



Royal Canadian Mint

Special Examination Report—2014



Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

OAG-BVG

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Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

To the Board of Directors of the Royal Canadian Mint:

We have completed the special examination of the Royal Canadian Mint in accordance with the plan presented to the Audit Committee of the Board of Directors on 22 August 2013. As required by Section 139 of the *Financial Administration Act* (FAA), we are pleased to provide the attached final special examination report to the Board of Directors.

I would like to take this opportunity to express my appreciation to the Board members, management, and the Corporation's staff for the excellent cooperation and assistance offered to us during the examination.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Nancy Y. Cheng".

Nancy Y. Cheng, FCPA, FCA
Assistant Auditor General

OTTAWA, 10 June 2014

Table of Contents

Special Examination Opinion	1
Overview of the Royal Canadian Mint	5
Focus of the special examination	6
Observations and Recommendations	6
Corporate governance	6
The Board of Directors has many elements of a good governance framework	7
Strategic direction	8
The Corporate plan sets strategic objectives for business lines and key divisions	9
Risk management practices are not aligned well with the Mint's Enterprise Risk Management Policy	9
The Corporation has processes in place to measure its performance and communicate results	12
Human resource management	13
The Corporation continues to develop practices and tools for human resource management	13
Manufacturing operations and supporting practices	15
Manufacturing operations at the Ottawa and Winnipeg plants are well managed	16
Insufficient direction and certain procurement and contracting practices for non-metals expose the Mint to various risks	17
Precious-metal hedging strategies and practices mitigate price volatility	18
Some cost allocations do not accurately reflect the cost of support for business lines	19
Accounting reconciliation of precious metals requires continued attention	20
The business development systems and practices of the Foreign Coinage business line contain weaknesses	21
Key controls in managing and administering travel and hospitality activities are not operating effectively	25
Research and development	27
Research and development activities are not managed in a structured fashion	28
Health, safety, and the environment	29
An environmental management system is in development	30
Health and safety practices and an Emergency Preparedness and Response Framework have gaps	31
Conclusion	34
About the Special Examination	35
Appendix	
List of recommendations	39

Special Examination Opinion

To the Board of Directors of the Royal Canadian Mint

Our opinion 1. In our opinion, based on the criteria established, there is reasonable assurance that, during the period covered by the examination, there were no significant deficiencies in the Royal Canadian Mint's systems and practices that we selected for examination. The Royal Canadian Mint (the Corporation) has maintained these systems and practices in a manner that provides it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

Findings that support our opinion

2. **Corporate governance.** We found that the Corporation has many elements of a good governance framework that meets the expectations of best practices in board stewardship, shareholder relations, and communications with the public.

3. **Strategic direction.** We found that the Corporation specifies strategic direction and, overall, has specific and measurable goals and objectives to achieve its mandate. The Corporation has a sound enterprise risk management policy, but it cannot demonstrate that the policy has been implemented systematically, especially at its business line and divisional levels. At the corporate level, the Corporation monitors, measures, and reports on the achievement of its goals, objectives, and mandate. We noted that the development of a corporate social responsibility framework has been slow and that, consequently, specific corporate targets and performance measures have not yet been established.

4. **Human resource management.** Generally, we found that the Corporation has systems and practices in place to manage human resources in a manner that provides it with the human resource capacity and the work environment needed to achieve its goals and objectives. However, we noted that certain systems and practices need further development and that the Corporation should improve its workforce planning.

5. Manufacturing operations and supporting practices. We found that the Corporation has manufacturing systems and practices that are designed, implemented, and monitored in a manner that safeguards and controls assets, enables economical and efficient use of resources, and results in effective operations and the achievement of its mandate. However, we also found a number of supporting practices that should be improved:

- We noted that certain corporate cost-allocation practices do not accurately reflect the costs of some activities for business lines and could, therefore, adversely affect pricing and decision making.
- In the management of the Foreign Coinage business line, we found that systems and practices related to business development should be strengthened. These include articulating the sales strategy, improving the costing system for bid quotations, and capturing and incorporating intelligence gained during sales trips. The Corporation should also improve its systems and practices related to the analysis of lessons learned on selected projects.

We also noted the following areas of particular concern:

- We found that some procurement and contracting activities for goods and services not related to metals lack sufficient guidance, and that weaknesses in existing controls expose the Corporation to various risks.
- We found that documentation related to travel and hospitality activities did not provide sufficient information to assess whether related expenses were reasonable. We also found that key controls for managing these activities were not operating effectively.

6. Research and development. We found that the Corporation identifies and selects research and development activities to support achieving its objectives within the scope of its mandate. Nevertheless, we noted that project selection and management of the Research and Development Division require more formalization, including establishing an operational plan to set measurable goals and objectives for Division-specific activities. We also noted that existing processes focus on the technical delivery of products and technologies and do not place significant emphasis on financial modelling, which would help optimize the use of corporate resources.

7. Health, safety, and the environment. Overall, we found that the Corporation is focusing on addressing environmental compliance requirements. The Corporation has recently identified and assessed its environmental risks as part of its effort to develop an environmental management system (EMS). As the EMS is still in development, the Corporation needs to evaluate comprehensively whether existing programs and operational controls appropriately mitigate all those risks. We found that systems and practices to mitigate occupational health and safety risks pertaining to the handling of hazardous substances and certain specialized equipment are in various stages of development and implementation. We found that the Corporation's practices related to hazardous chemicals are generally sound. However, those that apply to radiation safety are less advanced, as radiation safety guidance and training have yet to be provided and administrative requirements are yet to be completed. We also found that the Corporation has identified and is now addressing several key gaps related to compliance with applicable health and safety laws and regulations. We note that the Corporation needs to ensure that its health, safety, and emergency response systems and practices identify and address all remaining risks, and that it needs to establish a systematic monitoring regime.

**Findings, recommendations,
and responses**

8. The rest of this report provides an overview of the Corporation and more detailed information on our examination findings and recommendations. The Corporation agrees with all of the recommendations. Its detailed responses follow the recommendations throughout the report.

What the Corporation is required to do

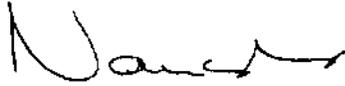
9. Under section 131 of the *Financial Administration Act* (FAA), the Royal Canadian Mint is required to maintain financial and management control and information systems and management practices that provide reasonable assurance that its assets are safeguarded and controlled; its financial, human, and physical resources are managed economically and efficiently; and its operations are carried out effectively.

10. Section 138 of the FAA requires the Corporation to have a special examination of these systems and practices carried out at least once every 10 years.

**What the Office of the Auditor General
is responsible for**

11. Our responsibility is to express an opinion on whether there is reasonable assurance that during the period covered by the examination—from January 2013 to December 2013—there were no significant deficiencies in the Corporation’s systems and practices that we selected for examination.

Signature and date



Nancy Y. Cheng, FCPA, FCA
Assistant Auditor General for the Auditor General of Canada

16 May 2014
Ottawa, Canada

Overview of the Royal Canadian Mint

12. The Royal Canadian Mint (the Corporation, or the Mint) is a Crown corporation owned solely by the Government of Canada. It formally reports to Parliament through the Minister of Finance by submitting annual reports on its operations. The *Royal Canadian Mint Act* requires the Corporation to mint coins in anticipation of profit and carry out other related activities (Exhibit 1).

13. As part of its mandate, the Mint produces and distributes coins for circulation and for use in trade and commerce, ensures an adequate supply of coins in the correct denominations throughout Canada, and provides advice to the Government of Canada on all matters related to coinage. These functions are served by its Canadian Circulation business line.

14. The Mint's other business lines carry out a variety of activities:

- Numismatics and Collectibles—produces and sells innovative, high-quality, limited-mintage collectable coins and medals to customers in Canada and around the world.
- Foreign Coinage—produces circulation coins, blanks, medals, medallions, and tokens for customers around the world. Other services to the global minting community include licensing of a number of Mint technologies and technical services based on products and processes developed by the Mint.

Exhibit 1 The Mint realized record financial performance since our 2005 special examination (\$ millions)

Business line	2005	2006	2007	2008	2009	2010	2011	2012	2013
Canadian Circulation	\$111	\$131	\$174	\$186	\$185	\$130	\$137	\$153	\$133
Numismatics and Collectibles	\$57	\$57	\$56	\$67	\$72	\$71	\$93	\$145	\$167
Foreign Coinage	\$44	\$25	\$115	\$99	\$65	\$40	\$34	\$30	\$78
Bullion, Refinery, and Exchange Traded Receipts	\$224	\$281	\$287	\$1,040	\$1,712	\$1,969	\$2,895	\$2,255	\$2,997
Total revenue	\$436	\$494	\$632	\$1,392	\$2,034	\$2,210	\$3,159	\$2,583	\$3,375
Net income	\$9	\$11	\$17	\$38	\$49	\$34	\$31	\$30	\$36
Dividend	\$1	\$1	\$1	\$1	\$5	\$7	\$10	\$10	\$10
Employees	732	773	779	865	904	875	1,042	1,140	1,255

Sources: Annual reports from the Royal Canadian Mint from 2005 to 2013.

- Bullion, Refinery, and Exchange Traded Receipts (ETRs)—refines and produces investment-type precious-metal products, such as the Maple Leaf gold and silver bullion coins, gold kilo bars, trade bars, and gold wafers. This business line also manages the ETRs that allow investors to buy and sell gold and silver on the Toronto Stock Exchange. Other services in this business line include gold and silver refining, assaying (that is, investigating the content of materials), and providing secure storage.

15. The Royal Canadian Mint primarily operates out of facilities in Ottawa and Winnipeg.

Focus of the special examination

16. Our objective for this audit was to determine whether the systems and practices we selected for examination at the Royal Canadian Mint were providing it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. For the examination, we selected systems and practices in the following areas: corporate governance; strategic planning, risk management, and performance measurement and reporting; human resource management; manufacturing operations and supporting practices; research and development; and health, safety, and the environment.

17. Further details on the audit objectives, systems and practices that we selected for examination, period of the audit, and criteria are provided in **About the Special Examination** at the end of the report.

Observations and Recommendations

Corporate governance

18. Corporate governance refers to the structures, and systems and practices for overseeing the direction and management of an organization. Sound practices in corporate governance are essential for the Royal Canadian Mint (the Corporation, or the Mint) to be able to ensure that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

19. We examined whether the Mint has adopted an effective governance framework that incorporates best practices in its Board of Directors' stewardship, shareholder relations, and communications with the public.

20. We found that the Corporation has many elements of a good governance framework that meets the expectations of best practices in board stewardship, shareholder relations, and communications with the public.

The Board of Directors has many elements of a good governance framework

21. The Board of Directors consists of 10 directors, including the President and Chief Executive Officer. This number is within the range required by the *Royal Canadian Mint Act*. The Board is supported by a number of standing and ad hoc subcommittees whose roles and responsibilities are described in their respective terms of reference.

22. The Board has developed and maintains a Board Competency Profile that describes, among other things, the roles and responsibilities and necessary competencies, skills, and experience of its directors. This profile is periodically updated and shared with the Minister of Finance. The directors declare annually any potential conflicts of interest and refrain from participating in Board discussions when there is a potential for conflict of interest.

23. New directors participate in an orientation session and keep abreast of developments in corporate governance and the minting industry by participating in various conferences and workshops. The Board obtains information about the Mint from management, independent internal auditors, external auditors, and consultants. The Board has asserted that it receives the information that it requires.

24. To monitor its own effectiveness, the Board performs an annual self-assessment and provides a summary of the assessment to the Minister. Various standing committees also perform periodic self-assessments.

25. When directors' terms are set to expire, the Board recommends nominees to the Minister. Terms of three critical positions are expiring in 2014: those of the President and Chief Executive Officer, the Chairperson of the Board, and the Chairperson of the Audit Committee. Initiatives have begun to address the first two expiries, according to the practice of submitting nominations within six months before terms are set to expire.

26. The Mint has various mechanisms in place to support ethics and values, such as its code of conduct, requirements to declare conflicts of interest, and occasional training for selected personnel on business ethics. However, we found that the Mint has not yet fully analyzed the requirements of the *Values and Ethics Code for the Public Sector* to

ensure that all the required elements are incorporated into its internal policies. We encourage the Mint to undertake appropriate and timely steps to update its practices to ensure that it is fully compliant with the Code.

27. The Corporation communicates with stakeholders in various forms. For example, it holds annual general meetings and makes annual reports available to Parliament and, ultimately, to the public through its website. The website also includes the Mint's news releases as well as other corporate information, such as the quarterly financial statements and proactive disclosure of the travel and hospitality expenses incurred by officers and directors.

Strategic direction

28. We examined several elements of the Royal Canadian Mint's strategic direction: strategic planning, risk management, and performance measurement and reporting.

- Strategic planning defines an organization's long-term direction and priorities. It is important for ensuring that a corporation's objectives, strategies, and the way it allocates resources support the corporate mandate. This process involves an organization assessing and adjusting its strategic direction in preparation for, and in response to, changes in the organizational environment and the risks the organization faces.
- Risk management, which is integral to this process, ensures that the organization has a comprehensive understanding of the internal and external factors affecting the achievement of its objectives. Risk management consists of identifying and assessing risks, as well as a process for documenting the steps that management has taken to mitigate them.
- Performance measurement and reporting are important steps for making informed decisions, supporting management accountability, and demonstrating the extent to which the organization has achieved the expected results set out in its strategic plan.

29. We found that the Corporation specifies strategic direction and, overall, has specific and measurable goals and objectives to achieve its mandate. The Corporation has a sound enterprise risk management policy, but it cannot demonstrate that the policy has been implemented systematically, especially at its business line and divisional levels. At the corporate level, the Corporation monitors, measures, and reports on the achievement of its goals, objectives, and mandate. We noted that the development of a corporate social

responsibility framework has been slow and that, consequently, specific corporate targets and performance measures have not yet been established.

The Corporate plan sets strategic objectives for business lines and key divisions

30. The Mint's 2014–2018 corporate plan sets out its mandate and mission, and presents its strategic objectives and corresponding performance targets and indicators. The document takes into consideration the Mint's internal and external environments, and its strengths and weaknesses. The objectives and strategies in the corporate plan serve as a basis for developing the operational plans for each of the Mint's business lines and key divisions. In general, the targets defined in the corporate plan are outlined in the existing operational plans. The Board of Directors is involved in various stages of the strategic planning process and approves the plan annually. In 2005, we recommended that the three key corporate objectives be clearly linked to the operational objectives of each business line. The Mint's current four corporate objectives have been carried forward to the business lines and key divisions, each of which identified a number of strategic sub-objectives that detail how they contribute to meeting the corporate objectives.

31. We found that operational plans existed for each of the business lines and had general links to the objectives in the corporate plan. However, some divisions of the Mint, such as information technology and research and development, did not have operational plans. Without these plans, the activities of these divisions might not align with corporate objectives, and might not be carried out in an efficient, economical, and effective manner. We encourage the Mint to develop, for all divisions, strategic and operational plans that align with both the corporate and divisional priorities.

Risk management practices are not aligned well with the Mint's Enterprise Risk Management Policy

32. In a special examination we conducted in 2005, we recommended that the Mint develop a comprehensive plan for managing its most significant risks. Management accepted the recommendation and committed to applying a risk management process framework in a formalized, coordinated, and well-communicated fashion.

33. Risk policies and frameworks. The Mint developed its Enterprise Risk Management Framework in 2007, with an

accompanying narrative report. The Mint's Enterprise Risk Management Policy was put in place in 2009. These documents included all the required elements for a comprehensive and systematic approach to managing and documenting risks—including identifying risks, defining tolerances, developing and evaluating mitigation strategies and controls, reassessing and monitoring periodically, and assigning responsibility. The framework and policy also aimed to promote these practices at the corporate, business, and divisional levels.

34. While the original framework and the policy provided a basis for sound risk management systems and practices, we found that they have not been effectively implemented or documented. Weaknesses are more prominent at the business line and divisional levels. Moreover, the framework has recently been simplified and does not meet the policy objective of providing guidance to stakeholders and establishing a common understanding of the required approach to risk management at the Mint.

35. Corporate risks. Two separate key practices were used for identifying corporate risks at the Mint. The first is the spring corporate planning retreat, where the Board of Directors and management discuss the overall strategic direction of the Mint and the risks to achieving its objectives. The second key practice is an annual anonymous survey, for which managers and supervisors across the organization are asked to provide their assessments of various risks. The last survey was conducted in 2012; the results, including the risk profile, have not been presented to the Board. The Mint could not demonstrate that management has accounted for differences in the feedback generated through these two practices or has made the Board of Directors aware of these differences.

36. Management presents a quarterly enterprise risk management report to the Audit Committee of the Board of Directors. The report demonstrates how the Mint is performing relative to predetermined key risk or performance indicators and includes comparative results of the previous four quarters. We found that there is no clear mapping of the indicators in this report to the risks reported in the corporate plan. For example, the Mint acknowledges broadly that its operations and business activities present a “variety of risks related to health and safety, security and environment,” but the quarterly risk management report does not contain related indicators. See our recommendation in paragraph 38.

37. Business line and divisional risks. We also assessed how risk management was performed at the business line and divisional levels, because this is an important input into corporate risk assessments. We found that risks are being discussed for the business lines at the executive level during quarterly business reviews; however, there is no documentation to illustrate that risk management principles have been systematically applied as required by the Mint's policy. A few examples demonstrate that risk management principles are not being applied in several areas:

- Sound management of information technology practices require assessments (such as threat and risk assessments and privacy impact assessments), as we recommended in our 2005 special examination. Threat and risk assessments have not been performed for the corporate information technology environment or for the mission-critical systems we looked at. A privacy impact assessment that we expected to see in one of the mission-critical systems we examined had not been performed.
- Risk assessments for human resources are performed by the Human Resource Division, primarily in relation to key staff within the Division itself, rather than for the Mint as a whole.
- The Mint's corporate-level risk mitigating plans (such as disaster recovery plans and business continuity plans) are outdated. The updating of these plans had been recommended by the Mint's Internal Audit function in 2010, but progress has been slow.

38. Recommendation. The Royal Canadian Mint should take steps to implement its Enterprise Risk Management Policy effectively. These steps include developing the basis for periodic completion of risk assessments, which consists of identifying risks, preparing risk profiles and implementing appropriate risk responses, and reporting on the effectiveness of risk responses. This implementation should take place at the corporate, business line, and divisional levels, and include identifying owners of key risks and clarifying and enforcing roles and responsibilities.

The Corporation's response. Agreed. Management of the Royal Canadian Mint firmly supports effective risk management across the Corporation. While risks are routinely discussed and considered in the Corporation's management practices, the Corporation will undertake additional measures to clearly define required documentation to demonstrate implementation of its Enterprise Risk Management Policy.

In early 2014, a corporate risk profile was created to assess risks to corporate objectives. In addition, risk owners were identified for key risks and roles and responsibilities will be increasingly clarified and enforced.

Throughout the remainder of 2014, the Corporation will enhance current practices through increased standardization in risk assessments and documentation. It will also revise the reporting formats of presentations to the Executive Committee and the Audit Committee to provide the basis for evaluation of control activities and effectiveness of risk responses, thus ensuring that risks are being properly managed.

The Corporation has processes in place to measure its performance and communicate results

39. To ensure effective management, a corporation must measure its performance. A well-designed performance assessment process and appropriate performance indicators provide an overview of the results achieved, and facilitate decision making for management and the Board of Directors.

40. The Mint's corporate plan describes how performance against stated strategic objectives will be measured. These performance indicators are measured and reported to the Board quarterly through a corporate scorecard.

41. However, we noted a gap in one of the areas. In 2008, the Mint added a key corporate objective related to applying best practices in corporate social responsibility (CSR). The key strategic initiative for this objective is to apply best practices in CSR through the Mint's CSR framework. The development of the CSR framework has been slower than expected and, as of the end of our examination phase, it had not been completed. We found that business lines and divisions have defined their own sub-objectives for this overall objective, but it is not clear what key performance targets the Corporation as a whole wishes to meet to ensure that this particular objective is achieved. We encourage the Mint to develop targets for its CSR objective and report on performance against the objective.

42. We assessed the communication of results to external stakeholders through the Mint's 2012 annual report. In general, we found that the information in the report clearly articulates the Mint's initiatives, challenges, and performance results, providing stakeholders with an appreciation of the Mint's overall performance.

Human resource management

43. Effective management of human resources supports a corporation's ability to recruit and retain enough people with the right skills needed to meet its objectives. Since our last special examination, the number of employees of the Royal Canadian Mint has grown from 732 to 1,255 full-time equivalents and is expected to continue growing. This growth rate puts additional pressure on managing human resources at the Mint to recruit, develop, and retain the people it needs.

44. We examined whether the Mint manages human resources in a manner that provides it with the human resource capacity and work environment needed to achieve its goals and objectives. We assessed certain indicators for potential problems and, in the absence of such indicators, focused on key areas such as compensation practices, training and development, and workforce planning.

45. Generally, we found that the Corporation has systems and practices in place to manage human resources in a manner that provides it with the human resource capacity and the work environment needed to achieve its goals and objectives. However, we noted that certain systems and practices need further development and that the Corporation should improve its workforce planning.

The Corporation continues to develop practices and tools for human resource management

46. Competitive compensation is important for attracting and retaining qualified employees. The Mint's compensation practices for non-unionized employees are benchmarked against those of comparable organizations. Compensation packages of unionized employees are negotiated through collective bargaining. All staff are entitled to a performance bonus based on the attainment of corporate objectives and, in cases of non-unionized employees, personal performance objectives. Corporate performance objectives are directly linked to the planned corporate objectives. Non-unionized employees receive bonuses annually, after undergoing a performance evaluation process. Non-unionized employees are required to complete a declaration on conflicts of interest. However, unionized employees are not subject to an annual performance evaluation process, which would help to ensure that the employees are contributing to the organization's achievement of its objectives.

47. The Mint targets a specific percentage of its payroll budget to invest in training and development, and monitors spending against the target quarterly. The bulk of the training budget is managed by the

Human Resource Division and the rest by business lines and other divisions in the organization. Monitoring whether required training has been completed is consequently the responsibility of various personnel throughout the Corporation, depending on the type of training obtained. The Mint does not have a training policy, which would be beneficial given the size of the Corporation and its significant growth in recent years.

48. In our 2005 special examination report, we recommended that the Mint develop a workforce plan and present it to the Board's Human Resources and Workplace Health and Safety Committee for endorsement. We found that the current workforce plan, which was presented to the Committee, primarily presents workforce statistics. These statistics are derived from the corporate planning process, which enables budget managers to determine staffing needs and serves for approval of personnel budgets. However, the document does not capture several key elements of an effective workforce plan, such as

- identifying current and future competencies and required skills;
- assessing capabilities for critical areas; and
- setting priorities to achieve corporate objectives, including development of succession plans and strategies on recruitment, training, and retention.

Some of the elements, such as training, are considered and planned separately but, given the recent and anticipated growth in the workforce, the Mint would benefit from incorporating these elements into the plan.

49. Management is planning to develop a training policy. Management also advised us that the development of new competency profiles and a full rollout of the new Human Resource Management Information System are important initiatives aimed at more effective human resource management. Therefore, systems and practices supporting human resources need further development.

50. Recommendation. The Royal Canadian Mint should develop and implement a comprehensive workforce plan that identifies current and future workforce gaps, along with strategies for recruitment, training, and retention, to address these gaps.

The Corporation's response. Agreed. By the second quarter of 2015, the Human Resource Division will enhance the workforce planning process to more effectively

- identify current and future workforce gaps;

- *integrate the Corporation's growth forecast;*
- *estimate the corresponding change in talent needs;*
- *estimate internal and external availability of the talent needed to meet this forecast; and*
- *identify a recruitment, retention, redeployment, leadership and employee development, and succession-planning strategy.*

Manufacturing operations and supporting practices

51. Effective manufacturing operations and supporting practices contribute directly to the quality of production, the overall productivity of resources employed, and timely delivery of products—all of which are factors in corporate profitability.

52. We examined whether the Royal Canadian Mint has manufacturing systems and practices that are designed, implemented, and monitored in a manner that safeguards and controls assets, enables economical and efficient use of resources, and results in effective operations and the achievement of its mandate. In addition to the core manufacturing systems and practices, we examined supporting practices, such as those related to procurement and contracting; precious-metal hedging; the costing systems and practices; and precious-metal accounting reconciliation, tracking, and safeguarding processes. We also looked at the Foreign Coinage business line's sales strategy, contract costing, and project management and monitoring.

53. We found that the Corporation has manufacturing systems and practices that are designed, implemented, and monitored in a manner that safeguards and controls assets, enables economical and efficient use of resources, and results in effective operations and the achievement of its mandate. However, we also found a number of supporting practices that should be improved:

- We noted that certain corporate cost-allocation practices do not accurately reflect the costs of some activities for business lines and could, therefore, adversely affect pricing and decision making.
- In the management of the Foreign Coinage business line, we found that systems and practices related to business development should be strengthened. These include articulating the sales strategy, improving the costing system for bid quotations, and capturing and incorporating intelligence gained during sales trips. The Corporation should also improve its systems and practices related to the analysis of lessons learned on selected projects.

We also noted the following areas of particular concern:

- We found that some procurement and contracting activities for goods and services not related to metals lack sufficient guidance, and that weaknesses in existing controls expose the Corporation to various risks.
- We found that documentation related to travel and hospitality activities did not provide sufficient information to assess whether related expenses were reasonable. We also found that key controls for managing these activities were not operating effectively.

Manufacturing operations at the Ottawa and Winnipeg plants are well managed

54. Effective and efficient Ottawa and Winnipeg plant operations are critical to the Corporation's ability to fulfill its mandate. The Mint's manufacturing facilities are certified under the ISO quality management standard (ISO 9001:2008). This ISO certification standard requires the Mint to develop and maintain a quality management system to ensure that customer requirements are met by providing high-quality products and services in a timely and cost-effective manner. The Mint has documented its quality management activities in its Workplace Intelligence for Systemic Enhancement (WISE) system. This system includes process mapping and documentation of facility-specific activities related to the design, manufacturing, distribution, and support of its products and of refinery products and services. The WISE system is accessible to all Mint employees.

55. WISE outlines a series of continuous improvement and monitoring initiatives, such as the Corrective and Preventative Action Requests (CPAR) process. The CPAR process identifies and corrects significant or repetitive problems in production and product quality. We found that processes to prioritize, assign, and monitor the status of CPAR requests were in place and operating effectively.

56. We also found that operational key performance indicators had been established for each of the manufacturing facilities and that these indicators could be used to measure and monitor the economical and efficient management of resources and the productivity and quality of operations. We identified key monitoring activities taking place daily, weekly, monthly, and quarterly, and reviewed how management tracks and reports internally on key operational performance indicators. We attended daily "huddle board" meetings at each facility—"huddle boards" are white boards that are located in various working areas of the plants and that display information to be discussed regularly by key

personnel. We found that huddle boards were designed to communicate issues and concerns related to health and safety, quality, production, and continuous improvement; they also help management adjust the deployment of resources in a timely manner, which contributes to achieving daily production quotas.

57. Because the production and distribution of Canadian circulation coins are of great significance to Canadian trade and commerce, we assessed this element in the context of core manufacturing operations. It has been clearly stated to us that the Winnipeg plant's priority is to service domestic needs. In addition to shifting production toward Canadian circulation coins in the event of a short-term shortage, the Canadian Circulation business line maintains and manages an inventory throughout Canada, with the assistance of its external partners. The level of production is based on ongoing forecasting of needs.

Insufficient direction and certain procurement and contracting practices for non-metals expose the Mint to various risks

58. Effective procurement and contracting practices contribute to the economical and efficient management of financial resources. The Mint's procurement and contracting activities are performed by several different areas of the organization, depending on the type of procurement. Base metals and precious metals comprise the most significant procurement activity.

59. For additional guidance, the Mint's procurement policy refers employees to its corporate card directive and "other procurement directives," but these other procurement directives do not exist. Therefore, this policy is the key reference document for employees. The Mint has a Justification for Sole-Source Purchases form to be used when the goods or services are available from only one single supplier or contractor. However, a directive for sole-source purchases currently exists only in draft form. Given the decentralized nature of procurement and contracting activities, the existing procurement and contracting suite of policies and directives is not sufficient to guide employees toward fully meeting corporate policy objectives.

60. We found several control weaknesses in our evaluation of procurement and contracting practices of goods and services not related to metals that exposed the Corporation to various risks:

- The approval requirements for the Justification for Sole-Source Purchases form are unclear and were not always met. In one case, the approval process began after the contract had already been

signed and, even then, the final approval was not documented on the form.

- Payments to a storage facility had been made over the course of years without a contract or other formal agreement in place.
- Some procurement practices were not in full compliance with international trade agreements.

These examples demonstrate that more direction and guidance are necessary.

61. Recommendations. The Royal Canadian Mint should develop directives and guidelines in support of its policy to cover all procurement and contracting methods, along with an effective monitoring process for them. The Mint should ensure that all transactions are carried out in accordance with these instruments and are supported by supplier agreements. The Mint should also ensure its procurement activities comply fully with relevant trade regulations.

The Corporation's response. Agreed. In 2014, the Corporation will review, update, and issue procurement directives; implement a performance monitoring process to support procurement activities across all areas of the business; and ensure compliance with relevant trade regulations.

Precious-metal hedging strategies and practices mitigate price volatility

62. Effective precious-metal hedging strategies and practices—essentially, financial techniques that the Mint uses to mitigate potential losses in its metal transactions—contribute to the economical use of financial resources. The Mint purchases a variety of precious metals for its Bullion, Refinery, and Exchange Traded Receipts (ETRs) business line and its Numismatics and Collectibles business line, and is exposed to volatility in precious-metal prices.

63. The Mint has practices to mitigate this volatility. The Mint has a metal-hedging policy, which identifies hedging principles and defines roles and responsibilities. To mitigate the risk associated with price volatility and uncertainty, the Mint performs bullion transactions through contracts that place volatility risk outside the Corporation. For transactions related to its numismatics products, the Mint enters into forward contracts based on its forecast precious-metal purchasing needs. When hedging instruments were used, the Mint's Precious Metal Committee met as considered necessary throughout the year to assess the effectiveness of the hedge.

Some cost allocations do not accurately reflect the cost of support for business lines

64. The Mint's mandate to mint coins in anticipation of profits requires product costing systems and practices that provide accurate cost information to support sound business decisions. Cost information also plays a role in the Mint's negotiated compensation from the Government of Canada for the Mint's services of providing and managing the production and distribution of Canadian circulation coins.

65. Variable costs. For each of its products, the Mint develops standard manufacturing costs that include a proportion of material, direct labour, and variable overhead costs and are based on production estimates and throughputs.

66. Because standard costs are estimates, differences from actual costs arise. We found that the Mint records such differences in variance accounts for each plant. The Mint's information systems are not currently configured to allocate these differences to specific products, but a significant portion of these differences can be allocated to appropriate business lines. Currently, the Mint does not perform this allocation to the business lines. Consequently, business lines' operating profits do not fully reflect the financial results of their operations. Because the differences in 2013 were significant for the Winnipeg plant, the operating profits of the Canadian Circulation business line and, more significantly, the Foreign Coinage business line were overstated. Our recommendation is in paragraph 69.

67. Fixed costs. The Mint does not have a formally developed methodology or guidelines for allocating corporate fixed costs. Allocations are based on cost centre managers' judgment. We found that some cost allocations to business lines do not reflect the level of services provided by those business lines. For example, all research and development costs are allocated to the Canadian Circulation business line, even though some research and development initiatives specifically support other business lines.

68. The allocation model for the Winnipeg plant's fixed costs was developed in the 1990s, reassessed in 2007, and again in late 2013. Since 2007, domestic coin production has undergone significant changes. Most recently, the Mint completed a facility expansion in Winnipeg that was opened in June 2013 but is expected to start fully operating in 2014. Servicing the anticipated growth in the Foreign Coinage business line was one key reason for the expansion; another was the anticipated need to refurbish equipment to produce Canadian

circulation coins. The latest cost allocation reassessment did not lead to changes in the allocation percentages, as we would have expected, given the incremental costs of the expansion for the Foreign Coinage business line. Without changes to the model, the Canadian Circulation business line would absorb a higher amount of plant costs, which would affect the quality of information for making sound pricing and other business decisions.

69. Recommendation. The Royal Canadian Mint should review its costing methodologies and develop additional guidelines to allocate plant variances to specific products and business lines. It should ensure the consistent allocation of corporate and plant fixed costs to business lines, to generate more accurate costing data in support of decision making.

The Corporation's response. Agreed. In 2014, the Corporation will review its cost allocation methodologies and develop methods and guidelines to allocate plant variances and corporate and fixed plant costs to business lines in a more consistent and accurate manner.

Accounting reconciliation of precious metals requires continued attention

70. Effective processes for tracking and safeguarding precious-metal inventories enable management to accurately account for and control its valuable assets. The Mint processes and stores significant amounts of precious metals, primarily gold and silver, in its Ottawa plant for its Bullion, Refinery, and ETR business line and its Numismatics and Collectibles business line. Normal refining processes inherently involve some losses, which must be estimated for accounting purposes. At current precious-metal prices, even small quantities are valuable, and differences could directly or indirectly affect the Mint's profitability. Therefore, effective systems and practices are important to ensure that the metals are fully accounted for and safeguarded.

71. Over recent years, the Mint has undertaken various initiatives toward improving the precious-metal reconciliation process and safeguarding products and materials. These initiatives included conducting external consultations and revisiting its processes. The implementation of new tools within the current financial system is expected to be completed in 2014 and is an example of efforts that the Mint expects will strengthen its reconciliation processes to ensure that its records accurately reflect its physical resources and that sources of variances are well understood.

72. Currently, the Mint performs counts and reconciliations four times a year. The results are presented and discussed at meetings of the Audit Committee of the Board of Directors. In 2013, two concurrent reconciliations presented variances between the records and the physical count that were outside of the Mint's tolerance levels. While performing the reconciliation for the following quarter, the Mint advised us that it identified a procedural error as the cause of the majority of those variances. Due to the complexity and challenges of the reconciliation process, the Mint needs to continue strengthening instructions and training for employees involved in this process, and management needs to continue to closely monitor this area.

The business development systems and practices of the Foreign Coinage business line contain weaknesses

73. The Foreign Coinage business line competes internationally for predominantly foreign circulation coins and blanks. In recent years, the Foreign Coinage business line's financial performance has suffered because of the effects of global economic conditions on the size of the market and competitive environment. The declining revenue trend was broken in 2013 as a result of the delivery of larger contracts.

74. In-house manufacturing of some blanks and circulation coins for foreign countries takes place in the Winnipeg plant by using the capacity that is not required for the production of the Canadian circulation coins. In deciding in November 2010 to expand the plant, the Mint made a strategic decision to grow its foreign coinage operations beyond the capacity of the existing plant. The \$68-million expansion included the new Hieu C. Truong Centre of Excellence for Research and Development and took into account the need to refurbish existing equipment. The official opening of these facilities was in June 2013, and the facilities were expected to start operating fully in 2014. Management decision making needs to consider that the Foreign Coinage business line is no longer restricted to just using the excess capacity of the old facility.

75. The Mint requires sound systems and practices to support successful bids and deliver foreign contracts at a profit. We found that, once a contract has been awarded, the Winnipeg plant manages manufacturing operations well. However, weaknesses exist in the systems and processes related to business development. We define business development as including the implementation of the sales strategy and preparation of bid quotations. The business line would

also benefit from more comprehensive analysis of lessons learned on selected projects.

76. Implementation of the sales strategy. In mid-2013, management of the Foreign Coinage business line communicated a fundamental change in its sales strategy to the Board and the rest of Mint's management in high-level, conceptual terms; a comprehensive document describing how to implement the sales strategy does not exist. The corporate plan articulates the Foreign Coinage business line's strategic objectives; the business line's operating plan serves as the primary means to focus and direct business activity. We found that the elements related to the sales strategy in the previous year's plan are similar to those of the latest operational plan. So, the plan does not provide a clear direction for significant changes.

77. The main changes in the new sales strategy were a targeted market strategy and a focus on a specific "basket" of value-added products. We looked for evidence of how the business line had prioritized the implementation of changes in its country-specific sales strategies, because sales representatives will continue to travel and develop business opportunities during the implementation period of the new strategy. We found that many of the individual country strategies had been developed early in 2012; it is, therefore, not evident whether the intended changes for the new sales strategy had been incorporated for those countries. Without updated sales strategies for specific countries, there is a risk that the new sales strategy will not be implemented effectively. We also noted that other core aspects of the sales strategy, such as new products and a technology consulting business, were still being developed, therefore limiting management's ability to implement some of the prerequisites to successful business development.

78. Successful development and implementation of strategies require integration of risk management in the process. Moreover, operating in foreign countries poses a great number and variety of internal and external risks. The Foreign Coinage business line had conducted some high-level risk discussions at executive quarterly business reviews and assessments relating to delivery and credit risks prior to bidding for larger contracts. But, the Foreign Coinage business line had not conducted a comprehensive risk assessment or a fraud-risk assessment. As a result, its management cannot demonstrate that it is prepared to deal effectively with certain adverse events that could have been identified by carrying out such risk assessments.

79. The Foreign Coinage business line sales representatives travel extensively throughout the year to meet with existing or potential clients, and to develop relationships with key country representatives and officials. We found that the business line has no systematic means to document and retain key market intelligence gained through these trips. This is important not only for continually refining the sales strategy, but also for reassigning sales representatives to countries in an orderly way, especially in the event of unplanned departures of sales personnel, as was the case in 2013.

80. Recommendations. The Royal Canadian Mint should formulate a comprehensive sales strategy and ensure that sales strategies for specific countries clearly align with it. The Mint should also ensure that intelligence gained from meetings with external stakeholders is documented and used to refine country strategies, as appropriate.

The Corporation's response. Agreed. All sales strategy documentation within the Foreign Coinage business line is currently being consolidated into one comprehensive framework that will incorporate sales objectives, targeted market and competitor analyses, and relevant country sales and marketing strategies for products and consulting services.

Since early 2014, the sales staff has been required to prepare trip reports that include trip details and describe achievements against trip objectives. Capturing and storing all vital customer data and intelligence gathered through travel and other activities will be strengthened through the introduction of a customer relationship management system in 2014.

81. Preparation of bid quotations. We noted that the Foreign Coinage business line is lacking a key tool to prepare bid quotations accurately. The business line has a quotation-costing system that estimates the costs of different elements to derive proposed contract pricing for tenders. Because of the system's lack of flexibility, some manufacturing scenarios are modelled outside the costing system. As a result, considerable efforts are invested in the adjustment of outputs from the costing system, in order to develop a competitive bid quotation. Furthermore, in 2013, the costing model incorporated a cost element that should not have been included in the calculation of contribution margins. Consequently, understated contribution margins were reported to the Mint's decision-making Bid Review Committee. Management advised us that, according to its analysis of lost contracts, this inaccuracy did not affect the outcome of the bids.

82. In our view, management should reassess cost drivers currently used to allocate certain indirect costs in its quotation-costing system.

It is imperative that the Foreign Coinage business line prepare accurate and timely costing information to assist decision makers with the pricing of quotations.

83. Recommendation. The Royal Canadian Mint should review its costing methodologies for the preparation of bid quotations and upgrade its costing model to make its cost-modelling more efficient for the scenarios the business line encounters in its tenders.

The Corporation's response. Agreed. In 2014, the Foreign Coinage business line's quoting process was fully mapped, procedures enhanced, and the issue related to understated contribution margins was addressed. Throughout the remainder of 2014, the Corporation will review and improve its costing methodologies and systems and introduce more efficient cost-modelling.

84. Project management and monitoring. Management and delivery of contracts is executed by employees in both Ottawa and Winnipeg. Once a contract is awarded, the Ottawa-based project management team leads the coordination of the contract by working closely with the Winnipeg team, which includes engineering, production, and finance personnel. The Winnipeg team is responsible for scheduling, planning, and executing the foreign contract; the Ottawa team is responsible for monitoring progress, communicating with the customer, and coordinating activities such as freight and transportation.

85. We noted that, during 2013, the Winnipeg plant put in place a formal review process to address issues identified during production. Winnipeg staff performed a comprehensive analysis of lessons learned on two foreign-denomination contracts, in order to identify best practices, opportunities for improvement, and challenges related to the production of the denominations. But the analysis did not extend to considering whether opportunities for improvement exist for sales, quoting, and project management activities in Ottawa. A comprehensive analysis of lessons learned on selected projects would encompass all aspects of the contract delivery process and look to identify areas for continuous improvement.

86. Management performs and communicates monthly reviews of the Foreign Coinage business line's overall financial performance, including assessing potential business development opportunities, project delivery challenges, and sales and marketing activities. The business line updates its operational plans quarterly to reflect progress

made. Additionally, the executive committee receives quarterly business review reports on overall sales activities and operations.

87. Recommendation. The Royal Canadian Mint should develop criteria for conducting analyses of lessons learned on selected projects to include opportunities for improvement in sales, quoting, and project management activities, as well as in manufacturing and production activities.

The Corporation's response. Agreed. The Foreign Coinage business line will examine opportunities to enhance and improve the current win/loss post-mortems (lessons learned) by performing a more comprehensive analysis. This review will be conducted in 2014 and any required changes will be implemented as soon as possible.

Key controls in managing and administering travel and hospitality activities are not operating effectively

88. Management and administration. In our assessment of how information gained through travel by the Foreign Coinage business line is being used, we found control weaknesses in the management and administration of travel and hospitality activities. We expanded our examination to include travel claims from other business lines and divisions to assess whether the observed weaknesses also applied to travel and hospitality activities for the rest of the Corporation.

89. For a commercial Crown corporation seeking to secure international business, travel outside Canada and extended hospitality can be costly. We selected travel claims related to 16 individual or group travel and hospitality activities outside Canada for examination. This sample represented approximately \$340,000 of the Mint's total of about \$4.7 million in travel and hospitality expenses and \$132.8 million in operating expenses for 2013, which exclude the cost of goods sold.

90. The Mint's Corporate Travel Policy, which was last revised in 2012, requires that an Authority to Travel and Travel Advances form be completed prior to travelling. This form requires details such as destinations and travel dates, along with cost estimates and a general description of the purpose of the trip. We found that cost estimates had not been provided in 13 of the 16 forms. In the remaining cases, the estimate was a fraction of the actual expense, rendering the cost estimate uninformative. We also found that none of the forms were accompanied by business itineraries or business objectives, which would help to determine whether the trips were being organized effectively and efficiently, and ultimately whether

the trips' benefits justified the costs. Information on the organization of the trip and cost estimates is especially important, because 12 of the 15 claims that included air fare showed flight itinerary changes (several changes in many cases), which came at additional costs.

91. We found that certain other requirements of the Corporate Travel Policy and the Hospitality Policy were not met. The most common deviation that we observed is that, in 10 of 12 travel claims that included hospitality expenses, itemized receipts and a description of the purpose had not been provided, contrary to what was required by the policy. It is difficult for the Corporation to demonstrate that the total cost of a purchase was reasonable without a receipt that lists the purchased items.

92. We also found cases where some elements of the travel claim were inappropriate and cases where, in our view, there was insufficient demonstration of regard for economy. We also observed instances where the financial control principle of segregation of duties had not been adhered to, as individuals approved travel claims that included some of their own costs.

93. All of the claims in our sample had passed through multiple approvals or reviews without generating documentary evidence of closer scrutiny or additional explanations prior to reimbursement of the claimed expenses. Our recommendations are in paragraph 96.

94. Proactive disclosure. To aid in transparency, the Mint proactively discloses the travel and hospitality expenses of its executive officers and members of the Board of Directors on its website.

95. We observed a number of areas for improvement in the implementation of this practice. We noted that the information is not timely; the Mint posts information approximately six months after the end of the quarter in which the travel and hospitality activity took place. We also found that some posted information was inaccurate and that travel and hospitality expenses for certain trips did not include all costs. We observed an administrative practice and a Hospitality Policy requirement that are not conducive to effectively capturing complete costs for disclosure purposes.

96. Recommendations. The Royal Canadian Mint should

- review its Corporate Travel Policy, Hospitality Policy, and any related guidelines to ensure that they are up to date and clearly outline requirements;

- ensure that all employees participating in, managing and administering travel and hospitality activities are made fully aware of the requirements of the Corporate Travel Policy and Hospitality Policy;
- ensure that sufficient and appropriate documentation accompany all travel requests and expense claims and be maintained on file to support assessment of expenses and their reasonableness; and that this documentation be subject to review and challenge against corporate policies before reimbursement occurs; and
- implement practices to ensure timeliness, accuracy, and completeness of proactive disclosure.

***The Corporation's response.** Agreed. The Corporation is currently reviewing its Corporate Travel Policy, Hospitality Policy, and related guidelines against best practices and its commercial objectives and will make necessary modifications. In 2014, the Corporation will undertake the appropriate level of training and awareness to ensure implementation of any modifications. Furthermore, the Corporation will implement procedures to improve documentation, timeliness, and completeness of proactive disclosure.*

Research and development

97. Effective and focused research and development activities contribute to the creation of innovative products and services. The Royal Canadian Mint views continued innovation as important for achieving its vision to be the best mint in the world, and as one of the keys to improving the performance of its Foreign Coinage business line. The Mint spent just over \$8 million on research and development activities in 2013. In June of that year, it opened the Hieu C. Truong Centre of Excellence for Research and Development as part of the Winnipeg plant expansion.

98. Research and development activities are carried out by the Research and Development Division. A separate project office is dedicated solely to the development of the Mint's digital currency, called the MintChip™, and is part of the Mint's strategy to address risks related to the future of traditional currency.

99. We examined how the Mint identifies, approves, prioritizes, and monitors its research and development activities. We found that the Corporation identifies and selects research and development activities to support achieving its objectives within the scope of its mandate. Nevertheless, we noted that project selection and management of the Research and Development Division require more formalization, including establishing an operational plan to set measurable goals and objectives for Division-specific activities. We also noted that existing

processes focus on the technical delivery of products and technologies and do not place significant emphasis on financial modelling, which would help optimize the use of corporate resources.

Research and development activities are not managed in a structured fashion

100. The Research and Development Division contributes to the Mint's corporate plan through the annual planning exercise. The Division provides various inputs into this process, but it does not have its own operational plan to support more effective, economical, and efficient use of its resources and measurement of its performance.

101. The Division had over 50 different projects in various stages during 2013. We observed that they are within the mandate of the Corporation. The selection and approval of key projects are performed through the Research and Development Steering Committee, consisting of senior stakeholders from various parts of the Corporation. They meet regularly to discuss the status of "top 10" projects and to consider any new ones. The selection of the top 10 projects is largely based on stakeholders' experience and informal assessments.

102. In 2011, the Research and Development Division developed a formal process for new product research and development. The process requires, among other things, a project charter that includes financial estimates. In one project that we examined, the financial estimates were not included in the project charter, nor was there a separate financial business case. Because the MintChip™ constituted a significant research and development initiative outside the Division, we also reviewed its latest business case. We found that, while the research and development activities were within the mandate of the Corporation, it did not consider scenarios for key plausible outcomes. Business cases that include modelling of costs and potential revenues under different scenarios would allow management to assess expected profitability and compare against other potential initiatives to help optimize the use of the Mint's research and development resources.

103. Overall, the Corporation focuses its monitoring on the top 10 projects, and most of the emphasis is on technical aspects and timelines. In the absence of a detailed operational plan to set specific measurable goals and objectives, and a more formal basis for selecting projects, there is a risk that resources of the Division will not be used effectively, economically, and efficiently.

104. The Mint is currently addressing recommendations of an externally conducted benchmarking study, which reached conclusions

similar to ours; the study also raised observations on areas we had not examined. The Mint has prepared a preliminary action plan and now needs to ensure that a comprehensive action plan is developed and fully implemented.

Health, safety, and the environment

105. Effective environmental and health and safety management systems and practices help organizations to identify and address the effects of their activities on employees, the general public, and the environment. The nature of the Royal Canadian Mint's manufacturing and refining operations in the Ottawa and Winnipeg plants makes those systems and practices particularly important.

106. We examined whether environmental risks associated with the Mint's strategies and operations are identified and assessed and whether the Corporation mitigates those risks and monitors and reports on its environmental performance. We examined the management of risks associated with the use and handling of hazardous substances and radiation-emitting equipment that are regulated under the *Canada Labour Code* and other safety legislation. We also examined the Mint's emergency preparedness and response regime.

107. Overall, we found that the Corporation is focusing on addressing environmental compliance requirements. The Corporation has recently identified and assessed its environmental risks as part of its effort to develop an environmental management system (EMS). As the EMS is still in development, the Corporation needs to evaluate comprehensively whether existing programs and operational controls appropriately mitigate all those risks. We found that systems and practices to mitigate occupational health and safety risks pertaining to the handling of hazardous substances and certain specialized equipment are in various stages of development and implementation. We found that the Corporation's practices related to hazardous chemicals are generally sound. However, those that apply to radiation safety are less advanced, as radiation safety guidance and training have yet to be provided, and administrative requirements are yet to be completed. We also found that the Corporation has identified and is now addressing several key gaps related to compliance with applicable health and safety laws and regulations. We note that the Corporation needs to ensure that its health, safety, and emergency response systems and practices identify and address all remaining risks, and that it needs to establish a systematic monitoring regime.

An environmental management system is in development

108. The Mint has an environmental policy that is directed at ensuring that environmental effects are identified and managed. The policy's objectives include compliance with legal requirements and sustainable use of natural resources.

109. During the course of our audit, we observed that environmental management practices focus predominantly on activities related to compliance. Detailed procedures and work instructions are in place for several core areas, such as management of hazardous waste, movement of dangerous goods, wastewater discharges, and ozone-depleting substances. Reporting to environmental authorities was also undertaken as required.

110. Given the long history and nature of its operations, we expected that the Mint would have a comprehensive EMS in place, but it is still in development. The Mint's objective is to adopt an EMS that reflects requirements of the ISO environmental management standard (ISO 14001:2004). To assess the status of its existing environmental management practices against the requirements of the standard, the Mint engaged an external review in 2011. The review found that the Mint had a number of initiatives and activities in place to address and react to certain environmental risks and, consistent with our observations, that more work would be required to make it into a proactive system geared toward performance improvement.

111. Following the 2011 external review, the Mint increased the staffing of its environmental management team from two to five members. It established action plans for developing an EMS that would reflect the requirements of ISO 14001:2004 in both Ottawa and Winnipeg. The original target dates for completion were July and December 2013, respectively, but the development of the systems is behind schedule.

112. We found that the Mint has recently completed a corporate exercise to identify and assess environmental risks related to internal operations. It has also prepared a draft EMS manual and formalized requirements in various areas, including training and compliance auditing. However, a number of areas remain works in progress. The Mint has not prepared a mapping of existing programs and operational controls against the identified risks to ensure that appropriate mitigating measures are in place. Environmental objectives, targets, and key performance indicators have not been approved. A detailed compilation of environmental laws and regulations was started in late 2012, and its finalization is pending the Mint's final assessment

with regard to provincial and municipal requirements that are relevant to its operations.

113. Recommendations. The Royal Canadian Mint should

- establish a clear, time-bound objective for completing its inventory of provincial and municipal legal and regulatory requirements; and
- commit to a target date and devote the necessary resources to implementing its environmental management system.

The Corporation's response. Agreed. In early 2014, the Corporation's Environment Division was incorporated under the Corporate Health and Safety Division. This change is expected to improve the accountability of environmental leadership and practices throughout the Corporation and allow a more harmonized approach to completing the roadmap by the end of 2014, toward implementing the Corporation's environmental management system.

The Corporation will complete an inventory of provincial and municipal legal and compliance requirements by the end of 2014 and develop an action plan to implement measures deemed to be best practices and pertinent to the Corporation's operations.

Health and safety practices and an Emergency Preparedness and Response Framework have gaps

114. Health and safety. The Corporation's minting and refining operations use more than 2,000 hazardous substances. The Corporation also operates specialized equipment such as lasers, ultrasound devices, and x-ray machines that pose varying radiation safety hazards. *Canada Labour Code* requirements are applicable in both cases. Radiation safety requirements noted in Health Canada safety codes are applicable to some equipment and, in the case of one piece of equipment, the *Nuclear Safety and Control Act* applies.

115. We found that the Mint's practices for managing hazardous chemicals are generally sound. Chemicals are well labelled and appropriately stored, and information and training is provided to appropriate personnel. We note that, as a more comprehensive and preventive response to incidents in the chlorine storage room in 2011 and 2012, an important project is currently under way in the Ottawa refinery to improve ventilation, in order to reduce operator exposure in the room and minimize risks to the surrounding environment.

116. Radiation safety practices are less advanced. An external review conducted in 2012 identified several gaps, including non-compliance with some regulatory requirements. While some of these issues were administrative, others included a need for guidance and radiation safety training. Since then, the Mint has taken steps toward addressing the various gaps identified through the review. A list of radiation-emitting equipment has been compiled, and radiation safety officers have been appointed and trained at both locations. A new radiation safety program that includes awareness and training for front-line staff and supervisory personnel is awaiting approval for implementation in 2014.

117. The Mint is currently implementing an action plan geared toward addressing a number of key risks, weaknesses, and compliance gaps that it identified through a preliminary risk assessment undertaken in 2012.

118. We observed other systems and practices used to promote health and safety, including a process to identify and mitigate health and safety risks before adopting or changing processes or using new equipment. The Mint also performs job hazard assessments in Ottawa, but not in Winnipeg. Management of health and safety risks for specific jobs and tasks can be strengthened by formalizing requirements and ensuring that they are consistently applied across the organization.

119. When health and safety (or environmental) incidents occur, the Mint conducts investigations to determine the circumstances and root causes of the incidents. Investigators prepare reports that identify corrective or preventive actions. The health and safety group in Ottawa has created a registry to track completion of corrective actions, but the corresponding registry for Winnipeg is less comprehensive. We also note that a similar registry for environmental incidents does not exist.

120. Regular inspections and periodic audits are necessary to ensuring that sound management and compliance practices are being followed, and to minimize the risk of incidents. Regular health and safety workplace inspections are being performed at both locations. While detailed reviews were commissioned recently for radiation safety and emergency preparedness, and various inspections are conducted on a regular basis, the Mint does not perform periodic audits and evaluations of its health and safety programs and practices. Furthermore, audits or evaluations to assess the Corporation's overall compliance with the health and safety requirements of the *Canada Labour Code* or other applicable legislation have not been conducted.

121. Recommendations. The Royal Canadian Mint should

- complete the implementation of its radiation safety program expeditiously;
- continue implementing its health and safety operational plan to address the remaining compliance gaps;
- conduct a comprehensive risk assessment and put in place appropriate risk mitigation and monitoring measures; and
- establish an ongoing monitoring and compliance regime for health and safety issues.

The Corporation's response. Agreed. The health and safety of employees is a priority, and the Corporation has invested significant resources to ensure that employees are protected against occupational injury and illness.

The Radiation Safety Program will be presented to the Corporate Policy Health and Safety Committee in June 2014 for approval; implementation of the program will proceed throughout the remainder of the year. Engineering controls, however, are already in place and radiation safety officers have been formally trained and are working toward addressing the administrative issues identified during the Program's development.

The Corporation will take the necessary steps to address the remaining compliance gaps identified by its health and safety operational plan and to ensure that a comprehensive risk assessment is developed in parallel to the development of a Hazard Identification and Assessment Program, scheduled to commence in 2014. This program will ensure that the Corporation is monitoring compliance across both plants, while driving preventive and continuous improvement initiatives.

122. Emergency preparedness and response. Emergency preparedness and response measures help an organization effectively respond to emergency scenarios that could pose threats to the health and safety of employees, nearby communities, the environment, and its own operations and assets.

123. We observed that measures are in place to ensure readiness to respond to fires and chemical emergencies. Fire safety inspections are undertaken regularly, evacuation plans for fire-related emergencies are in place, and fire drills are conducted. In case of chemical emergencies, spill kits, eyewash, and shower stations are located in production and refinery areas. Hazardous materials (Hazmat) teams are in place at both locations to act as first responders. A comprehensive chemical emergency response procedure has been drafted, though only for the Ottawa location.

124. While these measures address many of the requirements of the *Canada Labour Code* and other legislation, procedures for other types of emergencies, such as workplace violence and power outages, are not in place. The Mint informed us how it would respond to some other potential threats involving safety and security, but those procedures should be clarified, documented, and communicated to staff.

125. **Recommendation.** The Royal Canadian Mint should develop and implement a comprehensive emergency preparedness and response framework on a timely basis.

The Corporation's response. Agreed. In 2014, the Corporation will allocate the necessary resources to address the remaining elements of an emergency preparedness program and will work toward full implementation of the program across the Corporation by the second quarter of 2016.

Conclusion

126. In our opinion, based on the criteria established, there is reasonable assurance that, during the period covered by the examination, there were no significant deficiencies in the Royal Canadian Mint's systems and practices that we selected for examination. The Corporation has maintained these systems and practices in a manner that provides it with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

127. We found no significant deficiencies in the Corporation's systems and practices that we selected for examination. A significant deficiency is reported when there is a major weakness in the Corporation's key systems and practices that could prevent it from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed efficiently and economically, and its operations are carried out effectively.

128. We noted good practices in a number of areas. However, we also noted some areas where the Royal Canadian Mint would benefit from improving its practices such as risk management; human resource management; costing; the Foreign Coinage business line; and health, safety, and the environment. Furthermore, we noted that procurement and contracting of non-metals, and the management and administration of travel and hospitality, require particular management attention.

About the Special Examination

All of the audit work in this report was conducted in accordance with the standards for assurance engagements set out by the Chartered Professional Accountants of Canada (CPA) in the CPA Canada Handbook—Assurance. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

As part of our regular audit process, we obtained management's confirmation that the findings reported in this report are factually based.

Objective

Under section 138 of the *Financial Administration Act* (FAA), federal Crown corporations are subject to a special examination once every 10 years. Special examinations of Crown corporations are a form of performance audit where the objective is set by the FAA.

The Auditor General provides an opinion on the Corporation's systems and practices selected for examination. Special examinations answer the question: Do the Corporation's systems and practices examined provide reasonable assurance that assets are safeguarded and controlled, resources are managed economically and efficiently, and operations are carried out effectively? A significant deficiency is reported when there is a major weakness in the Corporation's key systems and practices that could prevent it from having reasonable assurance that its assets are safeguarded and controlled, its resources are managed efficiently and economically, and its operations are carried out effectively. The opinion for this special examination is found on page 1 of this report.

Key systems and practices examined and criteria

At the start of this special examination, we presented the Corporation's audit committee with an audit plan that identified the systems and practices, and related criteria, that we considered essential to providing the Corporation with reasonable assurance that its assets are safeguarded and controlled, its resources managed economically and efficiently, and its operations carried out effectively. These are the systems and practices and criteria that we used for our special examination.

These criteria were selected for this examination in consultation with the Corporation. They were based on our experience with performance auditing—in particular with our special examinations of Crown corporations—and on our knowledge of the subject matter. Management reviewed and accepted the suitability of the criteria used in the special examination.

Key system and practice examined	Criteria
<p>Corporate governance:</p> <ul style="list-style-type: none"> • Appointment of members and functioning of Board and committees • Board self-assessment and independence • Board information and resources • Board oversight of corporate values and ethics and compliance with the mandate • Board approval and input into strategic plan and enterprise risk management • Communications with the public and shareholders • Corporate values and ethics (including those of Mint employees) 	<p>To maximize the Corporation's effectiveness and its ability to balance public policy objectives with its commercial objectives, the Corporation should have a well-performing corporate governance framework that meets the expectations of best practices in Board stewardship, shareholder relations, and communications with the public.</p>
<p>Strategic direction consisting of planning, risk management, and performance measurement and reporting:</p> <ul style="list-style-type: none"> • Corporate strategic planning process • Enterprise risk management program • Organization-wide business continuity, emergency preparedness, and disaster recovery plans • Identification and management of mission-critical information technology (IT) systems • IT security risks and safeguards • Performance measurement, evaluation, validation, and reporting practices 	<p>The Corporation specifies strategic direction as well as specific and measurable goals and objectives to achieve its mandate. Its strategic directions, goals, and objectives take into account government priorities, identified risks, and the need to control and protect its assets and manage its resources economically and efficiently.</p> <p>The Corporation has an enterprise risk management process that involves all levels of the Corporation. The process is designed to identify, assess, and mitigate risks in order to help achieve the Corporation's objectives.</p> <p>The Corporation monitors, measures, and reports on the achievement of its goals, objectives, and mandate.</p>
<p>Human resource management:</p> <ul style="list-style-type: none"> • Strategic and workforce planning process • Recruitment and retention strategy • Compensation practices • Learning and development programs • Performance management practices • Labour relations strategy • Health and safety programs 	<p>Human resources are managed in a manner that provides the Corporation with the human resource capacity and the work environment it needs to achieve its goals and objectives.</p>

Key system and practice examined	Criteria
Manufacturing operations and supporting practices: <ul style="list-style-type: none"> • Management of manufacturing operations • Procurement and contracting processes • Precious-metal hedging strategies • Costing systems and practices • Precious-metal reconciliation process • Precious-metal tracking and safeguarding processes • Foreign Coinage business line sales strategy, contract costing, and project management and monitoring 	The Corporation has manufacturing systems and practices that are designed, implemented, and monitored in a manner that safeguards and controls assets, enables economical and efficient use of resources, and results in effective operations and the achievement of its mandate.
Research and development: <ul style="list-style-type: none"> • Identification, prioritization, and monitoring of research and development projects • Individual project management 	The Corporation identifies and selects research and development activities in support of the achievement of its objectives and within the scope of its mandate. The Corporation has specific and measurable goals and objectives for these activities. It has established and is using processes, methods, and tools to coordinate and manage activities throughout the life of the project, to monitor results.
Health, safety, and the environment: <ul style="list-style-type: none"> • Environmental management system • Health and safety practices related to hazardous substances • Emergency preparedness • Compliance with laws and regulations 	The Corporation identifies and assesses risks to the environment associated with the Corporation's operations and strategies, including related risks to health and safety associated with the use and handling of hazardous substances. The Corporation mitigates these risks, and it monitors and reports on its own performance and compliance with applicable laws and regulations.

Period covered by the special examination

The special examination covered the systems and practices that were in place between January 2013 and December 2013. However, to gain a more complete understanding of the significant systems and practices, we also examined certain matters that preceded the starting date of the special examination. Additionally, to assess management responses and validate implementation of changes, we also examined certain matters subsequent to our last special examination opinion, dated 31 March 2005.

Internal audit

In carrying out the special examination, we did not rely on any internal audits. This was because the timing of work performed by the Mint's Internal Audit function was outside the special examination scope. However, we used audits completed by Internal Audit to inform our work.

Audit team

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Appendix List of recommendations

The following is a list of recommendations found in the Special Examination Report. The number in front of the recommendation indicates the paragraph where it appears in the report. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<p>Strategic direction</p> <p>38. The Royal Canadian Mint should take steps to implement its Enterprise Risk Management Policy effectively. These steps include developing the basis for periodic completion of risk assessments, which consists of identifying risks, preparing risk profiles and implementing appropriate risk responses, and reporting on the effectiveness of risk responses. This implementation should take place at the corporate, business line, and divisional levels, and include identifying owners of key risks and clarifying and enforcing roles and responsibilities. (32–37)</p>	<p>Agreed. Management of the Royal Canadian Mint firmly supports effective risk management across the Corporation. While risks are routinely discussed and considered in the Corporation’s management practices, the Corporation will undertake additional measures to clearly define required documentation to demonstrate implementation of its Enterprise Risk Management Policy.</p> <p>In early 2014, a corporate risk profile was created to assess risks to corporate objectives. In addition, risk owners were identified for key risks and roles and responsibilities will be increasingly clarified and enforced.</p> <p>Throughout the remainder of 2014, the Corporation will enhance current practices through increased standardization in risk assessments and documentation. It will also revise the reporting formats of presentations to the Executive Committee and the Audit Committee to provide the basis for evaluation of control activities and effectiveness of risk responses, thus ensuring that risks are being properly managed.</p>

Recommendation	Response
Human resource management	
<p>50. The Royal Canadian Mint should develop and implement a comprehensive workforce plan that identifies current and future workforce gaps, along with strategies for recruitment, training, and retention, to address these gaps. (46–49)</p>	<p>Agreed. By the second quarter of 2015, the Human Resource Division will enhance the workforce planning process to more effectively</p> <ul style="list-style-type: none"> • identify current and future workforce gaps; • integrate the Corporation’s growth forecast; • estimate the corresponding change in talent needs; • estimate internal and external availability of the talent needed to meet this forecast; and • identify a recruitment, retention, redeployment, leadership and employee development, and succession-planning strategy.
Manufacturing operations and supporting practices	
<p>61. The Royal Canadian Mint should develop directives and guidelines in support of its policy to cover all procurement and contracting methods, along with an effective monitoring process for them. The Mint should ensure that all transactions are carried out in accordance with these instruments and are supported by supplier agreements. The Mint should also ensure its procurement activities comply fully with relevant trade regulations. (58–60)</p>	<p>Agreed. In 2014, the Corporation will review, update, and issue procurement directives; implement a performance monitoring process to support procurement activities across all areas of the business; and ensure compliance with relevant trade regulations.</p>
<p>69. The Royal Canadian Mint should review its costing methodologies and develop additional guidelines to allocate plant variances to specific products and business lines. It should ensure the consistent allocation of corporate and plant fixed costs to business lines, to generate more accurate costing data in support of decision making. (64–68)</p>	<p>Agreed. In 2014, the Corporation will review its cost allocation methodologies and develop methods and guidelines to allocate plant variances and corporate and fixed plant costs to business lines in a more consistent and accurate manner.</p>

Recommendation	Response
<p>80. The Royal Canadian Mint should formulate a comprehensive sales strategy and ensure that sales strategies for specific countries clearly align with it. The Mint should also ensure that intelligence gained from meetings with external stakeholders is documented and used to refine country strategies, as appropriate. (76–79)</p>	<p>Agreed. All sales strategy documentation within the Foreign Coinage business line is currently being consolidated into one comprehensive framework that will incorporate sales objectives, targeted market and competitor analyses, and relevant country sales and marketing strategies for products and consulting services.</p> <p>Since early 2014, the sales staff has been required to prepare trip reports that include trip details and describe achievements against trip objectives. Capturing and storing all vital customer data and intelligence gathered through travel and other activities will be strengthened through the introduction of a customer relationship management system in 2014.</p>
<p>83. The Royal Canadian Mint should review its costing methodologies for the preparation of bid quotations and upgrade its costing model to make its cost-modelling more efficient for the scenarios the business line encounters in its tenders. (81–82)</p>	<p>Agreed. In 2014, the Foreign Coinage business line’s quoting process was fully mapped, procedures enhanced, and the issue related to understated contribution margins was addressed. Throughout the remainder of 2014, the Corporation will review and improve its costing methodologies and systems and introduce more efficient cost-modelling.</p>
<p>87. The Royal Canadian Mint should develop criteria for conducting analyses of lessons learned on selected projects to include opportunities for improvement in sales, quoting, and project management activities, as well as in manufacturing and production activities. (84–86)</p>	<p>Agreed. The Foreign Coinage business line will examine opportunities to enhance and improve the current win/loss post-mortems (lessons learned) by performing a more comprehensive analysis. This review will be conducted in 2014 and any required changes will be implemented as soon as possible.</p>

Recommendation	Response
<p>96. The Royal Canadian Mint should</p> <ul style="list-style-type: none"> • review its Corporate Travel Policy, Hospitality Policy, and any related guidelines to ensure that they are up to date and clearly outline requirements; • ensure that all employees participating in, managing and administering travel and hospitality activities are made fully aware of the requirements of the Corporate Travel Policy and Hospitality Policy; • ensure that sufficient and appropriate documentation accompany all travel requests and expense claims and be maintained on file to support assessment of expenses and their reasonableness; and that this documentation be subject to review and challenge against corporate policies before reimbursement occurs; and • implement practices to ensure timeliness, accuracy, and completeness of proactive disclosure. (88–95) 	<p>Agreed. The Corporation is currently reviewing its Corporate Travel Policy, Hospitality Policy, and related guidelines against best practices and its commercial objectives and will make necessary modifications. In 2014, the Corporation will undertake the appropriate level of training and awareness to ensure implementation of any modifications. Furthermore, the Corporation will implement procedures to improve documentation, timeliness, and completeness of proactive disclosure.</p>
<p>Health, safety, and the environment</p>	
<p>113. The Royal Canadian Mint should</p> <ul style="list-style-type: none"> • establish a clear, time-bound objective for completing its inventory of provincial and municipal legal and regulatory requirements; and • commit to a target date and devote the necessary resources to implementing its environmental management system. (108–112) 	<p>Agreed. In early 2014, the Corporation’s Environment Division was incorporated under the Corporate Health and Safety Division. This change is expected to improve the accountability of environmental leadership and practices throughout the Corporation and allow a more harmonized approach to completing the roadmap by the end of 2014, toward implementing the Corporation’s environmental management system.</p> <p>The Corporation will complete an inventory of provincial and municipal legal and compliance requirements by the end of 2014 and develop an action plan to implement measures deemed to be best practices and pertinent to the Corporation’s operations.</p>

Recommendation	Response
<p>121. The Royal Canadian Mint should</p> <ul style="list-style-type: none"> • complete the implementation of its radiation safety program expeditiously; • continue implementing its health and safety operational plan to address the remaining compliance gaps; • conduct a comprehensive risk assessment and put in place appropriate risk mitigation and monitoring measures; and • establish an ongoing monitoring and compliance regime for health and safety issues. (114–120) 	<p>Agreed. The health and safety of employees is a priority, and the Corporation has invested significant resources to ensure that employees are protected against occupational injury and illness.</p> <p>The Radiation Safety Program will be presented to the Corporate Policy Health and Safety Committee in June 2014 for approval; implementation of the program will proceed throughout the remainder of the year. Engineering controls, however, are already in place and radiation safety officers have been formally trained and are working toward addressing the administrative issues identified during the Program’s development.</p> <p>The Corporation will take the necessary steps to address the remaining compliance gaps identified by its health and safety operational plan and to ensure that a comprehensive risk assessment is developed in parallel to the development of a Hazard Identification and Assessment Program, scheduled to commence in 2014. This program will ensure that the Corporation is monitoring compliance across both plants, while driving preventive and continuous improvement initiatives.</p>
<p>125. The Royal Canadian Mint should develop and implement a comprehensive emergency preparedness and response framework on a timely basis. (122–124)</p>	<p>Agreed. In 2014, the Corporation will allocate the necessary resources to address the remaining elements of an emergency preparedness program and will work toward full implementation of the program across the Corporation by the second quarter of 2016.</p>