√	
2. An integrated approach is used to manage risks where impact analyses of changes and issues are performed to identify changes in risks on all project components.	√		
3. Changes in risks and required mitigating actions are reflected in the risk management framework throughout the life of the project.		√	
4. Required action plans are monitored by the SAHMRP Project Director.	√		
Occupational Hygiene, Health and Safety Risks			
5. The risks in relation to occupational, health and safety are identified and management mitigation actions are defined.	√		
6. VAC/SAH and PWGSC's roles and responsibilities with regard to the management of occupational hygiene, health and safety risks related to the SAHMRP are defined and documented.	√		

Audit Criteria	Met	Met with Exception	Not Met
7. An occupational hygiene, health and safety program is established with: an inspector; a committee with defined responsibilities; a tracking system of frequency and severity of injuries for comparison purposes; measures to minimize the risk of discomfort and injuries to employees, patients, visitors and contractors during the renovation/construction and the transition activities; receipt and analysis of complaints and communication of relevant hygiene, health and safety requirements.	√		
8. A written advance notice of 72 hours is sent to hospital staff, patients, visitors and management of any service interruptions (power, water, fire protection, etc.) to minimize any potential inconvenience or harm to these persons.	√		
9. In case of a fire or an emergency related to the SAHMRP, the project management team informs the Deputy Minister's Office and the Emergency Measures Organization, and emergency measures are put in place to control and minimize risks.	√		
Protection and Material Management Risks			
10. The risks in relation to site protection and material management are identified, and management mitigation actions are defined.	√		
11. A physical security and a restricted area access plan are established and consider risks and threats.	√		
12. Enhanced reliability check is required for all construction site employees who have access to VAC/SAH buildings where sensitive information and goods belonging to SAH and VAC are located; controlled access is required for employees without the required security clearance.	√		
13. An action plan is developed for the commissioning of new equipment and sub-systems.	√		

4.8.1.1 Audit Criteria: A risk management framework for the SAHMRP is established, and includes the identification of short-term and long-term operation risks and management mitigation actions.

The Treasury Board *Risk Management Policy* indicates that Departments must analyze and assess the risks identified, and design and implement cost-effective risk prevention, reduction or avoidance control measures. The Treasury Board *Integrated Risk Management Implementation Guide* provides information of the common risk management process and model and defines the activities that need to take place: risk identification, risk assessment, risk response and monitoring and evaluation. Consultation and communication with stakeholders is essential in support of sound risk management decisions, and should be considered at every stage of the risk management process.

Finding

A risk management framework was prepared in 2001 summarizing key project risks. As the project unfolded, risks and mitigating actions were further defined and updated as documented in various documents. However, no overall risk management framework encompassing all project related risks was subsequently prepared to help ensure all risks are identified and measured, to determine if current controls/risk mitigation strategies are well aligned to the risks, and additional controls in response to residual risk exposure are identified.

In order to have a risk-based project management approach, all project risks need to be identified and measured to help ensure the current controls/risk mitigation strategies are well aligned to the risks, and to identify additional controls that may be needed in response to residual risk exposure. Risk monitoring also needs to be performed on a regular basis.

We found that a risk management framework of all project components was documented in 2001, with risk identification, impact and likelihood of risks and mitigation actions. As the project unfolded, project risks and mitigating actions were further defined and updated as documented in various documents.

As indicated, PWGSC identified and documented construction operating risks, impact and likelihood, mitigating actions and related contingency provisions of the construction packages, as recommended in the Treasury Board *Integrated Risk Management Implementation Guide*. Risks and mitigation actions in relation to other project components, such as, transition activities, human resources, occupational hygiene, health and safety, and communications were identified and assessed through various committees, working groups, questionnaires to managers, surveys and consultations.

In addition, as part of the accreditation process performed by CCHSA, numerous performance indicators are evaluated which allows the hospital to become aware of possible risks and areas for improvements. Our consultations revealed that risks were addressed through the implementation of risk mitigating actions integrated into the day to day management of the hospital's activities.

However, we observed that no overall risk management framework encompassing all project components is documented to help ensure all project risks are identified and measured, to determine if the current controls/risk mitigation strategies are well aligned to the risks, and to identify additional controls that may have been needed in response to residual risk exposure.

Recommendation for Consideration in Future Projects

RFc An overall risk management framework encompassing all project components should be documented and updated to help ensure all project risks are identified, and are measured to determine if the current controls/risk mitigation strategies are well aligned to the risks, and to identify additional controls that may be needed in response to residual risk exposure. (Essential)

4.8.1.2 Audit Criteria: An integrated approach is used to manage risks where impact analyses of changes and issues are performed to identify changes in risks on all project components.

According to Treasury Board directives, an integrated risk management is a continuous, proactive, and systematic process to understand, manage, and communicate risk from an organization-wide perspective. It is about making strategic decisions that contribute to the achievement of an organization's overall corporate objectives.

Finding

An integrated approach is used to manage risks where impact analyses of changes and issues are discussed to identify changes in risks on all project components.

Several committees are specifically set up to address project related risks and activities. For example:

- A Transition Committee to address required transition activities and related risks;
- A Vigilance Committee to prevent infections contracted by patients and employees during renovations as a result of construction work;
- A Project Finance Coordination Committee to help ensure, among other objectives, sound management of the risks related to financial and material resources;
- An Equipment Committee to address risks related to material resources; and
- A Site Safety Committee to address risks related to safety of workers, patients and staff.

The hospital also has a Quality and Risk Manager responsible for addressing clinical and safety risks.

We found that the HMC-M is the key mechanism through which SAHMRP activities are communicated across various functional areas, and allows for an integrated approach to project risk management. The committee is a vehicle through which hospital and project management members can provide updates of their activities and meeting results, and raise concerns with respect to the impact of the project on the ongoing hospital operations, and through which appropriate remedial actions can be identified and monitored.

We noted that risk management was specifically on the agenda of some HMC-M meetings, and planning, integration of activities (construction, transition, health and safety etc.) and required actions are discussed at the meetings.

In addition, we found that an integrated corporate transition plan was prepared and updated as needed by the Transition Coordinator to integrate transition related activities (human resources, material, information technology, financial resources and communication) of each construction package. According to management, the plan is followed up at HMC-M meetings. In addition, detailed integrated activity plans were prepared for transition activities in relation to the construction packages.

Post-mortems after moving activities were carried out on three occasions to identify lessons learned to improve the coordination of decisions and activities, and to better manage risk in the next phases of the project.

4.8.1.3 *Audit Criteria: Changes in risks and required mitigating actions are reflected in the risk management framework throughout the life of the project.*

As circumstances change, risks need to be reevaluated and required mitigations actions identified and implemented.

Finding

Changes in construction risks are reflected in the risk management framework prepared by PWGSC for each construction package. Changes in other project related risks are discussed through committees and work groups, and required mitigating actions identified. However, this exercise is not documented in an overall risk management framework encompassing all project components.

The risk management framework prepared by PWGSC for the construction packages indicate the operating risks, impact and likelihood, mitigating actions and related contingency provisions. Construction change orders are classified and cumulated under the related risk categories for contingency monitoring.

Our consultations revealed that changes in construction risks that have an impact on other project components are discussed at the HMC-M committee and/or communicated directly by the RPD Project Director to the Project Leader. In the later case, the Project Leader is then responsible to disseminate the information to the relevant stakeholders to address these changes in risks and their impact.

As mentioned, an overall risk management framework encompassing all project components is not documented and therefore changes in risks and required mitigating actions are not summarized in such document.

4.8.1.4 Audit Criteria: Required action plans are monitored by the SAHMRP Project Director.

According to the Treasury Board *Integrated Risk Management Guide*, monitoring and evaluation is the fourth component of the risk management process. Action plans are developed to address construction risks and situations that arise during the project.

Finding

Required action plans in relation to the construction are monitored by the RPD Project Director.

Our consultations revealed that the RPD Director monitors the progress of actions plan items through the bi-weekly RPD team meetings and bi-weekly contractors' meetings, frequent communications with relevant stakeholders. She also reviews the monthly status reports submitted by the PWGSC Senior Project Manager summarizing operational and financial aspects of the construction undertaking.

We also found that a rigorous process is in place to monitor construction risks. All proposed change orders approved by the PWGSC Senior Project Manager are submitted to the RPD Project Director for approval and monitoring. Approved change orders are cumulated and presented in the construction risk management framework for contingency monitoring by both PWGSC Senior Project Director and the RPD Project Director.

Our consultations also revealed that the RPD Project Director reports on construction risks through several means: verbal or written communications to the Project Leader; discussions at the HMC-M; and quarterly progress reports submitted to the PSC members and to VAC and SAH senior management.

4.8.1.5 Audit Criteria: The risks in relation to occupational, health and safety are identified and management mitigation actions are defined.

According to the PWGSC NPMS manuals, health and safety risks need to be defined, and related mitigating actions identified and implemented. According to VAC's *Environmental, Health and Safety Policy*, the department needs to maintain and promote health and security of its employees, and implement reasonable safe practices to protect them from getting injured in the workplace.

Finding

The risks in relation to occupational health and safety are identified, and management mitigation actions are defined.

Our review of the 2002 *SAH Renovation and Expansion Environmental Assessment* report and the 2001 *SAHMRP Risk Management Framework* document revealed that risks in relation to occupational health and safety were identified, and management mitigation actions were defined at the onset of the project. Prevention strategies and health and safety requirements around the SAHMRP were also updated throughout the project.

Several health and safety management measures are in place to mitigate these risks, such as:

- Requirements, specifically referring to health and safety and the prevention of infectious diseases on construction sites are included in the contractors' contract specifications;
- An air quality control expert was hired and performs air quality testing;
- A 2006-2009 *Prevention Program Framework*, was specifically designed to help ensure that roles and responsibilities in regards to occupational health and safety were well defined and understood by the tower renovation contractor, and that rigorous health and safety measures were in place to protect hospital employees and patients from getting injured and/or being impacted by any of the construction related activities.;
- A Health and Safety Officer is on site to coordinate project-related occupational health and safety activities, and to integrate all required actions to eliminate risks at the source. He also acts as the liaison with the SAH Health and Safety Committee;
- A Vigilance Committee was set up to help prevent construction related illnesses. The roles and responsibilities of committee members are clearly established; and
- A complaint resolution process is in place to address any complaints that relate to SAH health and safety.

4.8.1.6 *Audit Criteria: VAC/SAH and PWGSC's roles and responsibilities with regard to the management of occupational hygiene, health and safety risks related to the SAHMRP are defined and documented.*

Finding

VAC/SAH and PWGSC's roles and responsibilities with regard to the management of occupational health and safety risks related to the SAHMRP are defined and documented in their departmental manuals and in the 2006-2009 Prevention Program Framework.

As explained, we found that VAC/SAH and PWGSC's roles and responsibilities are briefly summarized in the 2001 *Project Management Framework* document and in the SSA which documents services to be provided by PWGSC under the SAHMRP.

The PWGSC NPMS and other departmental manuals serve as the framework under which PWGSC performs project management. The manuals provide specific guidance with respect to health and safety management.

We found that the VAC's *Environmental, Health and Safety Policy* describes expectations from management in relation to the management of environmental, health and safety matters. In addition, we noted that roles and responsibilities in relation to health and safety are defined in the *2006-2009 Prevention Program Framework* document, with full details of health and safety expectations from key players, such as, SAH, PWGSC, the Project Health and Safety Officer, the tower renovation contractor and its Health and Safety Agent, the sub-contractors, the construction workers, etc.

The RPD Project Director is mainly responsible for approving the *Prevention Program Framework*, contract specifications, code of conduct and required budget to implement the health and safety requirements. She sees that a safe and healthy work environment is provided to all construction site workers, and participates in the investigation of any serious accidents on the construction site. She is also present at the Coordination Committee meetings.

PWGSC is mainly responsible for supervising the application the *Prevention Program Framework*, monitoring compliance by all key players to the Prevention Program Framework related directives; overseeing that access to the construction site is controlled at all times and the work is properly coordinated to eliminate dangerous conditions; and informing key health and safety stakeholders of any accidents on the construction sites and implementing required corrective actions if necessary.

In addition, the Hospital Quality and Risk Manager is responsible for addressing clinical and safety risks in relation to patients and staff by implementing the required mitigating actions. The Vigilance committee, created to help mitigate risks in relation to construction related illnesses, helps ensure measures are in place to reduce staff and patients contamination by construction work residuals. The SAH Health and Safety Committee also examines problems, concerns or issues that relate to health and safety in the workplace.

4.8.1.7 *Audit Criteria: An occupational hygiene, health and safety program is established with: an inspector; a committee with defined responsibilities; a tracking system of frequency and severity of injuries for comparison purposes; measures to minimize the risk of discomfort and injuries to employees, patients, visitors and contractors during the renovation/construction and the transition activities; receipt and analysis of complaints and communication of relevant hygiene, health and safety requirements.*

The Treasury Board *Occupational Safety and Health Policy* requires departments to establish and maintain effective occupational health and safety programs consistent with Treasury Board policies, standards and procedures.

Finding

An occupational hygiene, health and safety program is established with: a Health and Safety Officer; a Site Safety Committee with defined responsibilities; an SAH Health and Safety committee; measures to minimize the risk of discomfort and injuries of employees, patients, visitors and contractors during the renovation/construction and the transition activities; and receipt and analysis of complaints by SAH health and safety representatives; and communication of relevant hygiene, health and safety requirements through contract specifications and training.

Our consultations revealed that an occupational hygiene, health and safety program was established to help ensure that risks of discomfort and injuries were minimized or eliminated on and around the construction sites throughout the lifecycle of the project.

According to the PWGSC NPMS manuals, PWGSC has developed a construction health and safety program to help ensure adherence to the Canada Labour Code – Part II and Treasury Board *Occupational Safety and Health Policy* and to promote compliance with the occupational health and safety acts and regulations.

Measures under the program in place include, amongst others:

- Inclusion of specific health and safety requirements in the contractors' contract specifications;
- A Health and Safety Officer monitors compliance by the construction contractors with their contract specifications through site inspections. He is also responsible to report any unfortunate incidents to the PWGSC Senior Project Director and RPD Project Director, and investigate them as needed;
- Training of the contractors on the health and safety requirements for the SAHMRP;
- A Site Safety Committee reporting to the contractor to coordinate safety measures as recommended in the *2006-2009 Prevention Program Framework*;
- A Vigilance Committee created in 2005 to help ensure measures are in place to prevent construction work residuals, such as, dust, moisture and molds from contaminating hospital patients. Construction areas are confined; elevators are blocked and restricted to construction workers, etc., to help ensure patients or staffs are protected against construction work related infections. This committee was recognized by the CCHSA as a best practice in their 2005 accreditation report, and
- Air testing on a regular basis by quality control experts to minimize and/or eliminate the risks of infections.

Our consultations also revealed that the SAH Health and Safety Committee, SAH health and safety representatives, and the transition team were closely involved in the SAHMRP to help ensure proper measures were in place to minimize the risk of discomfort and injuries of employees, patients, visitors and contractors during the renovation/construction and the transition activities.

The SAH health and safety representatives were also mandated to receive, examine and investigate all occupational health and safety matters, and to report on them. A tracking system is in place to track the nature, severity and persons involved in the reported incidents.

4.8.1.8 Audit Criteria: A written advance notice of 72 hours is sent to hospital staff, patients, visitors and management of any service interruptions (power, water, fire protection, etc.) to minimize any potential inconvenience or harm to these persons.

According to the contractors' contract specifications, a written notice of 72 hours must be given to the engineer prior to electric or mechanical systems' service interruptions. Section 1.8 of the first tower renovation contractor meeting's minutes also states that a written advance notice of 72 hours must be issued for any power, water and fire protection service interruptions.

Finding

When possible, a written advance notice of 72 hours is sent to hospital staff, patients, visitors and management of any service interruptions (power, water, fire protection, etc.) to minimize any potential inconvenience or harm to these persons.

Our consultations revealed that in most cases the written advance notice of 72 hours was respected to help minimize any potential inconvenience or harm to SAH staffs, patients, management and visitors. However, in rare occasions, such as, the December 2008 water problem in the main tower, this requirement could not be respected as water supply needed to be momentarily interrupted to help ensure the problem and damages were contained and risks minimized.

4.8.1.9 Audit Criteria: In case of a fire or an emergency related to the SAHMRP, the project management team informs the Deputy Minister's Office and the Emergency Measures Organization, and emergency measures are put in place to control and minimize risks.

According to the *Government Security Policy*, departments must develop procedures for reporting and investigating security incidents, and for taking corrective actions. Through effective reporting and investigation of security incidents, vulnerabilities can be identified, and the risk of future occurrence reduced.

Finding

Emergency measures are identified to minimize risks, and incidents are reported to the Deputy Minister's Office and to VAC Departmental Security Officer.

We found that emergency measures are defined in the SAH *Emergency Measures Guide* which summarizes the emergency plan in relation to medical emergency;

confinement; missing resident; violent person; fire; suspicious object; chemical spills; disaster outdoors; toxic leak; and evacuation.

These measures are in place to minimize confusion in the event of an emergency situation. Our consultations revealed that these measures were applied on three occasions during the tower renovation: a full evacuation was ordered on August 27, 2007 when a failure in the ventilation system caused smoke to spread in the building; a horizontal evacuation (from one side to the other side of the floor) was ordered when a fire started on one of the floors on March 2, 2008; and a water leak was contained on December 1, 2008.

Our consultations revealed that incident reports were prepared, and the events were investigated by SAH Emergency Measures Organization, i.e. SAH Security Services, and the results reported were to the Deputy Minister's Office and to the VAC Departmental Security Officer in accordance with SAH reporting procedure of all major security incidents.

4.8.1.10 Audit Criteria: The risks in relation to site protection and material management are identified, and management mitigation actions are defined.

According to the *Government Security Policy*, departments must conduct ongoing assessments of threats and risks to determine the necessity of safeguards beyond baseline levels. They must continuously monitor any change in the threat environment, and make any adjustment necessary to maintain an acceptable level of risk and a balance between operational needs and security.

Finding

As part of SAH Security Program, a restricted area access plan is established to minimize the risk of access by unauthorized individuals to the construction/renovation areas and to SAH facilities (equipment, assets, information).

Our review of the 2001 *SAHMRP Risk Management Framework* document revealed that the risks in relation to site protection and material management were identified during the project planning stage.

In 2002, a consulting firm was retained to review SAH security aspects which led to the 2003 *SAH Security Examination* report. According to management, recommendations in the 2003 *SAH Security Examination* report and a subsequent report from the consulting firm entitled 2004 *Work plan – Security Management Process* were integrated in the security system contract specifications.

Our consultations revealed that mitigation measures were implemented throughout the lifecycle of the project to help ensure risks in relation to site protection and material management were minimized or eliminated. For example, access to SAH facilities is restricted to construction workers with valid security clearance; elevators accessible from the basement are restricted to construction workers for them to access spaces under renovation; external caravans with lunch rooms and

bathrooms are placed at the disposition of the construction workers for them to be self sufficient outside the hospital facilities throughout the project; etc.

As mentioned, a Health and Safety Officer is on site to coordinate project-related occupational health and safety activities, and to monitor compliance with government regulations to help ensure related risks are minimized or eliminated during the project.

Our consultations revealed a lack of clear definition of roles and responsibilities of the Technical Services and the Security Services in relation to implementation and maintenance of the new integrated security system. This situation may result in misunderstanding of respective responsibilities, and could result in an improper or lack of response in critical incident situations.

Recommendation

R3 The SAH Administrative Services Director should define the roles and responsibilities of the SAH Technical Services and SAH Security Services over the new integrated security system implementation and maintenance so that both parties clearly understand their respective roles. (Essential)

4.8.1.11 Audit Criteria: A physical security and a restricted area access plan are established and consider risks and threats.

According to the Treasury Board *Operational Security Standard on Physical Security*, departments are responsible for providing and funding safeguards considered necessary based on a threat and risk assessment. They must control access to restricted areas using safeguards that will grant access only to authorized personnel.

Finding

A physical security and a restricted area access plan are established and consider risks and threats.

Our consultations revealed that the recommendations of the 2003 *SAH Security Examination* report and the 2004 *Work plan – Security Management Process* were integrated into the SAH Security Program. For example, the following measures were implemented in relation to the project:

- Containment of the construction and renovation areas;
- Installation of fences and barricades around areas used by construction workers;
- Access to SAH facilities is restricted to construction workers with valid security clearance;
- Elevators accessible from the basement are restricted to construction workers for them to access spaces under renovation; and
- Redesign and update of the *SAH Emergency Measures Guide*.

4.8.1.12 Audit Criteria: Enhanced reliability check is required for all construction site employees who have access to VAC/SAH buildings where sensitive information and goods belonging to SAH and VAC are located; controlled access is required for employees without the required security clearance.

According to the *Government Security Policy*, the Government of Canada must ensure that individuals with access to government information and assets are reliable and trustworthy. Therefore, prior to the commencement of duties, departments must ensure that individuals undergo a reliability check and are granted a reliability status.

Finding

A reliability security check of construction site employees with access to SAH facilities (equipment, assets, information) was performed and reliability status was granted.

Our review of documents provided by the SAH Chief of Security revealed that construction site employees who needed unescorted access to the SAH facilities (equipment, assets, information) hold a reliability status.

Our consultations revealed that other construction employees requiring only temporary access to the SAH facilities to do small repairs and/or to correct deficiencies are escorted by a SAH Security Agent or the Project Health and Safety Officer.

4.8.1.13 Audit Criteria: An action plan is developed for the commissioning of new equipment and sub-systems.

According to the PWGSC *Environmentally Responsible Construction and Renovation Handbook*, commissioning has both a technical and training component. The technical component involves testing the installed equipment and making adjustments as necessary. The training component focuses on instructing staff and occupants on how the new equipment should be properly operated and maintained.

Finding

An action plan is developed for the commissioning of new equipment and sub-systems.

Our consultations revealed that a technical and training commissioning process for new equipment and sub-systems has been carried out for the completed packages and for each of the renovated tower floors. According to management, commissioning meetings were held regularly among the contractors, experts, the SAH Technical Services representatives and PWGSC project team for each construction package, and training was provided when needed. The meetings allow for the monitoring of the 30 days testing period and the correction of any detected deficiencies.

4.9 Sub-Objective 9 – Assess Contract Management

4.9.1 Summary of Findings

We expected to find that: SAH and PWGSC's roles and responsibilities in relation to contract management and administration are defined and documented; contract administration and management complied with Treasury Board *Contracting Policy* and VAC *Manager's Reference Guide to Contracting for Services*, and a post-contract performance evaluation is in place.

We observed that all criteria were met as shown in the table below:

Audit Criteria	Met	Met with Exception	Not Met
1. VAC/SAH and PWGSC's roles and responsibilities with respect to contract administration and management are defined and documented.	√		
2. Contract administration and management including definition of goods or services specifications; appropriate management of contract amendments, complete contract file documentation and performance monitoring are in accordance with Treasury Board Contracting Policy and VAC Manager's Reference Guide to Contracting for Services.	√		
3. A post-contract performance evaluation is performed to assess the performance of the contractor against the terms and conditions set out in the contract and performance indicators are established.	√		

4.9.1.1 Audit Criteria: VAC/SAH and PWGSC's roles and responsibilities with respect to contract administration and management are defined and documented.

Finding

VAC/SAH and PWGSC's detailed responsibilities in relation contract administration and management are documented in their respective departmental manuals.

As explained, we found that VAC/SAH and PWGSC's roles and responsibilities are briefly summarized in the 2001 *Project Management Framework* document and in the SSAs which document services to be provided by PWGSC under the SAHMRP.

As part of their functions, PWGSC is, amongst others, responsible to manage the contractors and experts contracts. The PWGSC NPMS manuals and other departmental manuals serve as the framework under which PWGSC performs project management and contract administration.

All project requisitions over \$5,000 are sent to PWGSC Procurement Division who is responsible for call for tenders and contract awards; contracting of requisitions below \$5,000 is delegated to SAH Procurement Services. Monitoring and administration of contracts other than the contractors and experts is performed by SAH management as per SAHMRP *Financial Spending Authority*. Responsibilities in relation to contract administration and management are documented in the VAC *Manager's Reference Guide to Contracting for Services*.

4.9.1.2 Audit Criteria: Contract administration and management including definition of goods or services specifications; appropriate management of contract amendments, complete contract file documentation and performance monitoring are in accordance with Treasury Board Contracting Policy and VAC Manager's Reference Guide to Contracting for Services.

The Treasury Board *Contracting Policy* provides several directives in relation to contract administration and management. These include but are not limited to proper definition of requirements, proper monitoring of contract performance, proper management of amendments, appropriate contract documentation.

Finding

Within the limitations of the samples drawn, contract administration and management is overall in compliance with Treasury Board Contracting Policy and VAC Manager's Reference Guide to Contracting for Services.

The audit revealed that contract administration and management complied with the Treasury Board *Contracting Policy* and VAC *Manager's Reference Guide to Contracting for Services* directives. We found full compliance in relation to the following criteria as detailed in Appendix C.

- Requirements are properly defined;
- Contracting over \$5,000 is delegated to PWGSC;
- A contract is in place with proper terms and conditions;
- Proper monitoring of contract performance;
- Appropriate management of contract amendment; and
- Proper contract documentation.

4.9.1.3 Audit Criteria: A post-contract performance evaluation is performed to assess the performance of the contractor against the terms and conditions set out in the contract and performance indicators are established.

According to the PWGSC NPMS manuals, a post-contract performance evaluation should be performed to assess the performance of the contractor against the terms and conditions set out in the contract.

Finding

A post-contract performance evaluation of construction packages 2 and 6 has been performed to assess the performance of the contractor against the terms and conditions set out in the contract and established performance indicators. A post-contract performance will soon be completed for construction packages 7 and 9. The post-contract performance of construction package 1 could not be located by PWGSC; according to management, it has been done.

The PWGSC Real Property Branch and Real Property Contracting in conjunction with the Canadian Construction Association and the Professional Associations of architects and engineers have established a framework with specific evaluation criteria to assess the quality of services provided by consultants and contractors on federal real property projects. PWGSC has established a Contract Performance Review Committee to manage the contract performance evaluation process. The evaluation reports must be completed for all real property contracts regardless of value.

For most projects, the evaluation is prepared at the time of the issuance of the final invoices and signed by the Project Manager. However, in certain cases, particularly dealing with poor performance, the evaluation may be completed prior to completion of the work.

As explained, performance indicators as noted on the *Contractor Performance Evaluation Report Form* include: quality of workmanship, timing, project management, contract management and health and safety. The evaluation tool requires the assignment of a rating against pre-determined criteria and rating scales.

The total evaluation score determines the recommended actions which are categorized under four progressive levels. Disciplinary actions include written warnings, one-year suspension, and permanent removal from the pre-qualified list of contractors.

The audit revealed that PWGSC has performed a post-contract performance evaluation of construction packages 2 and 6 using the above process. According to PWGSC, a post-contract performance will soon be completed for construction packages 7 and 9. The post-contract performance of construction package 1 could not be located by PWGSC; however, they believe it has been done.

4.10 Sub-Objective 10 – Assess Communications Management

4.10.1 Summary of Findings

We expected to find that communication risks are identified and mitigation actions defined, and that a communication plan is developed with identified source of funds.

We observed the following:

Audit Criteria	Met	Met with Exception	Not Met
1. The risks in relation to communication for the SAHMRP are identified, and management mitigation actions are defined.	√		
2. Funding requirements and source of funds for internal and external communications are identified.	√		
3. A communication plan to employees, patients, families, visitors and media is developed and is updated as needed to provide relevant information in relation to SAHMRP.	√		

4.10.1.1 Audit Criteria: The risks in relation to communication for the SAHMRP are identified, and management mitigation actions are defined.

According to the *Communication Policy of the Government of Canada*, communication plans and strategies are essential for the management of program and project risks. They promote an open dialogue with stakeholders on the risks of the project or initiative and they are very helpful in instilling a trust relationship and enhancing project management credibility and transparency. Providing facts, instructions and/or information about the project or initiative and its risks contribute to the project's chance of success.

Finding

The risks in relation to communications are identified and management mitigation actions are defined.

Our review of the 2001 *SAHMRP Risk Management Framework* document revealed that risks relating to communications were identified and assessed for impact and likelihood. For example, the following risks were identified: the risk of a misunderstanding by the experts of SAH requirements during the planning phase of the project, resulting in subsequent changes in the design; misunderstanding by SAH employees and patients of operational requirements which could impact the

contractors' work; and lack of proper integrated transition activities causing delays on the project. We found that management mitigation actions were defined at the onset of the project to address these risks, and that a communication plan was developed and updated as needed.

Our consultations revealed that communication needs were reassessed throughout the project, and integrated into the SAH communication plan and strategy. Several means were used to identify communication requirements, such as, individual consultations, work sessions with interdisciplinary representatives from SAH sectors and the unions, and with individuals nominated as patients' representatives.

4.10.1.2 Audit Criteria: Funding requirements and source of funds for internal and external communications are identified.

Funding requirements and sources of funds for external and internal communications need to be identified during the planning phase of a communication management plan.

Finding

Funding requirements and source of funds for internal and external communications are identified.

The communication funding requirements are determined on an annual basis through the SAH budget exercise, and consider communication activities that will take place during the year and various promotional and communication tools. Our consultations revealed that part of the project communications are funded through the transition budget, but most of them are funded through the hospital's communication budget.

4.10.1.3 Audit Criteria: A communication plan to employees, patients, families, visitors and media is developed and is updated as needed to provide relevant information in relation to SAHMRP.

According to the *Communication Policy of the Government of Canada*, each department must elaborate a communication plan that integrates governmental and ministerial priorities, specifies the internal and external targeted population, takes into account their opinions and concerns, defines strategies, tools and responsibilities in regards to communications, and clarifies operational and resources needs.

Finding

A communication plan to employees, patients, families, visitors and media is developed and is updated as needed to provide relevant information in relation to SAHMRP.

Our consultations revealed that an integrated communication plan was put in place at the onset of the project, and was updated regularly throughout its lifecycle to help ensure communication needs and means surrounding the project were adequate

and relevant. Employees, patients, families and visitors were consulted regularly on many aspects of the project including the transition planning, change management, satisfaction with the new environments, etc.

To address communication and project risks and patients concerns throughout the project, the SAH developed some very interesting communication strategies and tools: a face-to-face communication strategy to help ensure uniform dissemination of information surrounding the project and the hospital operations, and feedback tools, such as, a suggestion box and an e-mail address to provide staff and residents with an opportunity to provide feedback regarding issues/comments they would like to put forward. According to management, the face-to-face meetings are recognized to be a very effective means for communicating and resolving issues with stakeholders.

Other different mediums, such as, the Missives, memos, newsletters, information kiosks, letter to employees and families, interactive bulletin board, intranet, focus groups, group meetings, etc. were used to help ensure that the targeted stakeholders were kept informed of the project progress on an on-going basis.

4.11 Sub-Objective 11 – Assess Sustainable Development and Environmental Protection Management

4.11.1 Summary of Findings

We expected to find the following: a sustainable development approach in accordance with VAC's *Sustainable Development Strategy (2007-2010)* and the Government of Canada directives in this regard; environmental risks being identified and mitigation actions defined; a hazardous waste management strategy being established in accordance with guidelines of the *Hazardous Wastes Management: Canadian Directions*; SAH and PWGSC's roles and responsibilities in relation to managing environmental risks being defined and documented; and measures identified in the 2002 *SAH Renovation and Expansion Environmental Assessment* report being integrated into project

The following table details our findings:

Audit Criteria	Met	Met with Exception	Not Met
1. A sustainable development approach is used under the SAHMRP and includes green procurement, decrease in paper consumption and increased waste recycling.	√		
2. The risks in relation to environmental matters are identified, and management mitigation actions are defined.	√		
3. A hazardous waste management plan is established, and hazardous waste or hazardous recycle material is directed to environmentally acceptable disposal or recovery/recycling site.	√		
4. VAC/SAH and PWGSC's responsibilities with respect to the management of environmental risks and hazardous waste are defined and documented.	√		
5. Measures identified during the environmental assessment are considered during decision-making.	√		

4.11.1.1 Audit Criteria: A sustainable development approach is used under the SAHMRP and includes green procurement, decrease in paper consumption and increased waste recycling.

According to the CEAA, an environmental assessment of a project is required to help ensure that the environmental effects of federal projects receive careful consideration. Furthermore, according to the PWGSC NPMS manuals, in order to promote sustainable development, environmental management practices of real property projects should include the anticipation and prevention of the degradation of the environmental quality (including air, water, land, natural resources, flora, fauna and humans), and should incorporate such factors into the planning and decision making processes for design, construction and maintenance activities of the project.

According to VAC's *Sustainable Development Strategy (2007-2009)* and the Government of Canada's approach in this regard, the department is expected to implement a sustainable development approach including green procurement, decrease in paper consumption and increase waste recycling.

Finding

A sustainable development approach is used under the SAHMRP and includes green procurement, decrease in paper consumption and increased waste recycling.

In accordance with the CEAA, an environmental assessment of the SAHMRP was conducted in 2002 which led to the *SAH Renovation and Expansion Environmental Assessment* report. Our consultations revealed that recommendations noted in the report were considered in subsequent project decision making. For example, several environmental risk mitigating measures were included in contractors' contract specifications.

Furthermore, our review of the *SAH 2006-2007 Annual Environmental Report* and *2007-2008 Annual Environmental Report* revealed that a sustainable development approach is also integrated in the hospital operations. An Environmental and Sustainable Development Committee is in place with the mandate to oversee the application of the *SAH Administrative Services Directorate Policies and Procedures on Managing the Environment (ADM-110)* and VAC's *Sustainable Development Strategy (2007-2010)*. The responsibilities of the Committee are to help ensure implementation the *SAH Environmental Management System*, and to promote exemplary environmental practices, such as, quantifying and improving ecological purchases, sensitizing staff to recycling and improving recycling practices, diminishing paper and water consumption, quantifying, managing and reducing construction residuals, hazardous and biomedical wastes on the SAH sites, etc.

Our consultations revealed that, throughout the project life cycle, the Transition Coordinator implemented practices where personnel were responsible to help ensure that all reusable and recyclable materials were accounted for and reused in the new facilities. When possible, communications were disseminated through electronic means to help diminish paper consumptions.

4.11.1.2 Audit Criteria: The risks in relation to environmental matters are identified, and management mitigation actions are defined.

According to the PWGSC NPMS manuals, environmental management should include the identification of environmental issues and sustainable development opportunities, and the development of a strategy to address these issues.

Finding

The risks in relation to environmental matters are identified, and management mitigation actions are defined.

Our review of the 2002 *SAH Renovation and Expansion Environmental Assessment* report and the 2001 *SAHMRP Risk Management Framework* document revealed that risks in relation to environmental and socio-economic matters, such as, air quality and noise, archeological heritage, quality of soils, waters and habitat, aquatic habitat, energy and water consumptions, workers' expositions to hazardous substances and materials, etc. were identified, and management mitigation actions were defined. We also found that environmental risks were also noted in the risk management framework prepared by PWGSC in relation to the construction packages.

Our consultations revealed that PWGSC is responsible for the implementation of the environmental risk mitigating measures. We noted that several requirements were integrated into the contractors' contract specifications to minimize these risks. For example, the tower renovation contract includes specific requirements in relation to environmental matters, such as: waste management and elimination; toxic and hazardous waste management; and the protection of the environment. Under his obligations, the contractor is also required to report on these considerations. Our consultations revealed that compliance by the contractor to the contractual environmental specifications is monitored by PWGSC.

4.11.1.3 Audit Criteria: A hazardous waste management plan is established, and hazardous waste or hazardous recycle material is directed to environmentally acceptable disposal or recovery/recycling site.

In recognition of the importance of safe management of hazardous wastes, the Government of Canada has issued the *Hazardous Wastes Management: Canadian Directions*, which recommended practices aim at reducing or eliminating the quantity of hazardous waste produced in Canada.

Finding

A hazardous waste management plan is established, and hazardous waste material is directed to environmentally acceptable disposal or recovery/recycling site.

Our consultations and review of contract documentation revealed that all construction contracts include clauses specifying expectations in relation to hazardous waste management, such as, guidelines to follow for their storage and handling, transportation, and elimination of material.

In addition, we found that controls were defined to help ensure hazardous wastes management and disposals comply with the *Hazardous Wastes Management: Canadian Directions*. For example, the contractors are required to submit to PWGSC documentation in support of proper waste disposal, such as, a duly signed expedition and work order from the waste management recognized centre as evidence that the hazardous wastes found on the construction site are handled safely and managed properly. Through his site visits, we understand the PWGSC Project Manager is also monitoring compliance by the contractor to the environmental contract specifications.

Hazardous materials such as asbestos and contaminated soils were found during the project. According to management, a plan was developed to eliminate the wastes using means that are in compliance with *Hazardous Wastes Management: Canadian Directions*.

4.11.1.4 Audit Criteria: VAC/SAH and PWGSC's responsibilities with respect to the management of environmental risks and hazardous wastes are defined and documented

Finding

VAC/SAH and PWGSC's responsibilities with respect to the management of environmental risks and hazardous wastes are defined and documented.

As documented in the 2001 *Project Management Framework* document and in the SSAs which document services to be provided by PWGSC under the SAHMRP, PWGSC is, amongst others, responsible to manage the contractors and experts contracts. The PWGSC NPMS manuals and other departmental manuals serve as the framework under which PWGSC performs project management and contract administration. According to the PWGSC NPMS manuals, promoting sustainable development is part of their project management practices under which they are expected to identify environmental issues and sustainable development opportunities, and to develop a strategy to address these issues.

Responsibilities of the contractors with respect to environmental risks and hazardous wastes are defined in the contract specifications, and PWGSC is responsible for monitoring compliance by the contractors to their contract specifications throughout the project.

Our consultations revealed that PWGSC reports to the RPD Project Director on all aspects of the project, including environmental risk assessment and management and hazardous waste strategies.

4.11.1.5 Audit Criteria: Measures identified during the environmental assessment are considered during decision-making.

According to the CEAA, an environmental assessment of a project is required prior to its inception to help ensure that environmental effects are carefully reviewed so

that the project does not cause significant adverse environmental effects. To that effect, the Act prescribes the project authority to determine ways to eliminate or minimize harmful effects through modifications to the project plan.

Finding

Measures identified during the environmental assessment are considered during decision-making.

We found that the 2002 *Renovation and Expansion Environmental Assessment* report proposed specific measures to help ensure that the project would satisfy environmental and social requirements, and that environmental risk would be minimized or eliminated throughout the project lifecycle.

We observed that the recommended measures were incorporated into the contractors' contractual obligations to help ensure operating decisions on the construction site would consider environmentally sensitive or waste management issues.

An example of environmental considerations by the construction team during the project is when contaminated soils were found prior to the new pavilion construction. Our consultations revealed that PWGSC retained the services of a laboratory to evaluate the soils, and to propose decontamination measures before authorizing the construction work. The proposed measures were integrated into the new pavilion construction contract, and contaminated soils were required to be decontaminated or transported elsewhere according to regulations prior to the start of the construction.

Other examples of how the measures identified in the 2002 *Renovation and Expansion Environmental Assessment* report were considered during decision-making are the implementation of the Vigilance Committee, and the hiring of a private firm to test the air quality on a regular basis to minimize and/or eliminate the risks of infections at all time.

4.12 Sub-Objective 12 – Assess VAC Head office Involvement in the SAHMRP

4.12.1 Summary of Findings

We expected to find that pertinent stakeholders at various levels of VAC are integrated into the consultation and decision-making process throughout the SAHMRP. Our findings are as follows:

Audit Criteria	Met	Met with Exception	Not Met
1. Pertinent stakeholders at various level of VAC are integrated into the consultation and decision-making process throughout the SAHMRP life cycle.		√	

4.12.1.1 Audit Criteria: Pertinent stakeholders at various level of VAC are integrated into the consultation and decision-making process throughout the SAHMRP life cycle.

According to the Treasury Board *Policy on the Management of Major Crown Projects*, the Project Leader who is accountable to the Deputy Minister must establish a Senior Project Advisory Committee, with membership consisting of senior representatives of departments which role is to advise the Project Leader on all aspects of the project. In addition, the Project Leader is responsible, amongst others, to interface with senior management of the sponsoring and participating departments to resolve interdepartmental issues, and is the spokesperson for the project.

Finding

Pertinent stakeholders at various level of VAC are integrated into the consultation and decision-making process throughout the SAHMRP life cycle. However, we noted that the PSC meetings did not take place every quarter as mentioned in a response by management to a recommendation in the 2006 Audit and Evaluation review report.

As explained, we found that as part of the 2001 *Project Management Framework* document, a PSC was established at the onset of the project to assist the Project Leader in reviewing the major strategic issues involved throughout the project. The committee includes several VAC key stakeholders including the VAC Deputy Minister, Senior Assistant Deputy Minister and Finance Director, and Audit and Evaluation Director General and Director.

These meetings serve as a platform to discuss the reporting of the results of project performance, including key activities, issues and related strategies and action plans. We understand that the meetings were more frequent at the beginning of the

project and became less frequent during less active phases of the project such as in 2005 while awaiting milestones decisions.

This was noted by VAC Audit and Evaluation Division in their 2006 review engagement report, and it was recommended to consider scheduling PSC meetings every three to six months. Management agreed to the recommendation and mentioned in response that formal meetings of the PSC would be convened on a quarterly basis. Our review of the PSC meetings' minutes indicate that only four meetings took place after the issuance of the 2006 review engagement report: March 28, 2007, September 30, 2007, June 2, 2008 and December 1, 2008.

Our consultations revealed that the PSC is functioning well in its coordinating capacity, and that members are generally satisfied with the level and reliability of information received for decision-making purposes. According to management, all committee members receive the quarterly reports submitted by the RPD Project Director.

In addition, VAC senior information is kept informed of the progress of the project through other means:

- The RPD Project Director sends to VAC Audit and Evaluation on a quarterly basis the following information with the progress report:
 - Copies of minutes of HMC-M, MPAC and PSC meetings;
 - Copies of minutes of the Vigilance Committee;
 - Copies of minutes of contractors' meetings;
 - Communications and memos from the SAH Executive Director; and
 - Annual financial information, including both budgeted and actual expenditures.
- The SAH monthly *Management Planning Report* (MPR) is sent to VAC Finance Directorate, and construction project costs are presented distinctly in the MPR. Transition costs are part of the SAH operating budget.
- VAC Audit and Evaluation Division requested the SAHMRP team to provide an update in 2003 and in 2006 of key items noted in the project management and monitoring framework document developed by the Audit and Evaluation Division to help ensure that SAHMRP management is consistent with the established project management framework, risk management strategies and plans, and that key project milestones and activities are completed as planned and reported.

We also found that in addition to her direct project team, the Project Leader is supported by a several SAH committees, such as, the HMC-M and the MPAC that were formed to enable the Hospital's primary stakeholders to provide feedback on the project and to help in the integration of activities.

Assistance from VAC Head office was requested only on an as needed basis. For example, the VAC Security Services were consulted prior to the acquisition of the security system.

Recommendation for Consideration in Future Projects

RFd The Project Steering Committee meetings should be scheduled every three months. (Essential)

5 Distribution

Deputy Minister
Departmental Audit Committee Members
Chief of Staff to the Minister
Senior Assistant Deputy Minister, Policy, Programs and Partnerships Branch
Assistant Deputy Minister, Service Delivery and Commemoration Branch
Assistant Deputy Minister, Corporate Services Branch
Executive Director, Sainte Anne's Hospital
Director General, Departmental Secretariat and Policy Coordination
Director General, Communications Division
Director General, Human Resources Division
Director General, Finance Division
Director General, Policy and Research
Director, Security and Real Property Services
Director, Finance at Sainte Anne's Hospital
Deputy Coordinator, Access to Information and Privacy
General Counsel, Legal Services
Office of the Comptroller General
Principal, Office of the Auditor General
Program Analyst, Treasury Board of Canada Secretariat

Appendix A: Audit Sub-Objectives and Audit Criteria

Audit Sub-Objectives	Applicable Audit Criteria
<p>1. Assess compliance with Treasury Board submission.</p> <p>Objective 1.1: Determine if processes and controls are in place to help ensure compliance with Treasury Board guidelines concerning Effective Project Approval.</p>	<ul style="list-style-type: none"> • The objectives and outcome of the modernization project are documented and communicated. • The risks and management mitigation actions relating to objectives are identified and monitored. • Conditions of the Effective Project Approval and Revised Effective Project Approval of December 2006 are met (scheduling, costing, etc.).
<p>2. Assess the financial management practices and delegated authorities surrounding to the SAHMRP.</p> <p>Objective 2.1: Determine if financial management practices, including budgetary control and cost management policies and procedures are defined and communicated properly.</p> <p>Objective 2.2: Determine if key controls over the SAHMRP contracting process are identified and documented.</p> <p>Objective 2.3: Determine if VAC/SAH delegated authorities in relation to expenditure initiation, contracting, performance certification and payment of expenditures related to the SAHMRP are defined and communicated properly.</p>	<ul style="list-style-type: none"> • Project budgets reflect the total expected costs and lifespan of the project, and incorporate contingencies for unexpected costs and cost overruns. • An accounting system is in place to track renovation and transition project costs. • Quarterly reporting and monitoring of project costs is performed, with analysis of variances, required corrective actions, and impact on forecasted costs. • Options are developed in the event of possible shortfalls in the contingency funds. • Key controls over the contracting process (authorization of expenditures, contracting, account verification, performance certification and payment of expenditures) are identified and documented. • Delegated authorities for financial transactions related to the SAHMRP are defined and consider segregation of duties (expenditure initiation, contracting, performance certification and payment of expenditures).

Audit Sub-Objectives	Applicable Audit Criteria
<p>3. Assess the rigor applied in the commitment and disbursement of public funds.</p> <p>Objective 3.1: Determine if VAC/SAH and PWGSC's roles and responsibilities in relation to account verification, performance certification and payment of expenditures are defined and documented.</p> <p>Objective 3.2: Determine if expenditure initiation, account verification, performance certification and payment of expenditures are in accordance with the directives set out in the Financial Administration Act Sections 32, 33 and 34, VAC <i>Financial Spending Authority</i> and VAC <i>Delegated Authorities Manual</i>.</p> <p>Objective 3.3: Determine if non-integrated items were recorded under the proper transition accounts.</p>	<ul style="list-style-type: none"> • VAC/SAH and PWGSC's roles and responsibilities in relation to account verification, performance certification and payment of expenditures are defined and documented. • Expenditure initiation, account verification, performance certification and payment of expenditures are in accordance with the directives set out in the Financial Administration Act Sections 32, 33 and 34, VAC <i>Financial Spending Authority</i> and VAC <i>Delegated Authorities Manual</i>. • Non-integrated items (furnishings, computer systems, interior decoration, etc.) are recorded under the proper transition accounts.
<p>4. Assess the extent to which the progress of activities is in compliance with the plans, schedules and budgets as revised in December 2006.</p> <p>Objective 4.1: Determine if procedures are established to help ensure that the progress of SAHMRP activities is in accordance with the plans, schedules and budget.</p> <p>Objective 4.2: Determine if the progress of SAHMRP activities follows the plans, schedules and budget.</p>	<ul style="list-style-type: none"> • VAC/SAH and PWGSC's responsibilities with respect to the management of plans, schedules and budgets are documented. • Assessment of project status, progress against scheduled milestones/delivery dates, reasons for delays, required remedial actions and impact analysis on budget and project activities is performed on a monthly basis. • Cost overruns, change orders and missed milestones are examined. • A change order process is defined, including rationale for change order, review, approval, log, verification and impact analysis on project activities and lifecycle.

Audit Sub-Objectives	Applicable Audit Criteria
	<ul style="list-style-type: none"> • The progress of activities is in accordance with the plans, schedules and budgets and this progress is regularly communicated to VAC stakeholders. • An intervention system (intervention group with terms of reference) has been developed to minimize the impact of any possible delays on clients, visitors and hospital staff.
<p>5. Evaluate the integrity and accuracy of project reports.</p> <p>Objective 5.1: Determine if controls are identified to help ensure the project reports are based on accurate and factual information.</p> <p>Objective 5.2: Determine if project reports and the information presented in the latter are accurate.</p>	<ul style="list-style-type: none"> • Controls are identified to help ensure information presented in the project reports is accurate. • Financial information provided in the quarterly project reports correspond to data as per accounting system • Facts reported in the quarterly project reports are consistent with information in the minutes of the project committees' meetings.
<p>6. Assess the overall project management and governance framework.</p> <p>Objective 6.1: Determine if the management of the SAHMRP complies with guidelines of the Treasury Board policies on the <i>Management of Major Crown Projects, Project Management, and Policy on Management, Resources and Results Structures</i>.</p>	<ul style="list-style-type: none"> • A project framework is established with governance structure, and processes, policies and procedures in relation to project integration, cost management, project schedule management, contract administration, quality management, risk management, information system, human resources and environmental, health, safety and security. • Roles, responsibilities and accountabilities of the SAHMRP/PWGSC management team and committees are defined and documented. • The governance structure includes: a Project Leader directly accountable to the Deputy Minister; a Senior Project Manager reporting to the Project Leader responsible for the day-to-day management of the project; and a Senior Project Advisory Committee.

Audit Sub-Objectives	Applicable Audit Criteria
	<ul style="list-style-type: none"> • Project plans include targeted milestones and deliverables, including the amount of funding secured. • The Master Project Schedule is reviewed on a monthly basis and adjusted as required. Impacts on forecasted funding, costs, commitments and other requirements are identified, and options are developed as needed. • A quality assurance plan is developed and documented to monitor quality issues that may impact the achievement of the project objectives and/or result in changes in scope, and allow for sufficient and timely inspections and resolution of problems throughout the life of the project. • PWGSC and consultants' quality assurance activities are monitored by the SAHMRP Project Director. • Global and annual contractor performance targets and indicators address cost, time, quality and scope. • Performance indicators are reviewed regularly against performance targets, and project plans are adjusted accordingly. • The project framework allows for quarterly reporting of project costs, project status, progress and issues to VAC/SAH and SAHMRP management.

Audit Sub-Objectives	Applicable Audit Criteria
<p>7. Assess human resources management.</p> <p>Objective 7.1: Determine if the risks in relation to human resources are identified and management mitigation actions are defined.</p> <p>Objective 7.2: Determine if a defined and known support program is established to support employees working in areas under construction or renovated under the SAHMRP.</p> <p>Objective 7.3: Determine if a contingency plan is in place to manage absenteeism/staff shortages as a result of the SAHMRP.</p>	<ul style="list-style-type: none"> • The risks in relation to human resources are identified and management mitigation actions are defined. • A support program including reporting of complaints is established to deal with physical, moral and psychological problems resulting from the SAHMRP. • A plan is in place to manage absenteeism/staff shortage problems as a result of the SAHMRP. • A plan and mitigation around succession planning have been developed.
<p>8.0 Assess the risk management practices and plans related to the SAHMRP.</p> <p>Objective 8.01: Determine if the risks related to the SAHMRP are identified and management mitigating actions are defined.</p> <p>Objective 8.02: Determine if an integrated approach is used to manage risks, and if changes in risks and issues are reflected in the risk management framework throughout the life of the project.</p>	<ul style="list-style-type: none"> • A risk management framework for the SAHMRP is established, and includes the identification of short-term and long-term operation risks and management mitigation actions. • An integrated approach is used to manage risks where impact analyses of changes and issues are performed to identify changes in risks on all project components. • Changes in risks and required mitigating actions are reflected in the risk management framework throughout the life of the project. • Required action plans are monitored by the SAHMRP Project Director.
<p>8.1 Assess the management of occupational hygiene, health and safety risks.</p> <p>Objective 8.11: Determine if the risks in relation occupational hygiene, health and safety are identified and management</p>	<ul style="list-style-type: none"> • The risks in relation to occupational, health and safety are identified and management mitigation actions are defined. • VAC/SAH and PWGSC's roles and responsibilities with regard to the management of occupational hygiene, health and safety risks related to the SAHMRP are defined and documented.

Audit Sub-Objectives	Applicable Audit Criteria
<p>mitigation actions are defined.</p> <p>Objective 8.12: Determine if VAC/SAH and PWGSC'S roles and responsibilities with regard to the management of occupational hygiene, health and safety risks related to the SAHMRP are defined and documented.</p> <p>Objective 8.13: Determine if measures in relation to service interruptions and emergencies are in accordance with the Government of Canada <i>Occupational Health and Safety Regulations</i> and VAC <i>Environmental, Health and Safety Policy</i>.</p>	<ul style="list-style-type: none"> • An occupational hygiene, health and safety program is established with: an inspector; a committee with defined responsibilities; a tracking system of frequency and severity of injuries for comparison purposes; measures to minimize the risk of discomfort and injuries to employees, patients, visitors and contractors during the renovation/construction and the transition activities; receipt and analysis of complaints; and communication of relevant hygiene, health and safety requirements. • A written advance notice of 72 hours is sent to hospital staff, patients, visitors and management of any service interruptions (power, water, fire protection, etc.) to minimize any potential inconvenience or harm to these persons. • In case of a fire or an emergency related to the SAHMRP, the project management team informs the Deputy Minister's Office and the Emergency Measures Organization, and emergency measures are put in place to control and minimize risks.
<p>8.2 Assess management of risks relating to site protection and material management.</p> <p>Objective 8.21: Determine if the risks in relation to site protection and material management are identified and management mitigation actions are defined.</p> <p>Objective 8.22: Determine if physical security and restricted area plans are established and consider risks and threats.</p> <p>Objective 8.23: Determine if commissioning of new equipment was performed.</p>	<ul style="list-style-type: none"> • The risks in relation to site protection and material management are identified, and management mitigation actions are defined. • A physical security and a restricted area access plan are established and consider risks and threats. • Enhanced reliability check is required for all construction site employees who have access to VAC/SAH buildings where sensitive information and goods belonging to SAH and VAC are located; controlled access is required for employees without the required security clearance. • An action plan is developed for the commissioning of new equipment and sub-systems.

Audit Sub-Objectives	Applicable Audit Criteria
<p>9. Assess contract management.</p> <p>Objective 9.1: Determine if VAC/SAH and PWGSC's roles and responsibilities relating to contract administration and management are defined and documented.</p> <p>Objective 9.2: Determine if contract administration and management are in accordance with Treasury Board <i>Contracting Policy</i> and VAC <i>Manager's Reference Guide to Contracting for Services</i>.</p> <p>Objective 9.3: Determine if a contractor performance control system is established and applied.</p>	<ul style="list-style-type: none"> • VAC/SAH and PWGSC's roles and responsibilities with respect to contract administration and management are defined and documented. • Contract administration and management including definition of goods or services specifications; appropriate management of contract amendments, complete contract file documentation and performance monitoring are in accordance with Treasury Board <i>Contracting Policy</i> and VAC <i>Manager's Reference Guide to Contracting for Services</i>. • A post-contract performance evaluation is performed to assess the performance of the contractor against the terms and conditions set out in the contract and performance indicators are established.
<p>10. Assess communications management.</p> <p>Objective 10.1: Determine if communication risks are identified and management mitigation actions are defined.</p> <p>Objective 10.2: Determine if funding requirements and source of funds for internal and external communications are identified.</p> <p>Objective 10.3: Determine if a communication plan to employees, patients, families, visitors and media is developed and is updated as needed to provide relevant information in relation to SAHMRP.</p>	<ul style="list-style-type: none"> ▪ The risks in relation to communication for the SAHMRP are identified, and management mitigation actions are defined. ▪ Funding requirements and source of funds for internal and external communications are identified. ▪ A communication plan to employees, patients, families, visitors and media is developed and is updated as needed to provide relevant information in relation to SAHMRP.
<p>11. Assess sustainable development and environmental protection management.</p> <p>Objective 11.1: Determine if the approach used by SAHMRP</p>	<ul style="list-style-type: none"> ▪ A sustainable development approach is used under the SAHMRP and includes green procurement, decrease in paper consumption and increased waste recycling. ▪ The risks in relation to environmental matters are identified,

Audit Sub-Objectives	Applicable Audit Criteria
<p>management for sustainable development and environmental protection is in accordance with VAC's <i>Sustainable Development Strategy (2007-2009)</i> and the Government of Canada's approach in this regard.</p> <p>Objective 11.2: Determine if environmental risks are identified and management mitigation actions are defined.</p> <p>Objective 11.3: Determine if a hazardous waste management system is in place, and is applied in accordance with the Government of Canada's directions for the management of hazardous wastes and the Canadian Environmental Protection Act.</p> <p>Objective 11.4: Determine if VAC/SAH and PWGSC's responsibilities with respect to the management and control of environmental risks and the management of hazardous wastes are defined and documented.</p> <p>Objective 11.5: Determine if the measures identified during the environmental assessment are followed-up.</p>	<p>and management mitigation actions are defined.</p> <ul style="list-style-type: none"> ▪ A hazardous waste management plan is established, and hazardous waste or hazardous recycle material is directed to environmentally acceptable disposal or recovery/recycling site. ▪ VAC/SAH and PWGSC's responsibilities with respect to the management of environmental risks and hazardous waste are defined and documented. ▪ Measures identified during the environmental assessment are considered during decision-making.
<p>12. Assess VAC head office involvement in the SAHMRP.</p> <p>Objective 12.1: Determine if pertinent stakeholders at various levels of VAC are integrated into the consultation and decision-making process throughout the SAHMRP.</p>	<ul style="list-style-type: none"> ▪ Pertinent stakeholders at various level of VAC are integrated into the consultation and decision-making process throughout the SAHMRP life cycle.

Appendix B: Audit Criteria in Relation to Compliance with Government of Canada and VAC Commitment and Disbursement of Funds Policies and Procedures

No.	Audit Citerions	Compliance Rate
1	FAA Section 32 certification by authorized delegated authority as per VAC <i>Financial Spending Authority</i>	93.80%
2	FAA Section 34 certification by authorized delegated authority as per VAC <i>Financial Spending Authority</i>	96.90%
3	FAA Section 34 certification was done in accordance with related directive	99.22%
4	FAA Section 33 certification by authorized delegated authority as per VAC <i>Financial Spending Authority</i>	99.22%
5	Proper performance of Section 33 after Section 34 certification by the delegated authority as per VAC <i>Financial Spending Authority</i>	93.02%
6	Payment agrees to invoice amount	100.00%
7	Proper recording of contract payments	94.57%

**Appendix C: Audit Criteria in Relation to Contract Administration/Management as Per Treasury Board
Contracting Policy and Related Guidelines**

No.	Audit Criterion	Compliance Rate
1	Requirements are properly defined	100 %
2	Contracting over \$5,000 was delegated to PWGSC	100 %
3	A contract is in place with proper terms and conditions	100 %
4	Appropriate management of contract amendment	100 %
5	Proper monitoring of contract performance	100 %
6	Proper contract documentation	100 %

Appendix D: Management Action Plans

Audit Recommendations	Management Response	Actions to be Taken	Target Date	Office of Primary Interest
1. VAC Finance Directorate should review the department's <i>Financial Spending Authority</i> with respect to the role of clerks in Section 34 certification in light of the Treasury Board <i>Policy on Delegation of Authorities</i> , and should communicate required changes to SAH.	The VAC Director General, Finance is reviewing the department's Financial Spending Authority with respect to the role of clerks in Section 34 certification in light of the Treasury Board Policy on Delegation of Authorities. Upon completion of this review, the VAC Director General, Finance will communicate any required changes to Ste Anne's Hospital.		October 2009	VAC Director General, Finance
2. The SAH Finance Director should clearly communicate the necessity for proper FAA Sections 32, 33 and 34 certifications. Evidence of an employee being in acting position should be retained to support the entitled delegated authority.	Management agrees with the recommendation and will take the action required to maintain and increase the high level of compliance that was noted further to the audit of the selected samples. It should be noted that all budget managers in those positions on January 1, 2006, as well as those in acting positions of more than four months, had successfully completed the on-line assessments for delegated authorities by December 31, 2006, in order to keep their delegations	Training sessions on financial delegations will be provided to SAH managers.	September & October 2009	Director, Finance, SAH
		New managers who are responsible for managing a budget must first successfully complete the "Essentials of Managing in the Public Service" course and all four modules of the on-line assessment on delegated financial authorities before they can initiate expenditures and sign off on documents under sections 32 and 34 of the FAA.	Ongoing	
		Signature specimen cards are reviewed annually. The next review is scheduled for October 2009. All documentary evidence is kept in a file in order to corroborate the authorities	Annual Ongoing	

Audit Recommendations	Management Response	Actions to be Taken	Target Date	Office of Primary Interest
		<p>delegated to an employee filling a position in an acting capacity.</p> <p>Refresher training sessions on the delegation of financial authorities were provided to the staff of the SAH Finance Directorate in June 2009.</p>	Completed	
<p>3. The SAH Administrative Services Director should define the roles and responsibilities of the SAH Technical Services and SAH Security Services over the security system implementation and maintenance so that both parties clearly understand their respective roles.</p>	<p>Management agrees with the recommendation.</p> <p>The Director of Administrative Services, who has only been on the job since late May 2009, is working closely with representatives from Technical Services and Security to draft the tender specifications for the preventive maintenance and inspection of the integrated security system so that the contract can be awarded as soon as possible.</p> <p>At the same time, overall system operation is being studied and analyzed in order to define the roles and responsibilities of the two departments involved, i.e. Technical Services and Security, and provide for a modus operandi that will allow both departments to work together, with a clear understanding of and respect for their respective roles, in order to activate and maintain the new integrated security system, which is so critical and important for the hospital.</p>	<p>Call for tenders and contract award for the preventive maintenance and inspection of the integrated security system.</p> <p>Drafting and publication of a handbook defining and clearly explaining the roles and responsibilities of Technical Services and Security with regard to the preventive maintenance and inspection of the integrated security system.</p>	October 31, 2009	Director, Administrative Services, SAH