Using Corporate Compliance Principles to Centralize Compliance Processes in an ISO 14001 Environmental Management System: Case Study of the Manitoba Hydro Environmental Management System

by

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Abstract

There is an increasing expectation for organizations to operate in compliance, i.e. in adherence with applicable laws, regulations and other commitments. To meet these requirements and to manage their environmental activities, Manitoba Hydro uses an environmental management system (EMS) registered to the ISO 14001 Standard. The history of the EMS being amalgamated from three separate systems, coupled with the culture of Business Unit independence, has resulted in inconsistencies in compliance processes. The purpose of this research is to explore how the application of corporate compliance principles can centralize compliance processes in an ISO 14001 EMS.

15 principles were selected with a consideration(s) provided for how the principle could centralize a process. The considerations were organized into three centralization approaches, which can promote centralization by 1) strengthening CEM's corporate compliance function; 2) developing a new corporate EMS process or modifying an existing corporate EMS process; and 3) creating conditions that promote centralization.

Acknowledgments

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CCP	Corporate Compliance Program
CEA	Canadian Electrical Association
CECO	Chief Ethics and Compliance Officer
CEM	Corporate Environmental Management Department
CSA	Canadian Standards Association
EMAC	Environmental Management Advisory Committee
EMS	Environmental Management System
FSGO	Federal Sentencing Guidelines for Organizations
ISO	International Organization for Standardization
PDCA	Plan-Do-Check-Act
SME	Subject Matter Expert
SMS	Safety Management System

Chapter 1. INTRODUCTION

1.1 Manitoba Hydro

Manitoba Hydro is the province's major energy utility. As of 2015, the Crown Corporation was responsible for providing service to 561,869 electricity customers within the province and 274,817 natural gas customers in southern Manitoba. Power is also exported to three wholesale markets within Canada and the Unites States (Manitoba Hydro, 2015a). The majority of electricity, an estimated 96%, is produced at 15 hydroelectric generating stations on the Nelson, Winnipeg, Saskatchewan, Burntwood and Laurie River systems. Two thermal stations, four diesel generating stations and two wind farms are also used for power generation (Appendix A).

With over 6,000 full-time employees working across the province, the corporation is both geographically and hierarchically dispersed. At the time of writing, the corporation was operating under ten Business Units (Figure 1).

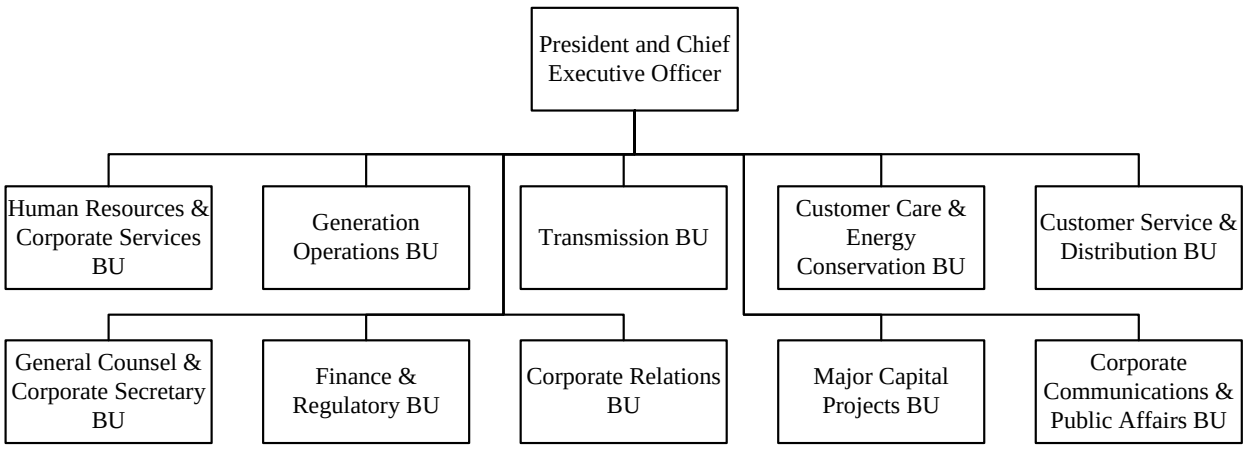


Figure 1. Manitoba Hydro Organizational Structure

1.2 Corporate Commitment to the Environment

Manitoba Hydro has a strong commitment to protecting the environment. The corporation's vision is "to be recognized as a leading utility in North America with respect to safety, reliability, rates, customer satisfaction and environmental leadership" (Manitoba Hydro, 2013a, p. 3). The same message is communicated through the Environmental Management Policy, Sustainable Development Policy, Corporate Strategic Plan, Annual Report and Sustainable Development Report; all of which are publically accessible documents.

1.2.1 Environmental Management Policy

The Environmental Management Policy is intended to provide a high-level overview of the corporation's environmental commitments (Appendix B). The policy commits to protecting the environment by:

- preventing or minimizing any adverse impacts, on the environment, and enhancing positive impacts;
- continually improving our Environmental Management System;
- meeting regulatory, contractual and voluntary requirements;
- considering the interests and utilizing the knowledge of our customers, employees; communities, and stakeholders who may be affected by our actions;
- reviewing our environmental objectives and targets annually to ensure improvement in our environmental performance; and
- documenting and reporting our activities and environmental performance (Manitoba Hydro, 2014, p. 1).

1.2.2 Sustainable Development Policy

Based on the frequently quoted definition from *Our Common Future*, the Sustainable Development Policy commits the corporation to operating in a manner that "meets the needs of the present without compromising the ability of future generations to meet their needs" (World Commission on Environment and Development, 1987, p. 43). 13 guiding principles of sustainable development are detailed in the policy:

1. Stewardship
2. Shared Responsibility
3. Integration of Environmental and Economic Decisions
4. Economic Enhancement
5. Efficient Use of Resources
6. Prevention and Remedy
7. Conservation
8. Waste Minimization
9. Access to Adequate Information
10. Public Participation
11. Understanding and Respect
12. Scientific and Technological Innovation
13. Global Responsibility (Manitoba Hydro, 2013b, para. 3).

1.3 Manitoba Hydro EMS

1.3.1 Background

The Manitoba Hydro environmental management system (EMS) is used to manage the corporation's environmental activities and associated impacts at a corporate level. It should be noted that Manitoba Hydro uses the term environmental "activities" in lieu of "aspects" as per the ISO 14001 Standard. As a member of the Canadian Electricity Association (CEA), Manitoba Hydro is an active participant in the voluntary Sustainable Electricity Program. The program commits CEA members to have an ISO 14001-consistent EMS (Canadian Electricity Association, 2014).

Manitoba Hydro's generating stations were the first to establish their EMS registrations in the 1990s. They were known as "local environmental management systems" or LEMS, which were later combined into the Power Supply EMS. Afterwards, the Transmission and Distribution EMS and Corporate EMSs were developed in the early 2000s. In 2011, Manitoba Hydro consolidated the three EMS registrations, making it the first utility in Canada to operate under a single EMS registration (Figure 2).

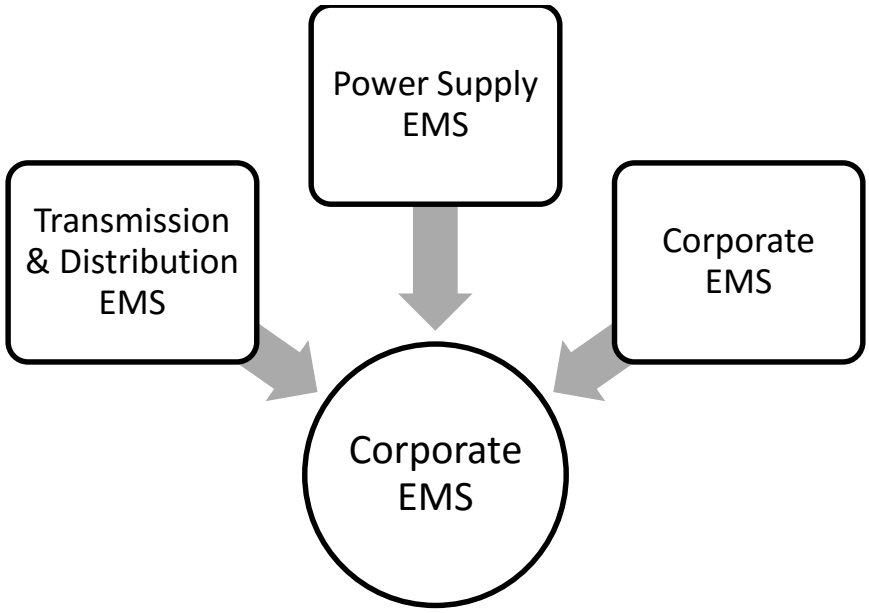


Figure 2. Amalgamation of EMS Registrations

1.3.2 Guide

The requirements for the EMS are managed in the *Guide to Environmental System Management Governance at Manitoba Hydro* (*Guide).* The *Guide* can be referred to as the corporation's EMS manual, which is used to interpret how the Standard's requirements are met through organizational structures and processes. The *Guide* assigns responsibilities to key functional groups/departments for each ISO Clause.

Forming the foundation of the *Guide* is the list of environmental activities. The list includes 55 activities organized into high, medium and low risk categories. The high-risk activities are termed "significant environmental activities". Due to their increased risk profile, these activities receive the most attention, in terms of oversight, management and auditing.

1.3.3 EMS Committees

A hierarchy of three main groups function on behalf of the EMS (Figure 3). The term "EMS Committees" is not an established termed at Manitoba Hydro but is used for purposes of this research when describing these groups jointly.

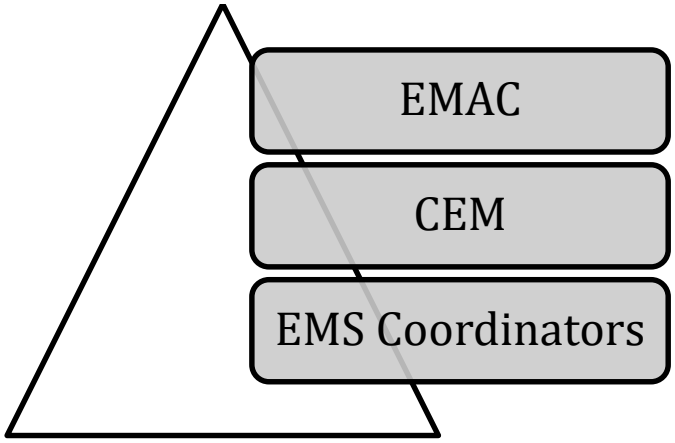


Figure 3. Manitoba Hydro EMS Committees

The Environmental Management Advisory Committee (EMAC) is a committee of senior managers or their delegates, responsible for monitoring and evaluating the effectiveness of the EMS. Their main responsibilities include reviewing significant environmental activity performance, external audit corrective action plans, and Management Review outcomes. The Chair of EMAC is responsible for quarterly communication with the Executive Committee.

The Corporate Environmental Management department (CEM) was developed in 2007 to coordinate environmental processes throughout the corporation. With the amalgamation of the EMS registrations in 2011, the department became the owner of the corporation's single EMS

registration. CEM coordinates EMS efforts amongst the Business Units and acts as is the liaison between the EMS Coordinators and EMAC.

The EMS Coordinators are an informal committee of Business Unit representatives acting as the primary point of contact regarding EMS and other environmental inquiries within their Business Unit. They are Subject Matter Experts (SMEs), both in terms of their Business Unit's operations and of the EMS.

1.4 Problem Statement

One of the purposes for transitioning to a single EMS registration in 2011 was to centralize processes throughout the corporation. While the importance of maximizing efficacy was understood, the amalgamation had its challenges. Having worked to develop their former systems, there was resistance from the Business Units to align their systems and report to a new corporate owner (CEM). As well, collaboration was a challenge in light of the corporate culture of Business Unit independence within the corporation. During the transition, Business Units largely continued to use their own processes (including compliance processes) for meeting the requirements of the ISO 14001 Standard. This has made it difficult for CEM to maintain and communicate assurance of compliance as a corporation.

1.5 Research Question

To address this issue, CEM recommended the exploration of corporate compliance programs (CCPs) and the principles that govern them, i.e. corporate compliance principles (principles). CCPs assist organizations in complying with requirements and maximize organizational efficiency by streamlining processes.

The overarching research question is: how can the application of corporate compliance principles promote centralized compliance processes in an ISO 14001 EMS? To guide this research, three objectives were identified:

1. To identify the similarities and differences between the Manitoba Hydro EMS and a CCP to establish compatibility;
2. To determine the relevant corporate compliance principles for the Manitoba Hydro EMS; and
3. To provide considerations for how to centralize compliance processes.

1.5.1 Centralization

The focus on centralization in this research warrants its own discussion. Centralization refers to a process/function managed through a central office – usually headquarters; and decentralization refers to a process/function managed at the local level – an office or department outside of the central office (Evans Incorporated, 2015). Similarly, centralization refers to the use of a consistent process owned by CEM.

It is acknowledged that Business Units are responsible for vastly different operations and therefore not all Business Unit processes could or should be centralized. The inconsistent processes discussed in this research are ones that have been identified by the EMS Committees and the researcher prior to this research. As such, this research does not explore what/where the inconsistencies are but how to resolve them.

Inconsistency in processes (as a result of decentralization) is not uncommon, especially in complex organizations where cross-functional and cross-geographical coordination is required

(Biegelman, 2009). However, significant benefits can be realized through the centralization of processes which can include:

- Consistency: Different branches use similar processes/products and common language;
- Consolidation: Expertise and information is kept in one unit; People know where to go for this function;
- Efficiency: Processes become more repeatable; redundancies are reduced; easier to document lessons learned;
- Stature: Function has a voice closer to, or at, the top of the organization, as opposed to fragmented;
- Alignment: Decisions more likely to be aligned with overall organizational strategy and priorities;
- Authority: More clarity on who owns and makes decisions in the functional area; and
- Leverage: Easier to leverage personnel if they report centrally (Evans Incorporated, 2015, p.55).

If not resolved, a system will fail to operate to its full potential – both in terms of effectiveness and efficiency.

1.6 Methodology

The qualitative nature of this research was approached using a gap analysis methodology. A gap analysis is used to identify the gap between the current and desired states. The following steps were followed:

1. Identification of the current inconsistent processes;

2. Determination of the potential for centralization; and
3. Application of principles.

1.6.1 Identification of the current inconsistent processes

The first step in conducting the gap analysis was to determine the current inconsistent processes. These inconsistencies were identified by the EMS Committees prior to this research.

1.6.2 Determination of the potential for centralization

A literature review was first used to understand the purpose and common components of a CCP. The similarities and differences between an ISO 14001 EMS and CCP were identified, which was important in determining their compatibility.

The literature review was also used to identify principles. For this research, a "principle" can be defined as "a general law or rule adopted or professed as a guide to action" (Simpson & Weiner, 1989, p. 499). Comparably, Manitoba Hydro's "operating principles" are defined as "statements of underlying values and beliefs. These statements guide individual and collection actions and decisions for the organization" (Manitoba Hydro, 2008, p.4). Corporate compliance principles are used to guide effective CCPs or corporate compliance processes in general. Best practices and recommendations were also considered with principles.

With no inclusive list of principles, many sources were used. However, four sources were particularly valuable in identifying principles that could be applied to the Manitoba Hydro EMS: The Federal Sentencing Guidelines for Organizations; the National Center for Preventive Law; the Compliance and Ethics Leadership Council; and Biegelman's *Building A World-Class Compliance Program*.

1. Federal Sentencing Guidelines for Organizations (FSGO)

The surge of acceptance for CCPs in the United States was the result of the growing number of corporate scandals throughout the 1980s. The United States Sentencing Commission released the FSGO in 1991, which became the first standard to mandate the implementation of a CCP that "encourages ethical conduct and a commitment to compliance with the law" (United States Sentencing Commission, 2004, p. 503). The FSGO were later amended in 2004 to further emphasize the promotion of a culture of compliance through senior management oversight.

In order for a CCP to be considered "effective" in the United States, the FSGO's "Seven Steps for an Effective Compliance Program" must be met (Appendix C). In the event of misconduct (noncompliance), an organization can benefit from reduced or suspended sentences if an effective CCP has been established. As such, these seven steps can often be considered as the backbone for building a CCP:

1. Establish policies, procedures and controls;
2. Exercise effective compliance and ethics oversight;
3. Exercise due diligence to avoid delegation of authority to unethical individuals;
4. Communicate and educate employees on compliance and ethics programs;
5. Monitor and audit compliance and ethics programs for effectiveness;
6. Ensure consistent enforcement and discipline of violations; and
7. Respond appropriately to incidents and take steps to prevent future incidents (United States Sentencing Commission, 2014).

2. National Center for Preventive Law (NCPL)

The NPCL Corporate Compliance Principles Commission was the primary developer of the NPCL's Corporate Compliance Principles. The 20 principles identified in the "Corporate Compliance Principles" publication represent the essential features of a successful CCP. The NCPL clarifies that these principles can be used generally (not directing a CCP) to assist an organization comply with its compliance requirements and organizational values (NCPL, 1996).

3. The Compliance and Ethics Leadership Council (CELC)

The Corporate Executive Board (CEB) is a technology company providing best practice and decision-making support to organizations. 50 membership programs are offered, categorized into key business functions such as Finance, Information Technology, Risk & Audit and Sales & Service. These programs are operated by Leadership Councils (CELC, 2015a). The CELC is a key source of information for this research. The research produced by this Council was valuable in understanding the challenges and best practices facing multinational organizations as a result of their CCPs.

4. Building A World-Class Compliance Program

Martin Biegelman is an expert in the fields of fraud and corruption prevention and corporate compliance. Biegelman has published several books, but of particular interest to this research was *Building A World-Class Compliance Program – Best Practices and Strategies for Success* published in 2009. The book provides compliance insight into specific corporate cases and the highlights the importance of implementing an effective CCP.

Principle selection criteria

The suite of principles discussed in this research was carefully selected based on specific criteria, hereafter referred to as the "principle selection criteria". The principle selection criteria required that all principles had to:

1. Be appropriate for the Manitoba Hydro EMS

Most importantly, the principles had to be relevant to processes that currently exist or could exist in the Manitoba Hydro EMS. As well, only the principles that reflected the maturity of the Manitoba Hydro EMS were selected; in many cases, the principles directed very stringent processes within a CCP that were not appropriate for the EMS at the current time.

2. Within CEM's control

This criterion was the most significant in limiting the principles most relevant for this research. These principles propose centralization of processes that require input from the Business Units, but are owned by CEM. The scope of corporate level processes allows CEM to implement the considerations identified in this research. Similarly, principles dealing with penalties for misconduct or ethical considerations are out of scope; these are dealt with by the corporation's legal staff.

3. Address an existing inconsistency or provide insight into new ways to promote centralization

To narrow the scope further, only the principles that could provide insight as to where/how processes could be centralized were selected. As expected, some principles were selected because they provided guidance in resolving a known inconsistency in the EMS; these

inconsistencies were identified by CEM, the EMS Coordinators and the researcher prior to this research. Other principles were selected because they provided insight into new processes that could be centralized and identified ways to strengthen the EMS in general. Therefore, the use of the gap analysis was an organic process, i.e. not limited to addressing only the current inconsistencies.

1.6.3 Application of principles

The application of principles can be thought of as the bridging process - closing the gap between the current and potential states of centralization. In discussing how each principle could be used to centralize a process, a consideration(s) was presented. For use in this research, a "consideration" should be understood as a solution used to promote centralization. It is important to note that considerations are just that – considerations. They are non-binding ideas that are at the discretion of the EMS Committees to approve and implement.

These considerations are discussed in Chapter 4 under the heading "Manitoba Hydro EMS Applicably". In these sections, the current state of an EMS process is identified and in applying the principle, a consideration(s) is presented.

1.7 Terminology

There are some differences in terminology used in an ISO 14001 EMS and CCP. When distinctly referring to the EMS, EMS terminology will be used; this terminology is derived from the ISO 14001 Standard. Likewise, when distinctly referring to a CCP, the CCP terminology will be used. When the systems are discussed jointly, the EMS terminology will be used to have more relevance for Manitoba Hydro.

- **Conformity:** fulfillment of a requirement (Praxiom, 2015, para. 10)
- **Compliance:** state of an organization that meets prescribed specifications, contract terms, regulations or standards (ASQ, 2015, para. 45)
- **Corrective action:** an action to eliminate the cause of a detected nonconformity (Canadian Standards Association, 2004, p. 87)
- **Legal requirement:** may include national and international legal requirements, state/provincial/departmental legal requirements, and local governmental legal requirements (Canadian Standards Association, 2004, p. 34)
- **Noncompliance:** failure to meet prescribed specifications, contract terms, regulations or standards (ASQ, 2015, para. 45)
- **Nonconformity:** non-fulfillment of a systems requirement (Canadian Standards Association, 2004, p. 88)
- **Other requirement:** requirements to which the organization subscribes. Examples of other requirements include:
    - agreements with public authorities;
    - agreements with customers;
    - non-regulatory guidelines;
    - voluntary principles or code of practice;
    - voluntary environmental labeling or product stewardship commitments;
    - requirements of trade associations;
    - agreements with community groups or non-governmental organizations;
    - public commitments of the organization or its parent organization; and
    - corporate/company requirements (Canadian Standards Association, 2004, p. 35).

- **Regulatory requirement:** an obligation that is specified by an authority which gets its mandate from a legislative body (Praxiom, 2015, para. 39)

There are several terms that have a parallel meaning in an ISO 14001 EMS and CCP (Table 1).

EMS Terminology	CCP Terminology
Conformity	Compliance
Legal requirement	Regulatory requirement, compliance requirement
Nonconformity	Noncompliance, misconduct, breach
Operational control	Internal control
Corrective action	Corrective action, remedial action

Table 1. EMS and CCP Parallel Terminology

1.7.1 Conformity vs. Compliance

There is a clear distinction between the term "conformity" used in an EMS and "compliance" used in a CCP.

The Standard refers to "conformity" because ISO 14001 is a process Standard that focuses on continual improvement rather than performance:

> It should be noted that [ISO 14001:2004] does not establish absolute requirements for environmental performance beyond the commitments in the environmental policy, to comply with applicable legal requirements and with other requirements to which the organization subscribes, prevention of pollution and to continual improvement (Canadian Standards Association, 2004, p. 6).

However, compliance is considered in three Clauses. *Clause 4.2 Environmental policy* requires an organization to define an environmental policy that "includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relates to its environmental aspects" (Canadian Standards Association, 2004, p. 20). *Clause 4.3.2 Legal and other requirements* requires the organization to establish, implement and maintain a procedure to identify applicable legal requirements and determine how these apply to its environmental aspects; and *Clause 4.5.2 Evaluation of compliance* requires the organization to establish, implement and maintain a procedure to periodically evaluate compliance with applicable legal requirements and keep records of these evaluations (Canadian Standards Association, 2004).

Manitoba Hydro uses the term "compliance" rather than "conformity" to describe adherence to legal requirements; and therefore this term will be used for the remainder of this research.

Chapter 2. ENVIRONMENTAL MANAGEMENT SYSTEMS

This Chapter serves to provide an understanding of an EMS and the ISO 14001 Standard; and how an ISO 14001 EMS can be used to improve compliance.

2.1 EMS Defined

The Canadian Standards Association defines an EMS as "part of an organization's management system used to develop and implements its environmental policy and manage its environmental aspects" (Canadian Standards Association, 2004, p. 87). It is a framework used to control an organization's products, services and processes to limit the negative impacts on the environment.

An EMS follows the Plan-Do-Check-Act (PDCA) cycle (Figure 4). The four steps work in a cyclical process to achieve continual improvement of the system:

- Plan: establish the objectives and processes necessary to deliver results in accordance with the organization's environmental policy.
- Do: implement the processes.
- Check: monitor and measure processes against environmental policy, objectives, targets, legal and other requirements, and report the results.
- Act: take actions to continually improve performance of the environmental management system (Canadian Standards Association, 2004, p. 7)

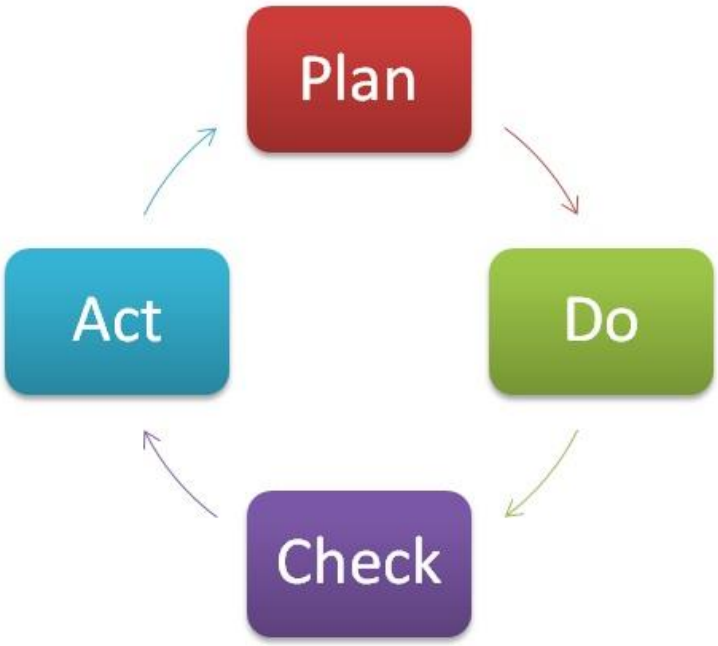


Figure 4. PDCA Cycle (PDCA Home, 2015, para. 3)

2.2 ISO 14001:2004

The International Organization for Standardization (ISO) is a non-governmental membership organization and the world's largest developer of voluntary International Standards. Standards are specifications used for "products, services and systems, to ensure quality, safety and efficiency" (ISO, 2015, para.3).

In the early 1990s the first national EMS Standard, known as the British Standard 7750: Environmental Management Systems was developed in the United Kingdom. This Standard was the foundation of what would become ISO 14001. Following the United Nations Conference on Environment and Development (UNCED) in 1992, the ISO 14000 series of Standards in the field of environmental management were developed. ISO 14001 Environmental management systems

was introduced in 1996 and further revised in 2004, becoming the first international EMS Standard (Bansal & Bogner, 2002).

ISO 14001 is the most widely recognized EMS Standard. As of 2014, it is estimated that 1,609,294 ISO 14001 certificates were issued worldwide. Europe and East Asia continue to be the predominant users of the Standard with China, Italy, Japan and the United Kingdom having the most certificates (Figure 5).

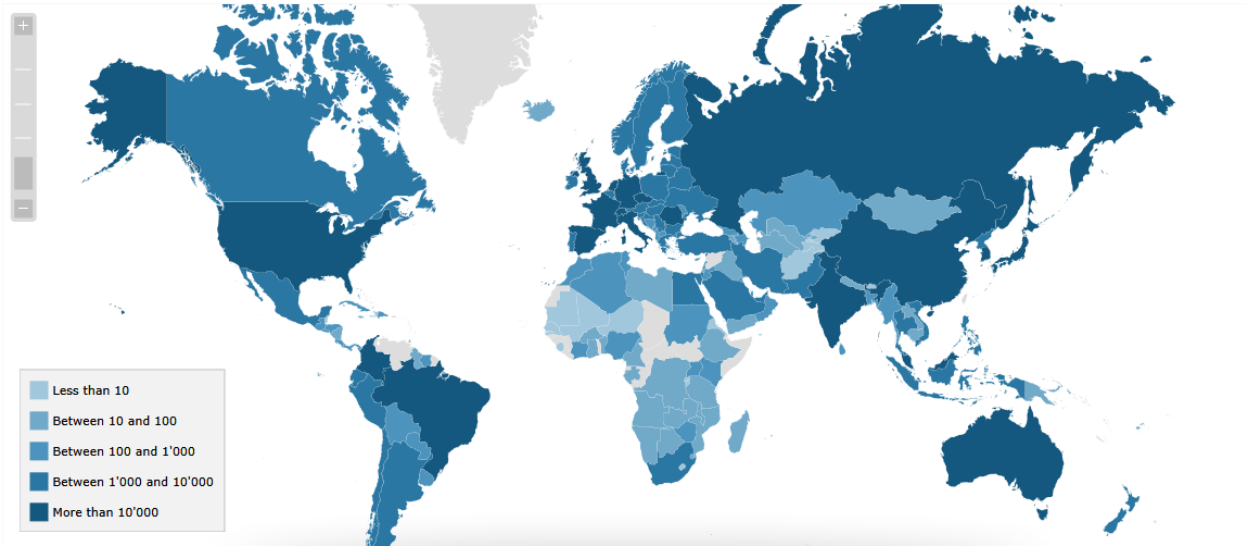


Figure 5. World distribution of ISO 14001 certificates in 2014 (ISO, 2014, p. 1)

The Standard is non-prescriptive allowing for flexibility in meeting the requirements, which can "accommodate diverse geographical, cultural and social conditions" (Canadian Standards Association, 2004, p. 5). Additionally, the Standard has been designed to be compatible with other systems Standards, such as ISO 9001:2000 quality management systems, which makes for a harmonized adoption and integration.

The ISO 14001:2004 Standard will be referred to as "the Standard" for the remainder of the research.

2.2.1 Conformity to the Standard

Organizations have several options to demonstrate conformity to the ISO 14001 Standard:

1. obtaining third party registration;
2. making a self-determination and self-declaration;
3. seeking confirmation of its conformance by parties having an interest in the organization; or
4. seeking confirmation of its self-declaration by a party external to the organization (Canadian Standards Association, 2004, p. 14-15).

The Standards Council of Canada terms a "certified" or "registered" EMS to be ISO 14001 compliant based on formal recognition from an external accredited certification body, referred to as a registrar. While this process can be costly, the majority of organizations adopting the standard have chosen to certify their EMS. To maintain the registration, an EMS must undergo an annual surveillance audit and a more comprehensive recertification audit every three years. These audits are conducted to assure the Standard's requirements are being met, the system is operating effectively, and that the organization is encouraging continual improvement (Smithers Quality Assessments, 2013).

2.2.2 Requirements

ISO 14001 sets out a framework to implement an environmental policy, set objectives, and manage an organization's environmental aspects using the PDCA cycle. The Standard's requirements are categorized into six main categories with associated requirements:

4.1 General requirements

4.2 Environmental policy

4.3 Planning

4.3.1 Environmental aspects

4.3.2 Legal and other requirements

4.3.3 Objectives, targets and programme(s)

4.4 Implementation and operation

4.4.1 Resources, roles, responsibility and authority

4.4.2 Competence, training and awareness

4.4.3 Communication

4.4.4 Documentation

4.4.5 Control of documents

4.4.6 Operational control

4.4.7 Emergency preparedness and response

4.5 Checking

4.5.1 Monitoring and measurement

4.5.2 Evaluation of compliance

4.5.3 Nonconformity, corrective action and preventive action

4.5.4 Control of records

4.5.5 Internal audit

4.6 Management review (Canadian Standards Association, 2004, p. iii).

2.3 Environmental Compliance

To put environmental complaince into perspective, the International Institute for Sustainable Development (IISD) considers environmental compliance as step one in a three-

phased journey towards maximizing environmental and economic performance (Figure 6). Through the use of a basic EMS, compliance with environmental regulations should result in improved environmental performance. This diagram reinforces that although operating compliantly will reap benefits, an organization should move beyond "compliance mode" and integrate sustainable development strategies into operations to maximize performance (IISD, 2013).

Figure 6. The Sustainable Development Journey (IISD, 2013, p. 1)

While the IISD considers environmental compliance to be a preliminary step, assuring compliance with legal requirements is a major challenge considering:

- Compliance with environmental requirements is seldom, if ever, complete;
- Defining an appropriate level of compliance can be challenging;
- Detecting and taking action against non-compliance is complex and resource-intensive; and

- The institutions assuring compliance with environmental requirements need to be sufficiently independent and equipped to resist undue political pressure or corruption (OECD, 2009, p. 13)

2.3.1 Improved compliance

While an EMS cannot guarantee compliance, many studies have shown that organizations with an ISO 14001 registered EMS have benefited from improved compliance. In a study of roughly 3,700 facilities in the United States, the implementation of an ISO 14001 EMS improved compliance with government regulations, specifically United States air pollution regulations. It is expected this is due to the pressure of third-party auditing and the motivation to continually improve internal processes (Potoski & Prakash, 2005).

In addition, the motivations behind ISO 14001 adoption have been widely explored. According to Hoffman (1997) the risk of legal sanction is the main motive behind proactive environmental management, including EMS adoption. Similarly, in a study of companies within the United States, the motives for ISO 14001 certification were explored to determine why parent companies mandate their operational units certify their EMS(s) to ISO 14001. The results revealed that "regulatory pressures in the form of improving the company's environmental compliance and anticipating future regulatory benefits" were an important predictor of firm wide ISO 14001 mandates (Darnall, 2006, p. 373).

The United States Environmental Protection Agency (EPA) also promotes the use of EMS to adhere to compliance requirements: "where the EPA determines that a root cause of a violation is the absence of a systematic approach to identifying, understanding, and managing the

regulated entity's compliance, the ordered corrective actions usually include developing an EMS with a compliance focus" (OECD, 2009, p. 52)

Chapter 3. CORPORATE COMPLIANCE

The focus of this Chapter is on the purpose, benefits and components of a CCP. The compatibility of the Manitoba Hydro EMS and a CCP is illustrated through the mapping of their components.

3.1 Corporate Compliance

"Corporate compliance" refers to an organization's "internal policies and procedures designed to prevent and detect violations of applicable law, regulations, rules and ethical standards by employees, agents and others" (Johnson, 2005, p. 1). Every individual and organization must act lawfully, and therefore corporate compliance is considered across all industries.

There is an increasing expectation for organizations, especially governments, to comply with regulations; and this expectation must be met in a fast paced regulatory environment where requirements are revised and added frequently (KPMG, 2012). In a 2012 survey conducted by Pricewaterhouse Coopers (PwC), compliance officers within the United States were asked, "How much will various stakeholders increase or decrease their demand for evidence of effective compliance in the next three years?" The results reveal an irrefutable demand for evidence of effective compliance (Figure 7).

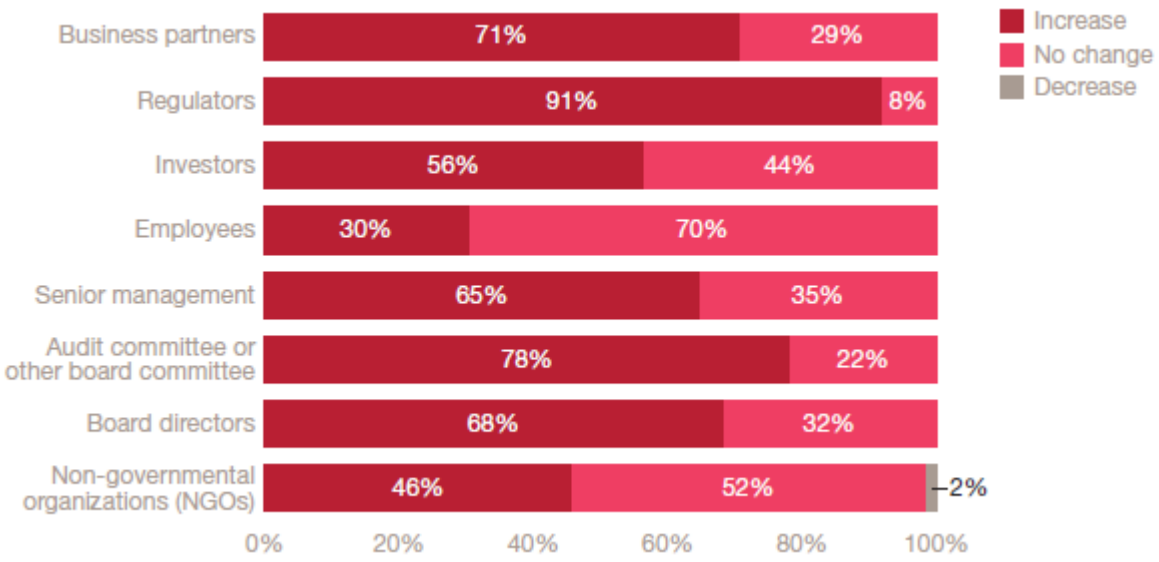


Figure 7. Change in Stakeholder Demand for evidence of effective compliance in the next three Years (PwC US, 2012, p. 13)

In this day and age compliance can be considered "a license to operate" (Deloitte, 2015, p. 5).

3.2 Corporate Compliance Programs

CCPs are also referred to as "corporate ethics and compliance programs". The FSGO define a compliance and ethics program as "a program designed to prevent and detect criminal conduct" (United States Sentencing Commission, 2014, p. 505). Ethics, in the context of CCPs, refers to conduct. Regardless of an individual's awareness of their compliance obligations (law), it is their ethics, i.e. "the principles, norms, and standards of conduct governing an individual or group" (Trevino & Nelson 2007, p. 13) that will affect their actual compliance behaviour. Incorporating both compliance and ethics is necessary in an effective CCP (Figure 8).

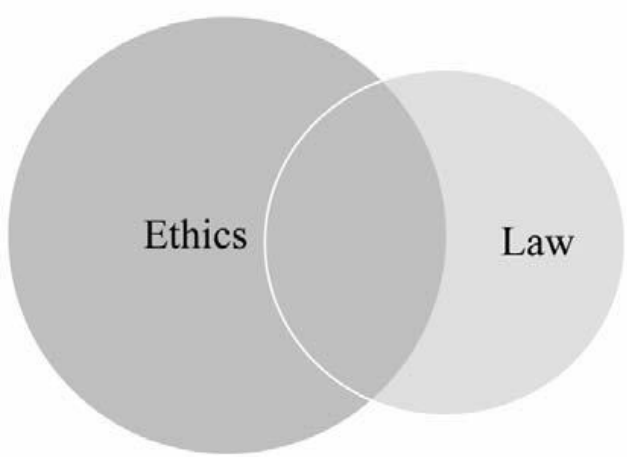


Figure 8. Relationship between ethics and the law (Trevino & Nelson, 2007, p. 18)

A CCP can be described as a risk management tool used to ensure "risks are properly identified, assessed, prioritised and treated" (OECD, 2010, p. 5). Their purpose is to assist an organization comply with requirements, prevent and detect potential violations, and foster an ethical business environment (Walker, 2005). In an increasingly regulated environment, CCPs are gaining popularity in assisting organizations to meet their requirements. While some organizations use a CCP for adherence to external requirements, Kral (2005) suggests that an integrated CCP will also consider internal compliance requirements.

Another common reason for CCP implementation is to maximize organizational harmony and efficiency by streamlining compliance processes. The intention of having a central program dedicated to Business Unit compliance collaboration is to act as a "magnet that brings all of a company's compliance efforts together" (Kral, 2009, p. 1). As similar compliance requirements are considered in different areas of an organization, organizations have benefitted from a central owner; the owner of a CCP is commonly referred to as the Chief Ethics and Compliance Officer (CECO).

CCPs are used across all industry sectors. In the health care industry, one organization uses their CPP to adhere to "various business and clinical practices and relationships, particularly as they are related to the delivery of services under Medicare, Medicaid, and other government-sponsored programs" (Ziel, 1998, p. 1032). The Barrick Gold Corporation, a mining company, use their CCP to comply with human rights norms and CCP best practices (Barrick Gold Corporation, 2010); and using an example from the financial industry, CCPs were developed to mitigate the risk of "legal or regulatory sanctions, material financial loss, or loss to reputation a bank may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and codes of conduct applicable to its banking activities" (Bank for International Settlements, 2005, p. 7).

3.2.1 Benefits

As Warren Buffet has forewarned, "it takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently" (Time, 2010, para. 10). This statement can be widely applied, but very convincingly illustrates the implications of noncompliance for an organization. As a good offence is the best defense, the implementation of a CCP is a "pay me now, or pay me later" decision (Steinberg, 2010, p. 3). The initial costs may appear high, but the risk of noncompliance can be significantly more costly.

A properly implemented CCP will be more than a "symbolic statement" of an organization's commitment to compliance and act as a strategic asset for the organization. By uncovering and rectifying weaknesses in compliance management processes, a CCP can improve business functioning and be used to:

- Reduce day-to-day costs;

- Enhance teamwork, communication and understanding between the legal and operational functions;
- Reduce the likelihood of noncompliance events;
- Reduce fines, penalties, costs related to litigation;
- Establish corrective actions;
- Trigger early warnings on noncompliance;
- Maintain a good reputation;
- Increase awareness of compliance, and enhancing the compliance culture;
- Assist employees in assessing the risks they may face;
- Improve the ability to recruit and retain staff;
- Increase competitive advantage;
- Improve employee productivity and morale; and
- Avoid disruption to operations (Freyer & Klubes, 1994; Competition Bureau of Canada, 2008; Biegelman, 2008).

Culture of compliance

Trumping all other benefits is the ability of a CCP to improve an organization's culture of compliance. An organization's culture of compliance is often discussed interchangeably with corporate culture, as both discuss the influence of an organization's values and beliefs in relation to employee behaviour. Included in the FSGO, an organization CCP is deemed effective if it can "promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law" (United States Sentencing Commission, 2014, p. 503).

The components of a CCP should work together to foster a deep-rooted culture of compliance, which acts as "the social glue that holds the organization together" (Trevino & Nelson, 2007, p. 259). Ultimately, it isn't the components of a CCP that affect actual compliance but the manner in which activities are managed in everyday work processes.

A weak culture of compliance is considered by most to be the single biggest impediment to compliant behaviour. Some common challenges in embedding a strong culture of compliance can include:

- the inability to attribute improved business performance to compliance culture;
- lack of incentive motivation for employees to deliver/embrace culture and values; and
- lack of stewardship/ineffective role models (Deloitte, 2015, p. 7)

Overcoming these obstacles is essential. "In the fight between culture and compliance, culture will always win" (Deloitte, 2015, p. 4).

3.3 CCP Components

The structure and components of a CCP will differ with the industry, organizational context and compliance risks of each distinct organization. Organizations are cautioned against adopting a "mechanistic" CCP without tailoring the components as it will fail to change the organization's culture of compliance and will ultimately fail (Ethics Resource Center, 2012; Biegelman, 2008; Langevoot, 2002).

Based on a literature review of CCPs, eight common components emerged: Senior management leadership; risk assessment; policies and procedures; training; monitoring, auditing and reporting; internal reporting; response and prevention; and maintenance and assessment.

3.3.1 Senior management leadership

An effective CCP is grounded on a strong foundation of senior management leadership. As a first step, senior management must clearly communicate their commitment to the program, which is often established through a Code of Conduct (Wulf, 2011). However, their continual visible support and reinforcement is equally important. According to the Competition Bureau of Canada (2008), lack of senior management reinforcement is the main reason for CCP failure.

Senior management should guide the overall direction for the program, be engaged in its activities and drive continual improvement. More specific responsibilities can include appointing the CECO, appearing in training materials and reviewing compliance reports (Competition Bureau of Canada, 2008; Williford & Small, 2013; Wulf, 2011).

With senior management ultimately accountable for compliance, it is a strategic business decision to accept compliance as a goal. Not only is instilling a strong culture of compliance of value internally, but it can also maximize external stakeholder perception and value. As Steinberg (2010) suggests, forward-thinking management will see past compliance as being a "costly but necessary evil" and acknowledge that complying with regulations enhances their organizational performance.

Through the actions of senior management, it is the intention that a strong culture will cascade down to middle management, and reach operational level employees. It is this ripple effect that will influence employee behaviour (Biegelman, 2008).

3.3.2 Risk assessment

A risk assessment is a process used to identify and prioritize risk. It is an essential process used to account for all compliance obligations and to identify high-risk areas that require the prioritization of resources to decrease the likelihood of noncompliances (Fox, 2013); in this way, risk assessments are a critical tool for the allocation of scarce resources. A risk assessment should provide senior management with a big picture of activities that could impact business objectives (PwC US, 2008).

The importance of this process cannot be overstated. The risk assessment should be used to influence each component in a CCP. In a study conducted by the Compliance and Ethics Leadership Council, 76% of CECOs consider improving compliance risk-assessment and monitoring capabilities as their most important initiative (CELC, 2005).

The first step in a risk assessment is defining the scope of the assessment. The risks can then be identified using past audit reports, claims, root causes, staff turnover and/or reports submitted to the CECO (Wulf, 2011). Afterwards, a methodology should be selected relevant to the organization's priorities and objectives and a threshold for high-risk activities should be established. Heat maps are a popular tool for risk assessments that consider the likelihood and impact of risks (Figure 9).

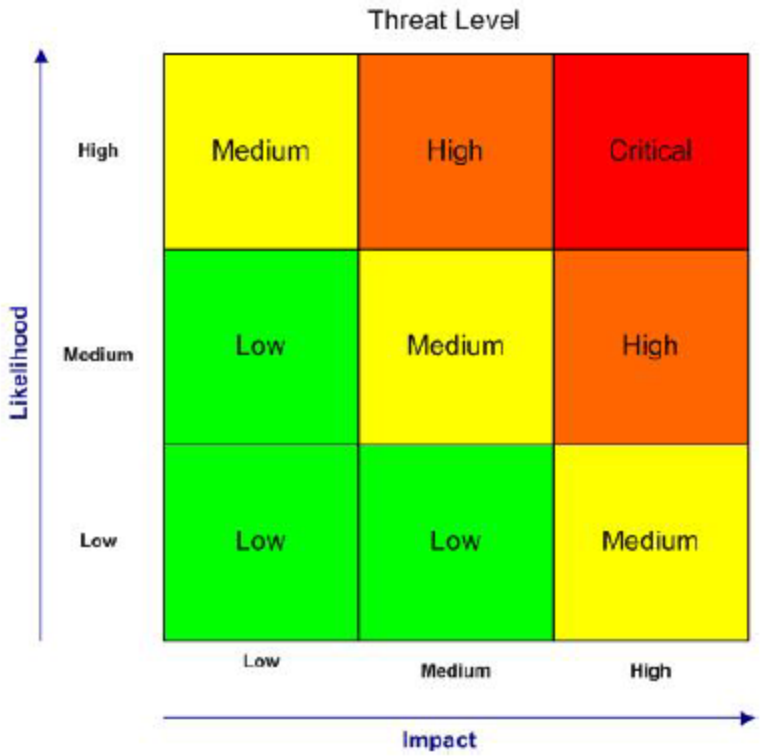


Figure 9. Risk Heat Map (Neil, p. 5)

3.3.3 Policies and procedures

Policies and procedures are used to tie the components of a CCP together. In essence, they are the tools used to get the job done in accordance with organizational objectives and goals. The difficulty is delivering the "package" of policies and procedures that achieve these goals in an efficient and effective manner (OECD, 2009).

Critical to a CCP is a clear statement of the organization's commitment. Most commonly, organizations will develop a Code of Conduct to make a statement to all employees. Using plain language, the Code of Conduct should clearly identify responsibilities for those administering and governing the program, identify channels for reporting violations, and provide guidance on the expected ethics of the organization (Williford & Small 2013; Biegelman, 2008). In addition

to the Code of Conduct, more detailed policies are needed to guide the approach desired by organization in order to mitigate regulatory risks.

Procedures should "demonstrate a CCP is more than just words on a paper" (Baker & Mackenzie, 2012, p. 10) by outlining specific methodologies. The CECO should work with the functional groups to develop their suite of policies and procedures, for which they are accountable (Barrick Gold Corporation, 2010).

3.3.4 Training

As with any program, training is a fundamental component of a CCP. Both the method in which training is conducted and the frequency is important for employee retention.

A CECO should recognize the importance of training in ensuring compliant behaviour. In a study of 260 employees, training and communication required the most time allocation from the CECO/compliance office (CELC, 2014).

A proper training program should educate employees on relevant requirements, Code of Conduct, and their associated responsibilities. Employees should have a clear understanding of how policies and procedures apply to their work and feel confident in resolving compliance issues themselves (Williford & Small, 2013). The Competition Bureau of Canada recommends four basic training requirements should be met:

1. Train all employees at an early stage (for instance, during an initial orientation session) regarding the importance and expectation of compliance;
2. Train senior management and staff as required in the particular circumstances to recognize and address compliance issues;

3. Regularly assess the employees' knowledge of compliance policies and procures; and
4. Document all training sessions (Competition Bureau of Canada, 2008, p. 14).

With training material ranging from general principles to specific technical procedures, it is useful to use a variety of training methods. These should be tailored towards the content and audience, which can include courses, marketing events, posters, newsletters and meetings (Competition Bureau, 2008; SAI Global, 2012).

Training should be conducted on an ongoing basis and in a timely manner when there are new or changed requirements that affect operations. Training should be provided to employees at all levels, senior management and staff alike who engage in or are exposed to potential noncompliant activities (Competition Bureau, 2008). As well, training should be prioritized based on risk, where high-risk areas receive more comprehensive (live in-person) and frequent training; these risk areas will be identified through the risk assessment process.

3.3.5 Monitoring, auditing and reporting

Monitoring, auditing and reporting mechanisms are often discussed jointly for purposes of preventing, detecting, and communicating potential noncompliance events. These functions should occur in a joint effort with the CECO and/or an organization's internal audit or law departments (Chibarro & Coyler, 2000). "It is not possible, nor desirable to evaluate every specific risk treatment carried out" (OECD, 2010, p. 5). As such, an organization should develop a CCP to prioritize areas/operations of the organization that require more attention.

Monitoring

Monitoring refers to the continual review of a CCP with the intention of identifying and remediating gaps in real time. It is an important proactive function in ensuring the organization's internal controls are functioning effectively and for detecting and correcting issues that could become noncompliances. In some organizations, results from their annual compliance monitoring report feed into the organization's annual report (Wulf, 2011; IENCE, 2009).

The IENCE categorizes monitoring activities into four primary sources (Figure 10).

BOX 7-1: COMPARING SOURCES OF COMPLIANCE INFORMATION		
INFORMATION SOURCE	**ADVANTAGES**	**DISADVANTAGES**
Inspections	Provide the most relevant and reliable information.	Can be very resource-intensive.
Monitoring Environmental Conditions Near a Facility	Useful for detecting possible violations without entering the facility. Useful for determining whether permit or license requirements are providing adequate environmental protection.	Can be difficult to demonstrate a connection between the pollution detected and a specific source. Difficult or impossible to obtain precise information. Resource-intensive in areas of multiple sources.
Self-Monitoring, Self-Recordkeeping, and Self-Reporting by the Regulated Community	Provide extensive information on compliance. Shift economic burden of monitoring to the regulated community. May increase level of management attention devoted to compliance within a facility.	Rely on integrity and capability of source to provide accurate data. Place economic burden on the regulated community and increase paperwork.
Citizen Monitoring	Can detect violations that are not detected by inspections, industry self-monitoring, and reporting.	Sporadically conducted. Cannot control amount, frequency, or quality of information received. Only a few violations are noticed by citizens. May require resources to respond to erroneous or irrelevant complaints.

Figure 10. Monitoring and Reporting Sources (INECE, 2009, p. 44)

Auditing

Auditing is used to evaluate specific risks. Audits can be periodic, systemic or event-triggered. An organization's internal audit department can fulfill this function, but it is ideal for an independent third party to conduct audits (Competition Bureau of Canada, 2008; Fox, 2013).

Reporting

This function is used in the context of reporting potential or real noncompliances. A CCP should have a process in place to allow employees to file an internal report quickly and easily (Competition Bureau of Canada, 2008).

3.3.6 Internal reporting

Unlike the other components that are typical in a variety of systems, internal reporting is unique to CCPs. This component can be a stand-alone component or included in the previous component. Internal reporting or "whistleblowing" refers to employees reporting potential or actual violations. Mechanisms can include hotlines, online reporting systems or email addresses (Wulf, 2011).

As a matter of enforcement, the FSGO require the use of incentives for performance in accordance with the CCP and disciplinary measures for failing to do so (United States Sentencing Commission, 2014). Incentives can include promotions and bonuses; and disciplinary measures can include warnings, suspension, demotion, dismissal and legal action (Competition Bureau of Canada, 2008). With consequences in play, internal reporting is a good indicator of how effective a CCP is functioning within an organization, as the social norm should be to act

compliantly rather than evade requirements (Biegelman, 2008; Wilford & Small, 2013). It is also a direct indicator of the culture of compliance.

With middle management, i.e. managers/supervisors, accountable for employee participation in the CCP, "tone from the middle" is important in influencing behaviour. It is expected that middle management foster an environment where employees feel comfortable enough to make an internal report.

3.3.7 Response and prevention

A CCP must have a process in place to respond to noncompliances in a timely and appropriate manner. The FSGO require the organization to take the reasonable steps to respond to the noncompliance and prevent it from reoccurring. Modifications to the CCP may be required to prevent a repeat noncompliance (United States Sentencing Commission, 2014).

3.3.8 Maintenance and assessment

Once implemented, a CCP must be kept alive and the performance information produced by the system must be used (Australian Taxation Office, 2012).

A critical aspect in the CCP's maintenance is conducting periodic assessments of the program. An assessment should occur at frequently planned internals to identify new risk areas, areas for improvement, and to communicate the program's ongoing value to the corporation (Chibbaro & Coyler, 2000). It also provides an opportunity to check that all the components of the program are operating effectively.

The FSGO consider a CCP effective if it was "reasonably designed, implemented and enforced in the circumstances" (United States Sentencing Commission, 2004, p. 503) but there is no definitive checklist that can assure a CCP's effectiveness. At a minimum, an effective CCP can be determined by employee awareness of the Code of Conduct, reporting mechanisms, disciplinary measures, and employees who have received proper training and do not fear internal reporting (Wulf, 2011).

Organizations often hire an external source to perform an assessment of the CCP. As with any type of external audit, there is value in having an independent perspective assess a system (Wulf, 2011). The auditing body must be familiar with the organization and maturity of the CCP (Chibbaro & Coyler, 2000).

3.4 CCP Frameworks

While the PDCA Cycle is an established framework for implementing EMS requirements, there is no universal framework for a CCP. Rather, the "compliance function should develop a framework that helps the business manage compliance issues and that provides oversight to ensure the framework is being adhered to" (PwC US, 2015, p. 11). Therefore there are innumerable CCP frameworks that have been developed by industries, researchers and by the organizations themselves. Regardless of the framework, the components are relatively similar, as highlighted from the examples provided.

CELC

The CELC have developed a framework composed of eight components (Figure 11). The framework illustrates the elements of the *Compliance and Ethics Program Strategic Roadmap* which is used to assist Compliance and Ethics Officers build an effective CCP.

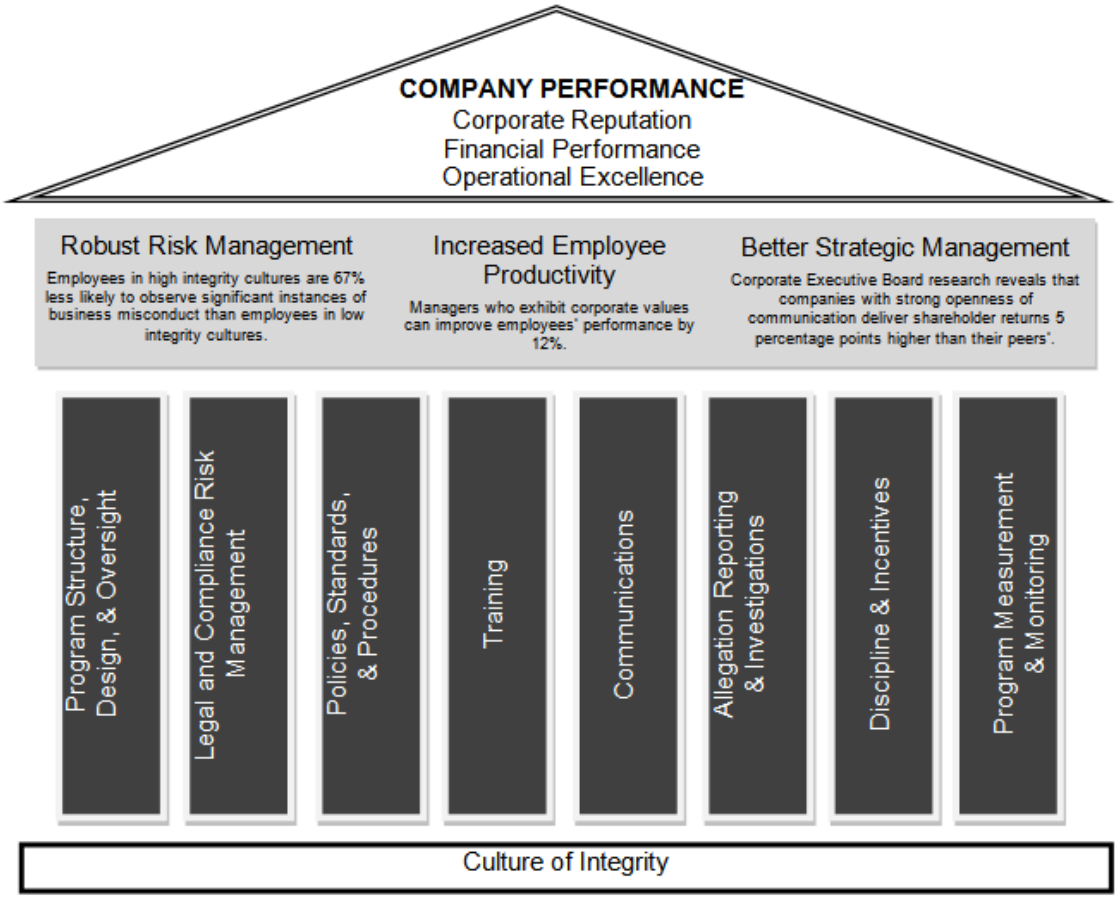


Figure 11. CELC Framework (CELC, 2010, p. 3)

PwC

PwC, a consulting company, have mapped their compliance framework to the FSGO. Categorizing the components into three levels of hierarchy, the compliance framework is used to manage individual risks and engage business peers (Figure 12).

Figure 12. PwC's compliance framework (PwC US, 2015, p. 11)

Wulf

Another CCP framework was developed as an output of CECO research in multinational organizations. Using three pillars, the framework organizes 11 components into Foundation, Toolset and Prevention categories (Figure 13).

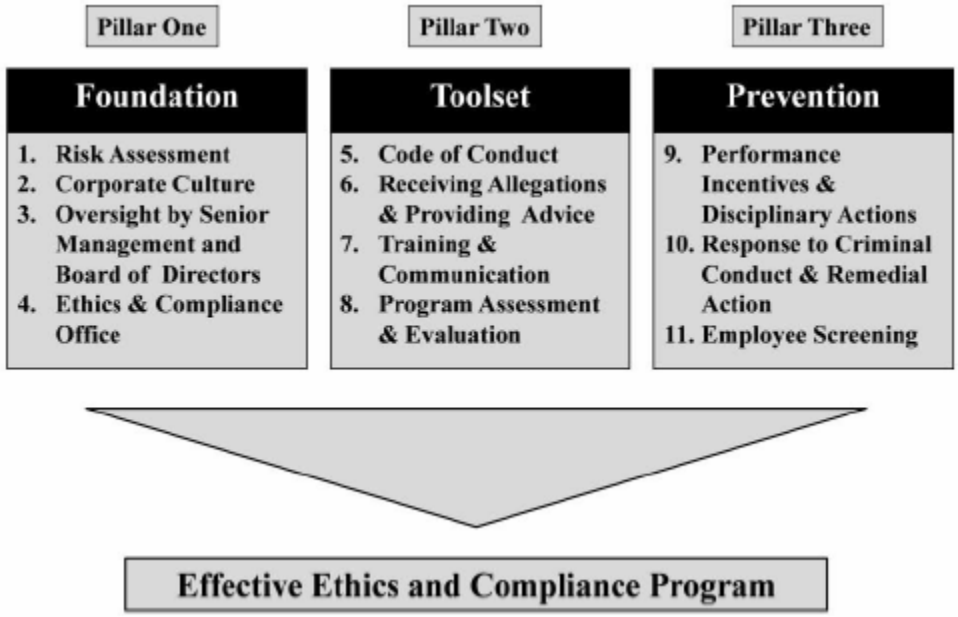


Figure 13. The three pillars of an effective ethics and compliance program (Wulf, 2011, p. 352)

3.5 EMS and CCP Components

Included as an objective of this research, it is important to understand the similarities and differences between the Manitoba Hydro EMS and a CCP. A key factor in meeting this objective is having an understanding of the compatibility of the systems' components.

To depict this compatibility, the common components found in an ISO 14001 EMS and CCP are mapped along the ISO 14001 PDCA Cycle (Figure 14).

The similarity of components allows for a logical application of corporate compliance principles to EMS components. As an example, a principle detailing a monitoring process within a CCP can similarly provide direction for a monitoring process within an EMS. The figure is also useful in illustrating that compliance processes can be considered throughout the entire EMS cycle. The Standard explicitly states compliance requirements in three Clauses – *Clause 4.2 Environmental policy; Clause 4.3.2 Legal and other requirements;* and *Clause 4.5.2 Evaluation of* compliance. This is important to understand, seeing as the selected principles provide insight into all areas of the EMS.

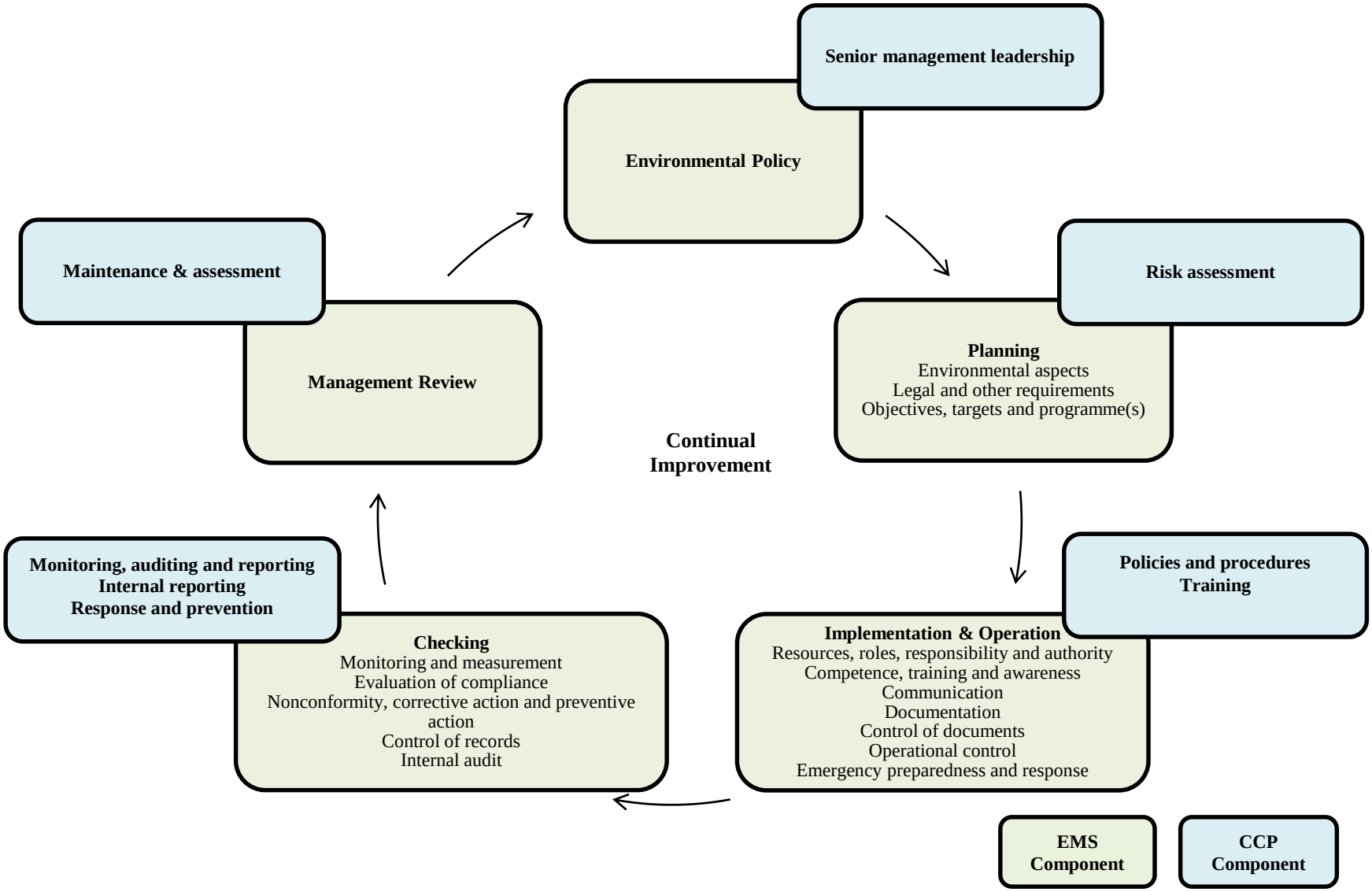


Figure 14. Comparison of EMS and CCP Components on the PDCA Cycle

Chapter 4. APPLYING CORPORATE COMPLIANCE PRINCIPLES

In this Chapter, corporate compliance principles will be applied to processes that exist within the Manitoba Hydro EMS. Each principle will begin with a discussion as it pertains to a CCP. Under the heading "Manitoba Hydro EMS Applicability", the relevant inconsistencies that currently exist in the Manitoba Hydro EMS will be identified; and in applying the principle, a discussion of the consideration(s) will be provided. Considerations are solutions used to promote centralization.

15 principles will be discussed, which are organized into seven categories that fit the structure of the Manitoba Hydro EMS. The order in which they appear does not reflect their significance or priority for Manitoba Hydro.

4.1 Senior Management Support

4.1.1 Establish a corporate compliance function

Senior management support for a CCP can be demonstrated through the employment of a CECO. The CECO has "overall responsibility for initiating, coordinating and reviewing organizational compliance efforts" (NCPL, 1996, p. 95). Critical to this function is having the authority and accountability to act independently on behalf of the CCP. In an ideal situation, the CECO should be in a high-level position within the organization and have a direct reporting relationship with the Chief Executive Officer (CEO) (Biegelman, 2009; Ethics Resource Center, 2010). The Ethics Resource Center (2010) considers the CECO's reporting relationship to be the biggest influence on their credibility, authority, and overall success. In a survey of 1,102 CECOs

from around the world, the majority of respondents report directly to the General Counsel/legal or to the CEO within their organization (Figure 15).

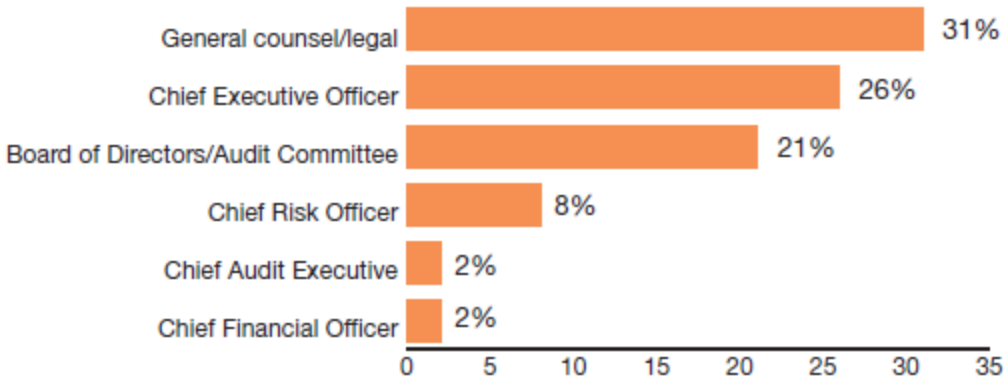


Figure 15. CECO reporting relationship (PwC US, 2015, p. 12)

The CECO can take many forms such as the compliance office/department, compliance manager, corporate compliance officer (CCO), etc. For consistency, the term CECO will be used to describe this function within a CCP.

The role of the CECO should be proportionate with the organization's "size, industry, key players and stakeholders, geographic dispersion, and its values and culture" (Wulf, 2011, p. 283). In a 2004 study it was determined that more than 75% of organizations have at least two full-time employees dedicated to the CCP; and where there is a central compliance office, responsibilities will be diffused throughout the organization (Biegelman, 2008; Wulf, 2011). Regardless of the structure, the CECO should:

- Oversee the assessment of organizational risk for misconduct and noncompliance;
- Establish organizational objectives for ethics and compliance;
- Manage entire ethics and compliance program throughout the company;

- Encourage the prioritization of corporate values throughout the organization;
- Implement initiatives to foster an ethical culture throughout the organization;
- Supervise ethics and compliance staff embedded throughout the organization;
- Frequently inform the board of directors and senior management team of risks, incidents, and activities related to the ethics and compliance program; and
- Ensure the periodic measurement of program effectiveness (Ethics Resource Center, 2010, p. 26-28).

Of particular importance to this research is the CECO's responsibility to coordinate compliance activities across the corporation. To achieve this, the CECO must be aware of the compliance requirements and how they are met, in order to work with operational owners to centralize efforts. It is important to note that having an awareness of compliance requirements does not make the CECO is the "owner" of these requirements (PwC US, 2015).

Traditionally, the CECO's main responsibility has been to meet baseline compliance requirements. However, "with risk increasing, change accelerating, and regulations multiplying, the opportunity for CECOs to elevate the profile of the compliance function – and their own status within the organization – has never been greater" (PwC US, 2015, p. 12). There is now a desire for CECOs to take a more strategic role in the organization, by using compliance performance to achieve corporate strategic goals (PwC US, 2015; Deloitte, 2014).

The FSGO considers the CECO so essential to the success of a CCP that there is a requirement to ensure the CECO "shall be given adequate resources, appropriate authority, and direct access to the governing authority or an appropriate subgroup of the governing authority" (United States Sentencing Commission, 2014, p. 503). Where the CECO cannot effectively

fulfill this role, the NCPL (1996) recommends that senior management provide additional resources, support and infrastructure.

Manitoba Hydro EMS Applicability

The reliance on a CECO in a CCP reinforces the importance of having a central owner/administrator for a program, who can promote the centralization of processes. As owner of the EMS, CEM is in a similar situation to define requirements for Business Units to adhere to; and therefore is best situated to centralize EMS compliance processes. CEM has a similar role as a CECO, as owner of the EMS, but managing corporate compliance is only one of the department's responsibilities. Therefore, when referring to this role of CEM the term "corporate compliance function" will be used.

Although CEM cannot fulfill the role of a CECO based on resources and organizational positioning, the function provides insight into new responsibilities the department could consider in supplementing its existing corporate compliance and governance responsibilities. Throughout this Chapter, new opportunities for CEM will be identified.

Defined role

Since CEM is removed from managing compliance at an operational level, it can be difficult to understand the role of the corporate compliance function.

To aid in this confusion and to establish the corporate compliance function as being a value-added resource to the corporation, the first consideration is to formally define CEM's corporate compliance role, including their key responsibilities. It is important to convey that CEM is not the compliance owner, but should be aware of compliance processes (existing at a

Business Unit level). It is through this awareness that CEM can work with Business Units to centralize processes.

Authority

Unlike a CECO, CEM is not in a position to act independently on behalf of the system. EMAC is responsible for reviewing and approving EMS initiatives, which lessens the department's level of authority.

To leverage the corporate compliance function's authority, two considerations have been identified.

1. EMAC

EMAC is organizationally positioned to make high-level decisions and act as the conduit to the Executive Committee. One challenge with using this committee as the approval function is the desire for consensus decision-making. Although not a formal arrangement, the majority of EMAC members must be in agreement before an item is approved. This can prolong the implementation of an action over several meetings where a consensus decision is not reached. In addition, EMAC meetings are scheduled on a quarterly basis, which can further delay an outcome.

CEM could propose an alternative decision-making model, where only the EMAC members specifically involved in an item are required to provide approval. This could take place outside of EMAC meetings in an effort to expedite processes; which could be done through individual meetings or email input for time-sensitive decisions. Where an item affects multiple

Business Units, such as changes to the Environmental Management Policy or Management Review, all EMAC members should still be consulted.

2. Law

Another option to leverage CEM's authority would be to receive formal support from the Law Division or Compliance section. Seeing as the legal department houses compliance SMEs, this high-level support could be advantageous in increasing CEM's internal recognition and visibility. As well, the partnership could assist CEM with compliance functions such as formalizing a reporting channel for serious noncompliances or interpreting changes to legal requirements.

4.1.2 Define expectations

Senior management should consider the "business needs, regulatory expectations, and existing operating processes" (CELC, 2015b, p. 1) when developing compliance objectives. Ideally, these should align with the organization's overall business objectives and be written in clear, plain language. Going one step further, some organizations will also state the methods in which to achieve the objectives.

Compliance objectives are often communicated through a Code of Conduct. The policy can be considered to be the basic building block upon which other components of the CCP can be built. It is a "public statement of the company's rules and values that establishes a corporate commitment to compliance and sets expectations for employee (and business partner) behavior" (CELC, 2015c, p. 1). Including objectives in the Code of Conduct is useful in promoting the policy as being more than nice words on a paper – it should be a driver for compliance

improvement. Therefore, employees should feel a responsibility to achieve these expectations in their day-to-day operations.

Manitoba Hydro EMS Applicability

Environmental compliance objectives

Environmental objectives are identified through a number of EMS processes. Most prominently, the Environmental Management Policy is used to communicate Manitoba Hydro's environmental commitment both internally and externally. EMS compliance efforts hinge on the commitment to meet "regulatory, contractual and voluntary agreements". The policy also commits the corporation to reviewing the environmental objectives and targets on an annual basis; these are derived from the Corporate Dashboard, which is a tool used to achieve strategic priorities (Manitoba Hydro, 2015c).

In addition, environmental targets are tracked through the EMAC Dashboard. This tool is used to monitor performance of the significant environmental activities. Each significant environmental activity is assigned several Key Performance Indicators (KPIs), most of which are compliance indicators. Each quarter the EMS Coordinators provide their data to CEM, which is amalgamated and presented to EMAC for review and direction.

There is an opportunity to define specific environmental compliance objectives for the EMS. Communicating these objectives at a corporate level would provide a consistent understanding of the corporation's priorities, demonstrate senior management support, and drive corporate-wide performance. The objectives should be developed with the EMS Committees, specifically EMAC; and be monitored consistently through tools such as the EMAC Dashboard.

Consistent use in publications

It is important to consistently communicate objectives in all publications. Rather than develop a separate policy, the environmental compliance objectives could be included in the Environmental Management Policy. The policy has visible senior management support, being signed by the CEO and is well ingrained throughout the corporation. Stating compliance objectives through this established media could be valuable in further promoting the culture of compliance. One important aspect to note is the policy is made publically available through the Manitoba Hydro website. If the EMS Committees do not wish to publically disclose the objectives, another internal document could be used.

Much like a Code of Conduct in a CCP, Manitoba Hydro publishes a "Code of Ethics". This publication is maintained by the General Counsel & Corporate Secretary and sets outs commitments for conducting activities "in a lawful, responsible and ethical manner so that our reputation for honest, integrity and the faithful performance of our undertakings and obligations are maintained and enhanced" (Manitoba Hydro, 2015d, p. 3). The Environmental Responsibility section makes reference to the Sustainable Development principles. If established, the environmental compliance objectives could also be included in this publication.

If deemed appropriate to publically disclose the environmental compliance objectives, they could also appear in the Corporate Strategic Plan, Annual Report and Sustainable Development Report. Rolling these operational objectives up to high-level publications is an effort in closing the gap between strategy and execution – further detailed in Section 4.7.1.

4.2 Communication

4.2.1 Foster cross-functional communication

"The difference between high performing compliance organizations and those that perform poorly hinges on cross-functional coordination and communication" (Biegelman, 2009, p. 39). Although cross-functional communication is imperative for an effective CCP, it is also one of the most significant barriers (Baker & Mackenzie, 2012).

The cross-functional flow of information (top-down, bottom-up and laterally) is critical, especially in organizations that are widely dispersed. In a top-down manner, information must flow from senior management down to middle management, who further communicate to operational employees. In a bottom-up manner, employees should feel comfortable openly communicating with their middle management, which should flow up to senior management to address. Lateral communication is required for collaboration amongst employees at the same level within an organization.

Manitoba Hydro EMS Applicability

Communication is inherent in all the principles but its significance warrants its own discussion. The Standard requires internal communication that occurs "among the various levels and functions of the organization" (Canadian Standards Association, 2004, p. 51) but the general nature of the requirement doesn't require significant improvements to existing efforts.

Bottom-up communication

The majority of EMS communication is delivered as an output from CEM (top-down), presumably as a result of the overarching issue of Business Units silos. The resistance for bottom-up communication is a culture issue that does not have a quick fix. Ultimately, if cross-Business Unit communication is improved, so would the inconsistencies at the heart of this research.

In an effort to promote stronger collaboration, a consideration is to focus on strengthening bottom-up communication. As compliance communication should be delivered through established communication channels, these should be utilized for more collaborative work between CEM and Business Unit representatives. As an example, the EMS Coordinators could be asked to provide a quick summary of current compliance-related activities taking place in their Business Unit at the beginning of each EMS Coordinator meeting.

Processes

There are many EMS processes that rely on cross-functional communication. Throughout this Chapter, new and modified EMS processes will be discussed as a result of applying principles. These processes can improve centralization of compliance processes but also have potential of improving cross-functional communication. These processes include:

1. Environmental SME Contact List;
2. Environmental Requirements Database;
3. Noncompliance Database;
4. EMAC Dashboard; and
5. Management Review.

4.2.2 Include all stakeholder perspectives

For a CCP to be effective it must be recognized as having value from all affected stakeholders. Stakeholders can include government/regulators, employees and business (CELC, 2012). It is important to understand the differences in expectations based on the stakeholder group, which can present a challenge for the CECO to communicate appropriately. As an example, government/regulators may be most concerned with how an organization's CCP meets laws and regulations, while senior management, i.e. business, may be only concerned with how the CCP delivers value to the organization.

In serving multiple stakeholders, the CECO should "pursue the program levers that increase performance across all activities and also fulfill stakeholder expectations" (CELC, 2012, p. 8).

Manitoba Hydro EMS Applicability

Since its amalgamation in 2011, the Manitoba Hydro EMS has steadily gained awareness and acceptance throughout the corporation. Similar to a CCP, the EMS serves many stakeholders. Being most involved in its processes, the EMS Committees have a comprehensive understanding of the EMS and its value. Beyond these committees, there is an opportunity for CEM to extend communication to reach all stakeholders.

Tailored communication approaches

Stakeholders who are able to see the value in managing compliance through the EMS are more likely to be active participants in the system and cooperate with CEM, as the corporate compliance function. This is a unique principle in the sense that a consistent approach isn't

encouraged, i.e. a single communication approach used for all stakeholders. For this principle to be applied successfully, communications should be tailored to each stakeholder group, while ensuring a consistent message is communicated. The main stakeholders for the EMS have been identified as the EMS Committees, senior management, employees, and external stakeholders.

1. EMS Committees

CEM is already actively communicating with the EMS Coordinators and EMAC through tailored approaches. Compliance communication with the EMS Coordinators is often detail-oriented and occurs through casual methods, such as phone calls. On the contrary, EMAC mostly receives compliance communication through formal high-level summaries. The committee is interested in "big picture" activities, such as significant non-compliances or systemic issues.

Seeing as CEM is the conduit between the EMS Coordinators and EMAC, it is important to keep the information accurate, while modifying the level of detail. In this way, the EMS Committees can work collectively on EMS activities, including centralization.

2. Senior management

EMS compliance information is regularly communicated to senior management through quarterly EMAC meetings and the Management Review. These processes provide a forum for senior management to raise questions and concerns with the EMS. Management Review is a mandatory process in the Standard used to "check in" with senior management and ensure the EMS is operating effectively. At Manitoba Hydro, this is done on an annual basis through meetings with division managers. The results are compiled into Division level, Business Unit level and an Executive level report that highlight the findings of the process. During

Management Review, division managers are asked whether they perceive the EMS as being effective. If the answer is "no", CEM could discuss how the EMS could be improved to deliver value from their perspective. This is being done to a limited extent, but could be a greater focus in the process.

Another way to engage senior management is by focusing on the bottom line, i.e. financials. Irrespective of the media used, "illustrations of the implications of noncompliance for the organization and the individual can often bring home the importance of compliance" (NCPL, 1996, p. 64). These implications can extend beyond an environmental context to include financial, reputational, and safety damages.

3. Employees

The EMS Coordinators are proficient at engaging their Business Unit employees. To supplement their efforts, CEM could explore different approaches to build relationships with employees and communicate their role as the corporate compliance function. This could involve speaking at operational-level meetings or provide more regular EMS updates through various corporate communication functions. Articles on best management practices or employees' experience with meeting compliance requirements could be beneficial.

4. External stakeholders

External stakeholders (public, residents, landowners, Aboriginal communities, etc.) are a significant consideration for Manitoba Hydro. While these stakeholders do not necessarily need/want to know that Manitoba Hydro is managing environmental compliance through an ISO

14001 registered EMS, it is important to communicate that the corporation is operating compliantly to manage its environmental impacts.

As an example of the significant influence external stakeholders can have on the corporation, Manitoba Hydro recently completed an extensive hearing process to receive approval for the Keeyask Generating Station. This involved multiple rounds of hearings, led by the Clean Environment Commission (CEC) before a license was granted to begin construction. During the process, it was communicated to CEM that having an ISO 14001 registered EMS was beneficial in expediting portions of the process. External credibility is a primary reason why organizations seek ISO 14001 registration.

4.3 Accountability

4.3.1 Create accountability at all levels

A major barrier in ensuring accountability at all levels is organizational separation. The conundrum is such that compliance requirements are a corporate responsibility but are essentially an operational function (NPCL, 1996).

Middle management are key in establishing that compliance is an individual responsibility. They must reinforce the importance of operating in compliance with policies and procedures – from the time of hire and continuously throughout the individual's employment. As well, they should encourage open communication with employees, in the event where an employee wishes to report a potential or real noncompliance.

Several techniques can be used to reinforce this principle. Firstly, compliance requirements should be integrated into existing work processes to demonstrate that adhering to

compliance requirements isn't additional work but the right way to do business (Biegelman, 2009; Steinberg, 2010). Financial outcomes of noncompliances (fines) can also be used to emphasize the importance of operating compliantly.

Overall, a strong culture of compliance will "support independent thinking and encourage employees and managers to make decisions consistent with the company's values" (Wulf, 2011, p. 273).

Manitoba Hydro EMS Applicability

Creating accountability at all levels is equally important in an EMS. This is imperative in assuring corporate objectives are met at an operational level.

Compliance responsibilities

With CEM removed from operational activities, the EMS Coordinators and line management are depended upon to ensure their employees are adhering to compliance requirements. They ensure the operational requirements of the Standard are met, such as ISO Clause *4.4.2 Competence, training and awareness, 4.4.6 Operational control, 4.4.7 Emergency preparedness and response* and *4.5.3 Nonconformity, corrective action and preventive action*.

To promote a consistent understanding of what is expected from all levels, compliance responsibilities should be clearly documented. This is especially significant for EMAC, whose members are rotated periodically. A consideration is to include compliance responsibilities in the *Guide*. As a corporate document, all employees (including the EMS Committees) could gain an understanding of how all levels of management are working jointly to achieve compliance.

4.3.2 Leverage subject matter expert knowledge

Assuring compliance is a difficult, to say the least. One person, regardless of their high-level position cannot be expected to manage an organization's compliance requirements and responsibilities. Therefore, a best management practice is to leverage the knowledge from the individuals who have compliance obligations and know how to comply accordingly, i.e. the SMEs.

Leveraging SME knowledge has strategic benefits for the CECO. Because the CECO can be perceived as having a negative policing function, collaborating with SMEs can diffuse accountability throughout the organization and shift the perception of the CECO to being a value-added function (PwC US, 2015). It is also useful to foster partnerships outside the immediate subject matter area – in this case, environmental compliance. These areas could include Human Resources, Internal Audit, Informational Technology Services, etc. that could assist with process or strategy improvement (CELC, 2010).

Manitoba Hydro EMS Applicability

The EMS Coordinators are well recognized environmental SMEs within the corporation. However, there are multiple other individuals who have specialized environmental functions that are not formally documented, or even included in their job descriptions. As CEM and the EMS Coordinators cannot be expected to be aware of every legal requirement and associated processes, leveraging this knowledge would be extremely useful. This process is used in other areas of the corporation. For example, the Workplace Safety Department maintains a list of owners for each of their Safety Management System (SMS) modules. These owners can be considered SMEs or points of contact.

Environmental SME Contact List

The EMS Coordinators first proposed identifying environmental SMEs throughout the corporation. The reaction to this proposal was positive, and CEM began developing the Environmental SME Contact List. Because the term "SME" has a level of liability and expectation associated with it, a different term may be more appropriate.

Leveraging subject matter expertise is particularly important for an organization as dispersed as Manitoba Hydro. The completion of the SME Contact List will give CEM the ability to direct inquiries to the correct people more efficiently. As an example, when an employee has a question about a hazardous materials or spill, the corporate Hazardous Materials Officer (HMO) should be contacted. The SME Contact List is a first step in collaborating with SMEs more effectively, with the intention of reducing the duplication throughout the Business Units. The involvement of SMEs is further discussed in other principles.

4.4 Legal and Other Requirements

4.4.1 Define requirements

Recognizing the complexity of compliance, a CCP should clearly define the scope of its compliance requirements. The scope should be written in plain language that is understandable for all employees. If written in complex regulatory jargon, an organization elevates the risk of noncompliances because employees were unable to comprehend the compliance risks or their responsibilities at mitigating this risk.

"Companies face two contradictory challenges: 1) the absence of practical and timely risk information emerging from the business and 2) the abundance of unfiltered risk information that

makes it difficult to identify true emerging risks" (CELC, 2015d, p. 1). With the infiltration of new/changing requirements, defining the scope of requirements is essential in filtering out those applicable to the organization. The scope is particularly important for the CECO who "must not only understand the scope of their own responsibilities but also come to agreement on what compliance entails across the organization – from compliance with legal and regulatory requirements to meeting internal operational and other strategic obligations" (PwC US, 2015, p. 6).

Manitoba Hydro EMS Applicability

Other requirements

The scope of requirements is defined in the Environmental Management Policy as including regulatory, contractual and voluntary requirements. The inclusion of contractual and voluntary requirements is the corporation's interpretation of "other requirements". While legal requirements are well understood throughout the corporation, the term "other requirements" is a grey area in an ISO 14001 EMS, including the Manitoba Hydro EMS. The Standard does not provide a definition for "other requirements", but provides examples of what these can include (Section 1.7).

This term is used throughout the *Guide* to consistently reflect the Standard's language but isn't reflected in the Environmental Management Policy. The ambiguity of this term has led to Business Units developing their own interpretations. Based on discussions with the EMS Coordinators and other environmental SMEs within the corporation, some common interpretations of other requirements include:

- Canadian Council of Ministers of the Environment (CCME) guidelines;
- Canadian Standards Association (CSA) requirements;
- Sustainable Electricity Program requirements;
- Agreements – Treaty, Land, First Nations; and
- Industry best management practices.

Providing clear and consistent guidance could help resolve this EMS inconsistency. CEM could consider providing a detailed description of what constitutes as an "other requirement" as it applies to the corporation. It isn't the intention to restrict Business Units from adhering to specific requirements but to promote a consistent understanding of what is expected within the scope of the EMS. If approved by the EMS Committees, the Environmental Management Policy should be revised to reflect the term.

4.4.2 Promote a common understanding of requirements

The identification of applicable regulatory requirements, formalized tracking of regulatory changes, and communication of these changes are all factors in promoting a consistent understanding of requirements. These processes were included under a single principle as they coincide with one another.

Identification

The ability to maintain a current listing of applicable regulatory requirements is one of the largest barriers in an effective CCP. The sheer volume of requirements, especially for organizations in highly regulated industries, makes it difficult to consolidate a complete listing of requirements. Once completed, the listing must be maintained to account for the constantly

changing regulatory environment. To add to the difficulty, most organizations have several separate lists of requirements (CELC, 2009a). Not only is this an inefficient use of resources, but also hampers compliance processes such as monitoring.

The use of a single repository for regulatory requirements is ideal. It is best to consider key regulatory requirements to avoid overpopulating and complicating the repository (CELC, 2015d).

Tracking

The CELC (2009a) caution that "without a structured tracking approach, companies often mismanage regulatory information and communicate less effectively with senior managers and regulators" (p. 12). The level of tracking should be commensurate with the company's regulatory environment and intensity. As a best management practice, tracking responsibilities should be assigned to various owners. Ideally, the owners should be SMEs within the business units, most knowledgeable about regulatory requirements (CELC, 2009b). Another option is to use a regulatory tracking service to provide regulatory updates, which is becoming increasingly popular.

Communication

Tracking regulatory changes is meaningless without an understanding of how these apply to the organization's operations and processes. Therefore the interpretation, and often simplification of legalese, is required. An indication of an effective CCP is how promptly changes are communicated to those affected (IESO, 2013). If these changes are being

communicated from the CECO, they will most often be delivered to middle management, who further distributes the changes to their employees.

Manitoba Hydro EMS Applicability

The processes used to identify, track and communicate legal requirements within the EMS are a key source of inconsistency.

Identification

The Standard requires an organization to identify the applicable legal and other requirements related to its environmental aspects and determine how they apply (Canadian Standards Association, 2004). There have been previous attempts to develop a central listing of legal requirements applicable to Manitoba Hydro's environmental activities. However, these lists were incomplete and seldom maintained, which led to the development of Business Unit specific processes.

In consideration of this principle, a central repository for legal requirements is recommended. Identified as the Environmental Requirements Database in this research, the database would be owned by CEM, but maintained by CEM, the EMS Coordinators and SMEs. The inclusion of SMEs is important in interpreting how the requirements are applicable to Manitoba Hydro's operations.

With the potential for this tool to support a wide audience, it is best kept simple (user-friendly) and easily accessible. As an example of what the database could look like, two requirements related to a significant environmental activity, Management of PCBs, are listed (Table 2). The EMS Committees should decide whether an SME should be assigned to each

activity or to each legal requirement. In this case, the Hazardous Materials Officer is the corporate SME for the activity.

Activity Name: Management of PCBs		
Legal Requirement	**Applicability**	**SME**
Federal Act: Canadian Environmental Protection Act, 1999 **Regulation:** PCB Regulations (SOR/2008/273)	This regulation introduced the end-of-use guidelines; Manitoba Hydro will achieve these commitments through their internal strategy. Releases of less than 2 ppm of PCBs must be reported. Proper labeling, record-keeping and reporting requirements are applicable to Manitoba Hydro.	Hazardous Materials Officer
Provincial Act: The Dangerous Goods Handling and Transportation Act **Regulation:** Dangerous Goods Handling and Transportation Regulation (MR 55/2003)	Manitoba Hydro must consider the proper packaging and transportation of dangerous goods. Further instruction is included in corporate publications – available on the Workplace Safety & Health and Corporate Services websites.	Hazardous Materials Officer

Table 2. Environmental Requirements Database Sample Entry

Tracking

Tracking changes to legal requirements has been a challenge in the EMS. One process used to identify and communicate changes was through a quarterly update provided by CEM. New and upcoming changes to legal requirements were retrieved from a subscription newsletter, where CEM would filter out applicable requirements. The EMS Coordinators were relied upon to further disseminate the information to their Business Units. Due to the time-sensitive nature of

some changes, this process wasn't the most appropriate. Again, Business Units relied on their own processes to track changes.

To make the abovementioned process more effective, CEM could provide more frequent updates, such as on a monthly basis. It would also be beneficial to involve the SMEs more thoroughly in the process in order to determine the real-time applicability of the requirements.

Considering the popularity of regulatory tracking services, this may also be an option for CEM to adopt. This could assist in more timely receipt of changes, which could then be added to the Environmental Requirements Database.

Communication

There is an opportunity for CEM to more actively communicate with the EMS Coordinators and EMAC. Where there are significant changes to a legal requirement, either new or upcoming, CEM could communicate these directly to the committees. In addition, CEM could work with the SMEs to deliver corporate communication, where appropriate.

4.4.3 Keep abreast of changing requirements

Forward-thinking CCPs keep abreast of regulatory changes. The CELC (2005) recommends looking ahead within one to three years. This can be considered a risk-based strategy, as a change to a requirement can significantly impact an activity's risk profile. This proactive function also gives management time to anticipate liabilities and make preventive modifications (if necessary), rather than responding reactively which increases the risk of noncompliance.

Maintaining of awareness of compliance trends within the organization's industry can also be beneficial. Through formalized mechanisms, organizations can share current and upcoming compliance risks (NCPL, 1996).

Manitoba Hydro EMS Applicability

As previously discussed, CEM has used a subscription newsletter to keep informed of upcoming legal requirements. However, there are many other methods that CEM could leverage.

Industry groups

One of these methods that could be further utilized for information sharing is industry groups. As a CEA member, Manitoba Hydro is an active participant in these groups that work collectively on behalf of specific environmental areas including:

- Climate Change;
- Air Quality;
- Stewardship;
- Environmentally Preferable Power;
- PCBs;
- Wood Preservatives;
- Species at Risk;
- Environmental Assessment; and
- Electric and Magnetic Fields (CEA, 2015).

CEA manages PCBs through the PCB Task Group. At the time of writing, their main focus was to meet the requirements of *PCB Regulations* under the *Canadian Environmental*

Protection Act; specifically, for the virtual elimination of PCBs in service and storage (Environment Canada, 2014). At Manitoba Hydro, the main PCB SME is a part of the PCB Task Group and therefore has the opportunity to partake in key discussions and decisions that affect Canadian utilities. These types of forums are ideal for keeping abreast of legal requirements that may come into effect. CEM should be informed of this information to share with a wider audience, if required.

4.5 Risk Assessment

4.5.1 Establish a common understanding of risk

An issue, especially in larger organizations, is business unit-owned risk assessments that "tend to be informal, characterized by lack of cross-functional collaboration and inadequate upward reporting channels (CELC, 2005, p. 82). Having multiple risk assessment processes results in activities being assessed and prioritized differently throughout the organization.

Establishing a common risk assessment framework for assessing compliance risks is ideal. The CECO is generally is responsible for conducting compliance risk assessments with input from business units or functional groups. Conversely, if business units conduct their own risk assessments, the CECO should provide guidance on how to use the risk assessment template, tools, and results should be shared with the CECO (CELC, 2005). This approach can help "drive efficiency and reduce costs by eliminating overlapping and reddundant assessment" (PwC US, 2015, p. 19).

Manitoba Hydro EMS Applicability

Risk assessment methodology

CEM's risk assessment methodology is used to cateogorize environmental activities into high, medium, and low risk categories. These activities form the "List of Environmental Activities" in the EMS. This process is directed by CEM and involves SMEs throughout the corporation. While CEM sets the corporate ranking for environmental activities, the EMS Coordinators have their own risk assessment methodologies used to priorize their Business Unit efforts. This is not uncommon in other organizations, as what is considered as being significant/high-risk at a corporate level may not be considered significant at a Business Unit level, and vice versa.

To streamline this process, CEM could work with the EMS Coordinators to develop a centralized risk assessment methodology, where risks are considered using the same criteria. The results from their Business Unit risk assessments could then be communciated with CEM.

4.5.2 Maintain a current risk profile

It is difficult to maintain a current risk profile with the constantly changing regulatory environment, and changes to organizational processes. Re-assing risks on a continuous basis is required in a transparent world that is constantly exposing new risks (Deloitte, 2014). The identification of new risks is best accomplished using SMEs across the organization, which creates "the conditions for widespread information gathering and synthesis" (CELC, 2015d, p. 1). Risk assessments should consider "past compliance problems, current internal and external trends and emerging risks" (NCPL, 1996, p. 73).

In response to changing risks, a CCP may need to be modified to reflect new internal controls in place to prevent nonconformities. How quickly a CCP can adapt to these changing circumstances is an indicator of an effective CCP (NCPL, 1996).

An emerging best practice is to integrate compliance risk assessments into business planning. “That way, relevant risks can be considered throughout the planning cycle rather than during implementation (or worse, post implementation, after an unexpected compliance problem emerges)” (PwC US, 2015, p. 2). With senior management involved in business planning, it is an ideal time to communicate new compliance risks, past trends and objectives, and secure resources (NCPL, 1996).

Manitoba Hydro EMS Applicability

Risk assessment is an underemphasized concept in an ISO 14001 EMS. The use of a risk assessment is limited to the identification of significant environmental aspects (Canadian Standards Association, 2004).

Dynamic risk assessment methodology

In fulfillment of this requirement, CEM uses a risk assessment to determine the corporation’s significant environmental activities. A full review of the environmental activities occurs once per registration cycle (three years); and significant environmental activities are reviewed annually. Quite simply, the risk assessment is a static process.

There is an opportunity for CEM to initiate a proactive and dynamic risk assessment process; however this consideration is greatly dependent on the use of a centralized risk assessment methodology, described in the previous principle. The change to a legal requirement or business process should trigger a risk assessment that reviews all affected environmental activities (not limited to significant environmental activities). SMEs should also help identify and track new risk exposures that could feed into the risk assessment. Based off this periodic

assessment, the ranking of environmental activities would be subject to change. Where an environmental activity's risk is elevated, management should focus on establishing appropriate controls and associated processes. This proactive process could have significant benefit for the corporation.

4.6 Noncompliance Response

4.6.1 Formalize noncompliance reporting

An effective CCP has a formalized process for reporting noncompliances. Depending on the severity of the incident, the process should clearly define who to contact (at what level) and what is an appropriate response timeframe. This can expedite the timeliness and effectiveness in which noncompliances are dealt with.

The CECO is often the primary point of contact or "first responder" for noncompliances (Biegelman, 2009; O'Brien, 2006). Having this established point of contact can ensure a prompt and effective resolution.

Manitoba Hydro EMS Applicability

Sharing noncompliances

In accordance with the Standard, Business Units maintain their own procedures to respond and report noncompliances. These procedures often consider the appropriate Corrective and Preventive Action (CAPA) and Root Cause Analysis (RCA). CEM is not included in these processes.

From a corporate perspective, there is value in being alerted to noncompliances within the Business Units. Different methods of communication could be discussed with the EMS Coordinators. For example, CEM could be included on the reporting of a severe noncompliance, while lesser noncompliances could be communicated in the Business Unit Quarterly Report (discussed in Section 4.7.2).

Naturally, there could be resistance to disclose "mistakes" beyond Business Unit management. CEM should clearly communicate the purpose and value of this new process. Similar to how safety incidences are communicated via a corporate email, environmental "incidences" could be shared as well. This enables Business Units to learn from one another and sends a strong message that the corporation takes environmental compliance seriously. This formal reporting process can further be used in establishing a database for noncompliances – discussed in the next section.

4.6.2 Respond to trends

As "the best indicator of future performance is past performance" (Biegelman, 2008, p. 185), this principle promotes a very simple concept of learning from the past. At a corporate level, there is value in tracking noncompliances for trending purposes. Where a trend is observed, it should be raised with senior management. The underlying issue(s) commonly referred to as a root cause should be identified and corrected.

The NCPL (1996) recommends a database be used to track noncompliances, maintained by the CECO:

To assess the consistency of its responses and to detect patterns of noncompliance, an organization may wish to use a database to track incidents of noncompliance. In this manner, the organization can track the type of incidents occurring and target those areas for employee education. Further, the tracking of such incidents can indicate larger problems occurring within the organization or focus the organization on the area in which such violations are occurring. The database may also include a response for an automatic follow-up to ensure that all incidents are investigated and that any corrective actions which should be taken or considered are, in fact, taken (p. 127).

Manitoba Hydro EMS Applicability

Noncompliance Database

The EMS Coordinators are well versed at managing risk within their Business Unit. In the event of a noncompliance, the Standard requires "investigating nonconformity(ies), determining their cause(s) and taking actions in order to avoid their recurrence" (CSA, 2004, p. 73). However, there have been instances where a noncompliance, usually less significant in consequence, has been occurred within several Business Units. Without communication to CEM, there is a missed opportunity to learn from one another.

CEM could consider the development of Noncompliance Database to track noncompliances across the corporation. The database should capture this information from varying sources that are communicated to the department, such as internal and external audit reports, self-assessments, regulatory violations/warnings/infractions, near misses etc. CEM should determine how to best categorize noncompliances; at a minimum, it is recommended that noncompliances are categorized by environmental activity and root cause. This categorization is

done elsewhere in the corporation, and therefore CEM should work with these areas to consistently define the categories. The database would allow CEM to produce reports and trend noncompliances. These systemic trends could be communicated to EMAC for direction and support.

This same process could also be beneficial for trending best management practices and lessons learned.

4.7 Monitoring and Reporting

4.7.1 Measure outcomes

"The biggest impediment to organizations' success is not that they lack a well-defined strategy or well-honed execution; it's the fact that these two are usually not in sync" (Business Performance Management, 2005, para. 28). This statement highlights a common failure of not linking policy development with implementation - or strategy with execution. Without linking objectives with monitoring processes, a system cannot track its progress towards goals. In recognition of this gap, an effective CCP will utilize outcome-focused monitoring that delivers results.

In recognition of this, metrics/KPIs should be carefully selected. Moving away from activity-focused or lagging KPIs, the use of leading KPIs that deliver an outcome should be used (CELC, 2015d). While these may be more difficult to develop and track, these indicators can "help produce a more sophisticated understanding of why breaches are occurring and how they can be prevented and corrected" (Parker, 2002, p. 2). As with any KPI, these should reflect organizational priorities and desired improvements, which will constantly evolve over time.

Manitoba Hydro EMS Applicability

Contrary to a CCP's outcome-focused monitoring, the Standard's requirements for monitoring and measurement have been criticized for not driving performance improvement (Kluk & Gleckman, 1998; Massoud et. al, 2010). This is because ISO 14001 is a process (not performance) Standard that focuses on continual improvement.

EMAC Dashboard

Aware of this criticism, CEM has been mindful in the development of the EMAC Dashboard. As discussed in Section 4.1.2, the EMAC Dashboard is used to monitor performance of the significant environmental activities.

In applying this principle, the EMAC Dashboard could be further utilized as a strategic tool to achieve compliance objectives. Currently, the KPIs are commonly developed based on available data. CEM could challenge EMAC to include leading compliance KPIs that measure outcomes. As an example, where a trend of noncompliances is observed, resolving its root cause could be added to the dashboard. This notion of using the dashboard as more than just a monitoring tool would require a shift in perception.

Management Review

As it is written in the Standard, Management Review should be an outcome-focused process. "The outputs from management reviews shall include any decisions and actions related to possible changes to environmental policy, objectives, targets and other elements of the environmental management system" (Canadian Standards Association, 2004, p. 83). As is occurs

in the Manitoba Hydro EMS, the results are reported to EMAC and the Executive Committee. However, there isn't a clear linkage between the results and system improvements.

To ensure system improvements are considered and implemented, a consideration is to develop a spreadsheet to track actions. Often referred to as an "Action Log", the spreadsheet is useful in assigning an owner and ensuring actions are completed on time. Where a systemic system improvement is identified, CEM should make these a top priority for resolution.

Management Review could also be used to examine how environmental objectives, including compliance objectives, are being met. Where objectives are not being met, discussions with division managers could provide insightful as to where processes could be improved.

4.7.2 Determine monitoring needs

There is an increasing need for compliance monitoring, which is met through an overload of business unit-specific monitoring and oversight fatigue (PwC US, 2015). To align monitoring efforts, organizations are adopting technology tools, such as compliance dashboards to "consolidate data in a manner that supports easier presentation and analysis of compliance data" (PwC US, 2015, p. 20).

A key responsibility of the CECO is ensuring business units are regularly monitoring their key compliance risks. In order to receive consistent monitoring information, parameters must be defined. The term "parameters" is used loosely to describe the scope of information that is desired at the corporate level. The parameters will define what business unit monitoring information should be provided to the CECO (CELC, 2010).

Manitoba Hydro EMS Applicability

In accordance with *ISO Clause 4.5.1 Monitoring and measurement*, the EMS Coordinators monitor their significant activities on a regular basis. They employ a number of processes to monitor activities, such as self-assessments, site visits and tracking tools. Other than the information used in the EMAC Dashboard, CEM doesn't receive Business Unit monitoring information.

Business Unit Quarterly Report

To capture this valuable information, a Business Unit Quarterly Report could be produced by CEM and the EMS Coordinators; this was a previously used process in CEM. Using a template with pre-determined parameters, the EMS Coordinators would be responsible for completing the report and submitting it to CEM on a quarterly basis. These parameters would have to be flexible enough to account for the differences in Business Unit monitoring processes; but consistent enough to be completed by all Business Units. Defining the appropriate parameters would allow CEM to produce reports and trend information. The Business Unit Quarterly Reports could be used to capture additional Business Unit information, such as their EMAC Dashboard data, best management practices and new initiatives.

In developing monitoring parameters, CEM should be mindful of existing monitoring processes. As an example, several of the environmental activities are reported through the SMS on a quarterly basis (Table 3). The SMS is intended to be linked closely with the business planning process, providing detail and support for the safety and health related targets in a department's business plan. It is made up of modules that are used as monitoring tools requiring "an action plan, person responsible, target date and status" (SMS, 2014, p. 1). For the

environmental activities already monitored through this process, the Business Unit Quarterly Report should adopt the SMS metric to reduce inconsistencies and duplicated efforts.

EMS Activity	SMS Activity
Transport and off-loading of petroleum products (>1100 gal)	Storage and handling of petroleum products and allied products storage tank systems
Storage, handling and transportation of PCBs	Management of PCBs
Transportation and disposal of hazardous waste Generation, storage and handling of hazardous waste	Handling, storage and disposal of hazardous waste
Handling / removal & disposal of asbestos	Asbestos-containing material

Table 3. Similar EMS and SMS Activities

Chapter 5. DISCUSSION

Aligning with the research objectives, this Chapter will first determine the compatibility of the Manitoba Hydro EMS and a CCP. The selection of relevant principles and their associated considerations will be discussed; and to further understand how these can be used to centralize processes, three centralization approaches are explored.

5.1 EMS and CCP Compatibility

The first objective of this research was to identify the similarities and differences between the Manitoba Hydro EMS and a CCP to establish compatibility. This comparison was completed concurrent with the literature review and the results were used to develop the principle selection criteria. In understanding the compatibility of systems, the most relevant suite of principles could be selected.

5.1.1 Similarities

Components

Perhaps the most obvious similarity between the systems is their components, as illustrated in Figure 14. While the components may be termed differently, their functions are largely the same. Internal reporting is the only component in a CCP that doesn't have a parallel component in an ISO 14001 EMS due to the incentives and disciplinary measures involved.

Following the PDCA Cycle from start to finish, both systems are grounded on a foundation of strong senior management visibility and support, implement various operational functions in order achieve objectives, and undergo an assessment for continual improvement.

The components of the systems are derived from established standards and guidelines. The Manitoba Hydro EMS adheres to the ISO 14001 Standard requirements, and the majority of CCPs adhere to the FSGO requirements. While this provides a structured approach, the ISO 14001 Standard and FSGO allow for flexibility to accommodate all types of organizations.

Corporate compliance function

CEM and a CECO have similar roles, on a different scale. CEM is owner of the EMS and is responsible for maintaining an awareness of how the corporation is managing their environmental activities in accordance with legal requirements; a CECO is the owner of the CCP and can be accountable for the corporation's compliance requirements in their entirety. Of interest to this research is the CECO's responsibility of coordinating business unit processes. Having this similar corporate compliance function allowed for a seamless application of principles in this area. As an example, establishing a common understanding of risk (4.5.1) was one of the selected principles. The development of a common risk assessment framework is usually developed and implemented by the CECO; and therefore this responsibility could be adopted by CEM.

Challenges

Both CEM and a CECO experience similar challenges, in terms of centralizing processes and general responsibilities as system owners. The discussion of the principles in Chapter 4 provides insight into some of these challenges. Regardless of the size of the organization, it is difficult for the corporate compliance function to define compliance objectives, account for all compliance requirements, communicate with all stakeholders, and analyze monitoring/reporting

information. As well, there are similar pressures in meeting the standard and guideline requirements such as onerous administrative processes, audits, etc.

5.1.2 Differences

Authority of the corporate compliance function

As discussed in Section 4.1.1, a key difference between CEM and a CECO is their level of authority. A CECO is able to make key decisions, such as those relating to centralizing processes, due to their high level position and/or direct reporting relationship with the General Counsel or CEO. With EMAC having to approve EMS initiatives and activities, CEM lacks this level of authority, creating a challenge when trying to enforce centralization. This difference limited the selection of principles to those within CEM's control, which became a principle selection criterion.

Process vs. performance

A key difference between the systems is the stringency of requirements and expectations. This difference is attributable to their purposes; an ISO 14001 EMS is used to conform to the Standard's requirements, while a CCP is used to achieve regulatory compliance. ISO 14001 is a process Standard that doesn't establish performance requirements. Meeting legal and other requirements is a statement made in an organization's environmental policy but whether an organization fully complies with these requirements is outside the scope of an ISO 14001 registration/re-registration audit. Therefore, in addition to the environmental policy, an organization must develop policies and procedures that guide compliant operations and

behaviour and ensure compliance is evaluated through established methods such as audits, self-assessments, etc.

With a CCP focused on meeting regulatory requirements, more stringent requirements are needed to guarantee results. While this difference limited the selection of some principles, others were selected as a way to strengthen the EMS. As an example, the principle requiring a response to trends (4.6.2) was selected. This isn't a requirement in the ISO 14001 Standard, but the application of this principle could be beneficial in cross-Business Unit learning, trending, and root cause identification and resolution of systemic issues.

5.2 Relevant Principles

The second objective of this research was to determine the relevant corporate compliance principles for the Manitoba Hydro EMS. After the literature review and comparison of systems was completed, the principle selection criteria were developed. The principles selected for this research had to: 1) be appropriate for the Manitoba Hydro EMS, 2) within CEM's control; and 3) address an existing inconsistency or provide insight into new ways to promote centralization.

The last criterion was important in allowing for an organic approach, while still addressing the research problem. An example of an existing inconsistency was the variety of methods to list legal requirements. Organized by environmental activity, the Business Unit-owned lists are a prime example of a duplicated process. Learning from the experience of CECOs in various organizations, this is a common challenge in CCPs as well. Therefore, the principle promoting a common understanding of requirements (4.4.2) was selected. The principle reinforces the need for a central repository and suggests the involvement of SMEs and/or a regulatory tracking service to aid in the process.

Other principles were selected because they provided insight into new ways to promote centralization. Two of these principles were selected under the communication category:

1. Foster cross-functional communication (4.2.1); and
2. Include all stakeholder perspectives (4.2.2).

Fostering cross-functional communication is necessary in breaking down Business Unit silos, which is an essential step in resolving inconsistencies. As well, the inclusion of stakeholder perspectives is important in ensuring stakeholders recognize the value in managing compliance through the EMS, and work collaboratively with CEM as the corporate compliance function.

15 principles were selected and organized into seven categories. They were selected as the most relevant and applicable principles in resolving inconsistencies in the Manitoba Hydro EMS at the current time.

5.3 Centralization Approaches

Following the selection of principles and the discussion of how they are used in CCPs, each principle was applied to the Manitoba Hydro EMS. Under the heading "Manitoba Hydro EMS Applicability", a consideration(s) was provided for how the principle could be used to centralize a process. The considerations can be thought of as the findings of this research.

In reviewing the considerations collectively, three common approaches became evident. Regardless of the principle category, the principles (and their associated considerations) can promote centralization by:

1. Strengthening CEM's corporate compliance function;

2. Developing a new corporate EMS process or modifying an existing corporate EMS process; and
3. Creating conditions that promote centralization.

These are termed “centralization approaches” in this research. This section will discuss each in further detail.

The 15 principles and the centralization approach(es) are summarized in Table 4.

Principle Category	Principle	Centralization Approach
Senior management support	Establish a corporate compliance function	CEM, Condition
	Define expectations	Process, Condition
Communication	Foster cross-functional communication	CEM, Condition
	Include all stakeholder perspectives	CEM, Condition
Accountability	Create accountability at all levels	Condition
	Leverage subject matter expert knowledge	Process, Condition
Legal and other requirements	Define requirements	Process, Condition
	Promote a common understanding of requirements	Process
	Keep abreast of changing requirements	Process
Risk assessment	Establish a common understanding of risk	Process
	Maintain a current risk profile	Process
Noncompliance response	Formalize noncompliance reporting	Process
	Respond to trends	Process
Monitoring and reporting	Measure outcomes	Process
	Determine monitoring needs	Process

Centralization Approach Abbreviations:

- CEM: Strengthening CEM's corporate compliance function
- Process: Developing a new corporate EMS process; or modifying an existing corporate EMS process
- Condition: Creating conditions that promote centralization

Table 4. Summary of the Selected Principles and their Centralization Approach(es)

5.3.1 Strengthening CEM's corporate compliance function

The first centralization approach greatly influences the other two approaches, and therefore can be seen as the most significant approach. By strengthening CEM's corporate compliance function through increased authority, visibility and positive perception, Business Units should be influenced to work collaboratively to achieve centralization.

In large part, the ability for a CCP to operate as a centralized system is as a result of the CECO. Learning from the role and responsibilities of a CECO, CEM can consider what its corporate compliance function should look like and formally define the role. It is not the intention of the function to be the "owner" of compliance processes that exist throughout the corporation, but to centralize processes where possible and provide corporate support and direction.

There were several key considerations identified in strengthening this role.

Authority

As previously discussed, a key difference between a CECO and CEM's corporate compliance function is their level of authority. To increase CEM's level of authority, the considerations to modify EMAC's approval function and partner with other high-level support were identified.

SME support

It would be ideal to further leverage support from environmental SMEs throughout the corporation. These close working relationships could reinforce CEM's desire to support Business

Units in more effectively managing their environmental activities and meeting legal requirements. The involvement of SMEs was identified in the development of the Environmental Requirements Database and risk assessment methodology.

Leveraging subject matter expertise is also an example of a condition that promotes centralization (discussed further in section 5.3.3), as these relationships can help foster centralization immediately and for future initiatives.

Communication

The importance of communication in strengthening CEM's corporate compliance function cannot be overstated. The processes discussed in all principles can help encourage cross-functional communication. It is through cross-functional communication that CEM can deliver value-added processes for the corporation, and assist middle management and the EMS Coordinators in ensuring their employees operate compliantly.

Strategy

As owner of the EMS, CEM has the ability to establish the department and the EMS as having a strategic role in the corporation. In defining compliance objectives and utilizing outcome-focused monitoring, CEM can use processes such as the EMAC Dashboard and Management Review to deliver results. Because the link between strategy and execution is a common weakness in systems, it takes a mature owner/system to realize these benefits.

The ability for the corporate compliance function to trend results is another strategic benefit of centralizing processes. Trending is valuable in identifying systemic issues and

prioritizing resources accordingly. The consideration to trend results was identified through the use of the Noncompliance Database and Business Unit Quarterly Reports.

5.3.2 Developing or modifying processes

The development of new corporate processes or the modification of existing corporate processes is another centralization approach. Often referred to as "compliance tools" these processes are designed to increase effectiveness and efficiency (Jankousky, 1994).

Several new processes were identified, including:

- Environmental Requirements Database;
- Environmental SME Contact List;
- Noncompliance Database; and
- Business Unit Quarterly Reports.

As well, a number of modifications to existing processes were identified, including:

- Risk assessment methodology;
- EMAC Dashboard; and
- Management Review.

In many cases, the considerations to develop or modify a process exceed what the Standard requires. As an example, the use of a risk assessment in an ISO 14001 EMS is limited to the identification of significant environmental activities. In recognition that all components of a CCP should stem from the risk assessment, this process has significantly more value in a CCP. Therefore, the consideration for CEM to conduct risk assessments on an ongoing basis was

identified as a consideration, which would require a modification to the existing process. This example highlights another finding of this research: not only can these considerations centralize processes, but they can improve the process in general. Using this example, ongoing risk assessments have the potential to improve how risk is proactively managed and communicated, therefore adding value for the EMS and corporation.

5.3.3 Creating conditions that promote centralization

The conditions that promote centralization are proactive processes used to build a foundation that supports centralization. They are small steps that have the potential to break down Business Unit silos, when considered collectively. The principles in support of this approach include:

- Establish a corporate compliance function;
- Define expectations;
- Foster cross-functional communication;
- Include all stakeholder perspectives;
- Create accountability at all levels;
- Leverage subject matter expert knowledge; and
- Define requirements.

As an example, defining the scope of requirements is important in ensuring all employees have a consistent understanding of what legal and other requirements are included in the EMS. For CEM, the scope of requirements is used in the development of objectives, corporate policies (including the Environmental Management Policy), performance metrics (KPIs), etc. From a Business Unit perspective, the scope is equally important in developing policies and procedures

that adhere to these requirements. While the effect of these considerations may be less obvious, they are important in promoting centralization, now and into the future.

Chapter 6. CONCLUSION

"Unity is strength… when there is teamwork and collaboration, wonderful things can be achieved." – Mattie Stephanek

6.1 Introduction

The Manitoba Hydro EMS has a long history of change. The use of three separate EMS registrations prior to 2011 resulted in the development of Business Unit-specific processes, including compliance processes. Coupled with the pressures of operating under a new corporate owner and the culture of Business Unit independence within the corporation, centralization has been a challenge. In this research, "centralization" refers to the use of a consistent process owned by CEM.

The purpose of this research was to determine how the application of corporate compliance principles could centralize compliance processes in an ISO 14001 EMS. The research objectives were:

1. To identify the similarities and differences between an ISO 14001 EMS and a CCP to establish compatibility;
2. To determine the relevant corporate compliance principles for the Manitoba Hydro EMS; and
3. To provide considerations for how to centralize compliance processes.

This Chapter will synthesize the research objectives and their associated conclusions, provide an analysis of the methodology, and determine the limitations and next steps.

6.2 Conclusions

Objective 1: To identify the similarities and differences between the Manitoba Hydro EMS and a CCP to establish compatibility.

Conclusion 1: The two systems were established as being compatible. Three key similarities and two key differences were identified.

Similarities

Most importantly, the components making up the systems are similar, as illustrated in Figure 14, with the exception of internal reporting in a CCP. The presence of a corporate compliance function is another similarity, with CEM being the owner of the EMS and a CECO being the owner of a CCP. While there is no requirement in the Standard to have a central owner, this is the approach Manitoba Hydro has chosen for their EMS. Being managed through a central owner should promote the centralization of processes and therefore principles guiding CECO responsibilities/processes could be applied to CEM's corporate compliance function. The final similarity is in regards to the common compliance challenges, usually facing the corporate compliance function. The discussion of principles in Chapter 4 provides insight into some of these challenges, such as defining corporate compliance objectives and accounting for all compliance requirements.

Differences

The level of authority of the corporate compliance function is a key difference between the Manitoba Hydro EMS and a CCP. Due to the EMS Committee hierarchy, CEM is not in a position to act independently on behalf of the EMS, which is a requirement of a CECO in CCP.

The second key difference is in the stringency of requirements and expectations of the systems. An ISO 14001 EMS is used to conform to the Standard's requirements; while a CCP is used to achieve regulatory compliance.

Objective 2: To determine the relevant corporate compliance principles for the Manitoba Hydro EMS.

Conclusion 2: Using the principle selection criteria, the principles selected for this research had to: 1) be appropriate for the Manitoba Hydro EMS; 2) within CEM's control; and 3) address an existing inconsistency or provide insight into new ways to promote centralization.

15 principles were identified, organized into seven categories. These categories were chosen to reflect the structure of the Manitoba Hydro EMS.

Objective 3: To provide considerations for how to centralize compliance processes.

Conclusion 3: In applying each principle, a consideration(s) was identified. The considerations were then categorized into three centralization approaches. In essence, these approaches answer the overarching research question: "how can the application of corporate compliance principles promote centralized compliance processes in an ISO 14001 EMS?" They can do so by:

1. Strengthening CEM's corporate compliance function;
2. Developing a new corporate EMS process or modifying an existing corporate EMS process; and
3. Creating conditions that promote centralization.

CEM can strengthen its corporate compliance function by increasing its level of authority, SME support, and communication. Used effectively, CEM can leverage a strategic role and influence Business Units to work collaboratively to achieve centralization. This approach is the most significant, seeing as CEM is ultimately responsible for centralizing processes.

With inconsistent processes at the heart of this research, developing and modifying processes is the most obvious centralization approach identified. Examples of new processes include the Environmental SME Contact List and Noncompliance Database; and the risk assessment methodology and EMAC Dashboard are examples of modified processes that could directly or indirectly affect centralization of processes.

Creating conditions that promote centralization is the final approach identified. The principles and their associated considerations in this category achieve centralization in a less obvious manner. They are important in increasing collaborative efforts in the EMS with the intention of breaking down Business Unit silos. Examples of principles in this category include fostering cross-functional communication and inclusion of all stakeholder perspectives.

Importance of identifying centralization approaches

Identifying centralization approaches is important for a couple of reasons. Taking into account the number of considerations presented, the categorization makes them more manageable and their implementation seem less daunting. Communicating the considerations in this way could be beneficial in receiving buy-in for their implementation, which is a next step outside the scope of this research.

Additionally, the categorization is important for the prioritization of efforts. Depending on the needs, appetite and resources of the EMS Committees and their management, a certain approach may be of more interest. However, it should be understood that while the considerations have been categorized into three approaches, it is the researcher's opinion that they will achieve centralization most effectively if implemented concurrently. This is because the approaches are not mutually exclusive. Several principles are listed under two approaches (process and condition), as categorizing them under a single approach does not reflect their full potential. As well, each approach addresses an underlying cause of the overall issue of inconsistencies – lack of authority, visibility and coordination with CEM's corporate compliance function; a history of Business Unit-owned processes; and a corporate culture of Business Unit independence.

6.3 Analysis of the Methodology

Using a gap analysis methodology of applying principles that govern one system (CCP) to solve an issue in a separate system (EMS) is rather unconventional. However, inconsistencies have been a persistent challenge in the EMS and therefore the rationale behind using this approach was to "think outside the box" and identify new approaches for centralization. As a consequence of using this methodology, three key benefits were identified.

New perspective, new ideas

As expected, looking outside the usual scope of the EMS resulted in the identification of new ideas for how to centralize processes. Many of these "ideas" could create conditions that promote centralization, which became a centralization category in itself. For example, in responding to trends (4.6.2), it is acknowledged that "the best indicator of future performance is

past performance" (Biegelman, 2008, p. 185). With noncompliances currently being tracked at the Business Unit level, the consideration to develop a corporate Noncompliance Database could be beneficial in trending noncompliances across the corporation, predicting future occurrences and resolving their root cause(s).

Underlying causes

The centralization approaches shed light on the complexity of the research problem, and address the underlying causes. The underlying causes were identified through an examination of how compliance is considered in all components of the EMS – not limited to the three obvious ISO Clauses (*Clause 4.2 Environmental policy, Clause 4.3.2 Legal and other requirements,* and *Clause 4.5.2 Evaluation of compliance).*

While the need to strengthen CEM's corporate compliance function and create the conditions that promote centralization may have been acknowledged, this research is the first to address the underlying causes collectively. Therefore, the identification of centralization approaches is directly attributable to using this methodology.

Learning from others

A CCP exists to manage compliance through a centralized system, which is the goal state for the EMS. Therefore, this methodology allowed CEM to benefit from the principles and best management practices that govern a CCP without implementing a separate system to manage environmental compliance. Using the workable framework provided in the Standard, the considerations can be implemented in the EMS.

6.3.1 Use in other systems

The effectiveness of the methodology in this research provides insight into its use in other fields of study. With the Manitoba Hydro EMS and CCP having a similar structure, the application of principles was logical and practical; and therefore, establishing the compatibility of two systems is a critical first step. Beyond this requirement, the methodology is by no means limited to the fields of environmental management or corporate compliance, and can be used for resolving other challenges.

6.4 Next Steps

This research is the first step in transitioning towards a centralized EMS. A number of inconsistencies have been discussed with considerations for how to resolve them, using three centralization approaches. By identifying manageable considerations, the intention is to make small changes that can resolve the bigger picture.

The considerations presented in this research are to be further discussed with the EMS Committees for review and approval. Having a consistent understanding and appetite for this undertaking must be established before the considerations can be implemented. It is particularly important to receive buy-in from the EMS Coordinators who are involved in many of the considerations. However, the need for centralized processes to reduce duplication has been acknowledged - from the EMS Committees and employees throughout all levels of the corporation.

If the decision is made to implement the considerations presented in this research, the EMS Committees should determine a plan for prioritization. One approach could be to follow the

familiar PDCA Cycle. Beginning with "planning" components, the conditions that promote centralization could first be implemented such as defining expectations. From there, the development and modification of EMS processes could be executed in a logical order. For example, it makes sense to develop a process to develop and maintain the Environmental Requirements Database before the Business Unit Quarterly Report; CEM should know "what" to be in compliance with, i.e. legal and other requirements, before determining "how" Business Units should report on meeting these requirements. On the other hand, a specific new or modified process may be of higher priority. Regardless of the order of implementation, it should be reiterated that the considerations, organized by centralization approach, will be most effective if implemented concurrently.

Any change is difficult, especially in an organization as hierarchically and geographically dispersed as Manitoba Hydro. There would be a transition for the EMS Coordinators to align more closely with CEM and to develop/modify their Business Unit processes and procedures. In addition, there would be a significant transition for CEM in defining, fulfilling and being recognized as the corporate compliance function. This will take time, patience and above all, open cross-functional communication.

6.5 Limitations

ISO 14001:2004

This research is specific to an ISO 14001 registered EMS. While it may be of use for EMSs in general, the specific requirements of this Standard are used. Additionally, it is the 2004 version of the Standard being referenced - ISO 14001:2004. At the time of writing, ISO 14001:2015 was in draft version and therefore not considered.

Current solution

Because the principles were selected using the principle selection criteria, this research offers a current solution for the state of the EMS. As the EMS matures and the organizational structure and processes change, another suite of principles may be more relevant and appropriate for centralizing processes.

Realistically achievable

The principle selection criteria were developed to identify the principles that could be realistically and achievably applied at the current time. Understandably, this decision was made to encourage the implementation of all the considerations presented in this research. However, a potential limitation of this approach is the exclusion of principles that could promote the "best case scenario".

As an example, in an ideal situation, CEM's corporate compliance function would be more closely aligned with that of a CECO. This would include being in a high-level position within the organization and having a larger department to fulfill the CECO responsibilities. One of the responsibilities intentionally excluded from CEM's corporate compliance function was training, which is a key responsibility of a CECO. Based on the current size of the department, providing corporate-level training for all environmental activities isn't feasible. As such, a principle(s) directing centralized training was not selected.

"Application" of principles

Finally, when discussing the "application" of principles, this is to be understood in a theoretical sense. While each consideration identifies how the application of a principle could

centralize a process, this is only a prediction. How these principles would actually affect the EMS is beyond the scope of this research. Further research is needed to implement the considerations and determine the real effect of the application of the principles.

6.6 Concluding Remarks

Inconsistent processes have been a persistent challenge in the Manitoba Hydro EMS. Through the identification of considerations, organized into centralization approaches, small steps can be taken to resolve the underlying causes of inconsistencies. While the real application of principles is limited based on the scope of this research, it is the view of the researcher that corporate compliance principles can be used to centralize compliance processes in the Manitoba Hydro EMS.

The Manitoba Hydro EMS is already operating as an effective system in managing the corporation's environmental activities and associated legal requirements. Building upon this established foundation, there is potential for the system to realize further benefits – both in terms of compliance management and as a strategic tool for the corporation.

Reference List

American Society for Quality (ASQ). (2015). *Quality Glossary – C.* Retrieved from http://asq.org/glossary/c.html

Australian Taxation Office. (2012). *Measuring compliance effectiveness.* Canberra, Australia: Australian Taxation Office.

Baker & Mckenzie. (2012). *Essential Elements of Corporate Compliance.* Switzerland: Baker & Mckenzie International.

Bank for International Settlements. (2005). *Compliance and the compliance function in banks.* Basel, Switzerland: Bank for International Settlements.

Bansal, P., & Bogner C.W. (2002). Deciding on ISO 14001: Economics, Institutions, and Contex. *Long Range Planning, 35*, 269-290.

Barrick Gold Corporation. (2010). *Barrick Gold Corporation. Human Rights Compliance Program.* Toronto, Canada: Barrick Gold Corporation.

Biegelman, M.T., & Biegelman, D.R. (2008). *Building a World-class Compliance Program: Best Practices and Strategies for Success.* John Wiley & Sons, Inc.

Business Performance Management. (2005). Operational Alignment: bridging the Gap between Strategy and Execution. *Business Performance Magazine.*

Canadian Electricity Association. (2014). *Sustainable Development*. Retrieved from http://www.electricity.ca/industry-issues/sustainable-development.php

Canadian Standards Association. (2004). *The ISO 14000 Essentials, A practical guide to implementing the ISO 14000 Standard.* Mississauga, Canada: Canadian Standards Association.

Chibbaro, M.J & Coyler, C. (2000). Making corporate compliance programs work. *Journal of the Healthcare Financial Management Association. 54*(5), 60-65.

Competition Bureau Canada. (2008). *Corporate Compliance Programs*. Gatineau, Quebec: Competition Bureau.

Compliance and Ethics Leadership Council (CELC). (2005). *Towards Better Risk Detection and Prevention. Upgrading Compliance Risk-Assessment Capabilities.* Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2009a). *Preparing for Increased Regulatory Activity*. Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2009b). *Business-led Regulatory Tracking*. Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2010). *Compliance and Ethics Program Strategic Roadmap.* Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2012). *Driving Compliance and Ethics Program Effectiveness.* Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2014). *Spotlight on Effective Compliance and Ethics Training.* Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2015a). *About Us.* Retreived from http://www.cebglobal.com/exbd/about/index.page?

Compliance and Ethics Leadership Council (CELC). (2015b). *Design and Build a Compliance and Ethics Program*. Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2015c). *Policies and Procedures*. Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2015d). *Improve Compliance Risk Identification*. Washington, D.C.: Compliance Executive Board.

Cluk, R. & Gleckman, H. (1998). ISO 14001 *A Missed Opportunity for Sustainable Global Industrial Development.* London: Nigel Dudley.

Darnall, N. (2006). Why Firms Mandate ISO 14001 Certification. *Business & Society*, *43*, 354-381.

Deloitte. (2014). *Building world-class ethics and compliance programs: making a good program great.* Deloitte Development LLC.

Deloitte. (2015). *Compliance in motion. A closer look at the Corporate sector.* The Netherlands: Deloitte Risk Services.

Environment Canada. (2014). *Polychlorinated Biphenyls (PCBs).* Retrieved from https://www.ec.gc.ca/bpc-pcb/

Ethics Resource Center. (2010). *Leading Corporate Integrity: Defining the Role of the Chief Ethics & Compliance Officer (CECO).* Washington, D.C.: Ethics Resource Center.

Evans Incorporated. (2015). *Potential Benefits and Risks of Centralized and Decentralized Approaches.* Church Falls, VA: Sage.

Freyer, D.H., & Klubes, B.B (1994). A Practical Approcach to Implementing a Corporate Compliance Program for Smaller Companies. *Preventive LawReporter, 13*, 33-36.

Fox, T. (2013). *What Are the Essential Elements of a Corporate Complaince Program?* United States: Lexis Nexus.

Hoffman, A. (1997). *From Heresy to Dogma: an Institutional History of Corporate Environmentalism.* San Francisco: New Lexington.

Independent Electricity System Operator (IESO). (2013). *Statement of Approach: How Internal Compliance Programs Are Considered by MACD.* Toronto, Ontario: IESO.

IISD. (2013). *The Sustainable Development Journey*. Retrieved from https://www.iisd.org/business/sd_journey.aspx

International Network for Environmental Compliance and Enforcement (INECE). (2009). *Principles of Environmental Compliance and Enforcement.* Washington, D.C.: International Network for Environmental Compliance and Enforcement.

International Organization for Standardization (ISO). (2014). *ISO Survey*. Retrieved from http://www.iso.org/iso/home/standards/certification/home/standards/certification/home/standards/certification/iso-survey.htm?certificate=ISO14001&countrycode=CA#countrypick

International Organization for Standardization (ISO). (2015). *About ISO.* Retrieved from http://www.iso.org/iso/about.htm

Jankousky, L.A. (1994). Avoiding Enforcement: The Enviornmental Compliance Program. *Natural Resources & Environment, 8,* 35-67.

Johnson, P.E. (2015). *Corporate Compliance.* Augusta: Maine: Johnson & Webbert LLP.

KPMG. (2012). *A Good Offence is the Best Defense: Managing Regulatory Compliance with GRC.* Retrieved from https://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/managing-regulatory-compliance-grc.pdf

Kral, R. (2009). *Effective Corporate Compliance Programs.* Las Vegas, Nevada: Candella Soultions LLC.

Manitoba Hydro. (2008). *Manitoba Hydro Strategic Planning Process Guidelines.* Retreived from Manitoba Hydro internal website.

Manitoba Hydro. (2013a). *Corporate Strategic Plan.* Retrieved from http://www.hydro.mb.ca/corporate/csp/corporate_strategic_plan.pdf

Manitoba Hydro. (2013b). *Sustinable Development Policy*. Retrieved from https://www.hydro.mb.ca/environment/env_management/sdp.shtml

Manitoba Hydro. (2014). *Environmental Management Corporate Policy*. Retrieved from https://www.hydro.mb.ca/environment/env_management/ems_policy.pdf

Manitoba Hydro. (2015a). *About Us*. Retrieved from https://www.hydro.mb.ca/corporate/about_us.shtml

Manitoba Hydro. (2015b). *Major electrical and gas facilities*. Retrieved from https://www.hydro.mb.ca/corporate/facilities/pdfs/facilities_map.pdf

Manitoba Hydro. (2015c). *Corporate Strategic Plan*. Retrieved from internal website.

Manitoba Hydro. (2015d). *Manitoba Hydro's Code of Ethics.* Retreived from https://www.hydro.mb.ca/corporate/code_of_ethics.pdf

Morrow, D., & Rondinelli, D. (2002). Adopting Corporate Environmental Management Systems: Motivations and Results of ISO 14001 and EMAS Certification. *Environmental Management Journal*, *20*, 159-171.

Massoud, M.A., Fayad, R., Kamleh, R., El-Fadel, M. (2010). Environmental Management System (ISO 14001) Certification in Developing Countries: Challenges and Implementation Strategies. *Environmental Science & Technology Viewpoint, 44*, 1884-1887.

Neil, M. *Using "Risk Maps" to visually model & communicate risk.* Agena: University of London.

O'Brien, M.A (2006). *How corporate compliance helps your organization be accountable.* Tuscon, Arizona: Commission on Accreditation of Rehabilitation Facilities.

Organization for Econonmic Co-operation and Development (OECD). (2009). *Ensuring Environmental Compliance - Trends and Good Practices.* Paris: OECD Development Center.

Organization for Econonmic Co-operation and Development (OECD). 2010. *Guidance Note: Evalauting the effectiveness of compliance risk treatment strategies*. Paris: OECD Development Center.

Parker, C. (2002). *Is There a Reliable Way to Evaluate Organistional Compliance Programs?* Melbourne: Australian Institute of Criminology.

Praxiom. (2015). *ISO 9000 2015 Plain English Definitions.* Retrieved from http://www.praxiom.com/iso-definition.htm#Regulatory_requirement

PDCA Home. (2015). *PDCA Cycle (Plan, Do, Check, Act): The Deming cycle and the continuous improvement.* Retrieved from http://pdcahome.com/english/267/pdca-cycle-continuous-improvement/

Potoski, M. and Prakash, A. (2005). Green clubs and voluntary governance: ISO 14001 and firm's regulatory compliance. *American Journal of Political Science. 49*(2). 235-248.

Pricewaterhouse Coopers (PwC) US. (2008). *A practical guide to risk assessment.* United States: Pricewaterhouse Coopers.

Pricewaterhouse Coopers (PwC) US. (2012). *Broader perspectives; higher performance. State of Compliance: 2012 Study.* United States: Pricewaterhouse Coopers.

Pricewaterhouse Coopers (PwC) US. (2015). *Moving beyond the baseline. Leveraging the compliance function to gain a competitive edge.* United States: Pricewaterhouse Coopers.

SAI Global. (2012). *Canadian Centre for Ethics & Corporate Policy: Compliance & Ethics Program Best Practices.* Waltham, MA: SAI Global Ltd.

Simpson, J.A., & Weiner, E.S.C. (1989). *The Oxford English Dictionary. Second Edition. Volume XII Poise – Quelt*. Oxford: Oxford University Press.

Smithers Quality Assessments. (2013). *What comes after ISO 14001 certification*. Retrieved from http://www.smithersregistrar.com/iso14001/page-what-comes-next.shtml

SMS. (2014). *Safety Management System*. Retrieved from Manitoba Hydro internal website.

Steinberg, R.M. (2010). *The High Cost of Non-Compliance: Reaping the Rewards of an Effective Compliance Program.* Waltham, Massachusetts: OpenPages.

Time. (2010). *Warren Buffet's Boring, Brilliant Wisdom.* Retrieved from http://business.time.com/2010/03/01/warren-buffetts-boring-brilliant-wisdom/

Trevino, L., & Nelson, K. (2007). *Managing Business Ethics – Straight Talk About How To Do It Right*. New York: John Wiley & Sons Inc.

United States Sentencing Commission. (2014). *United States Sentencing Commission Guidelines Manual.* Washington, D.C.: United States Sentencing Commission.

Walker, R. (2006). International corporate compliance programmes. *International Journal of Disclosure and Governance*. *3*(1), 70-80.

Williford, K., & & Small, D. (2013). *Establishing an Effective Compliance Program: An Overview to Protecting Your Organization.* United States: Association of Corporate Counsel.

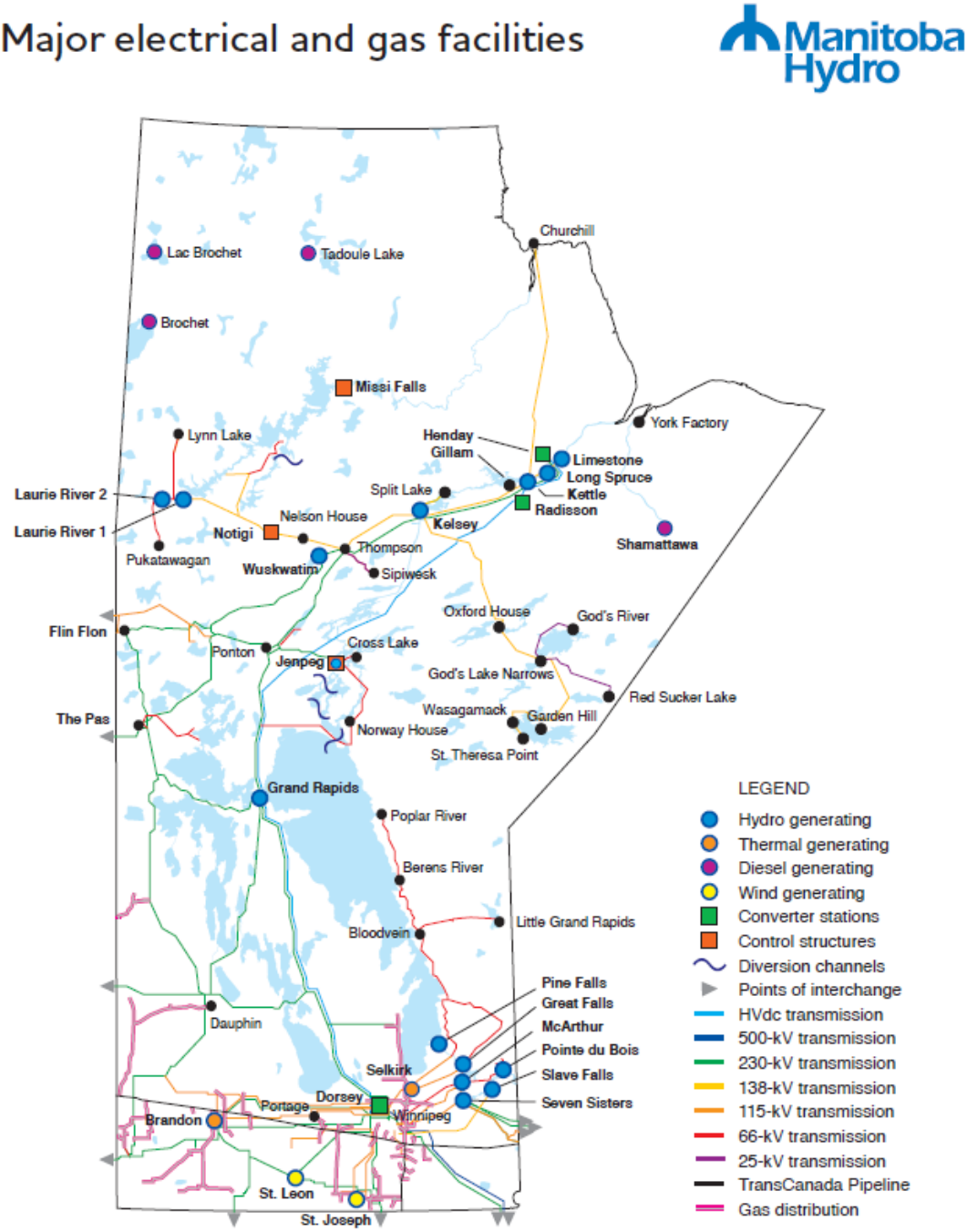
World Commission on Environment and Development (WCED). (1987). *Our common future.* Oxford: Oxford University Press.

Wulf, K. (2011). *Ethics and Compliance Programs in Multi-national Organizations.* Berlin, Germany: Springer Gabler.

Ziel, S.E. (1998). The "essentials" of an effective corporate compliance program. *AORN Journal, 67*, 1032-2034.

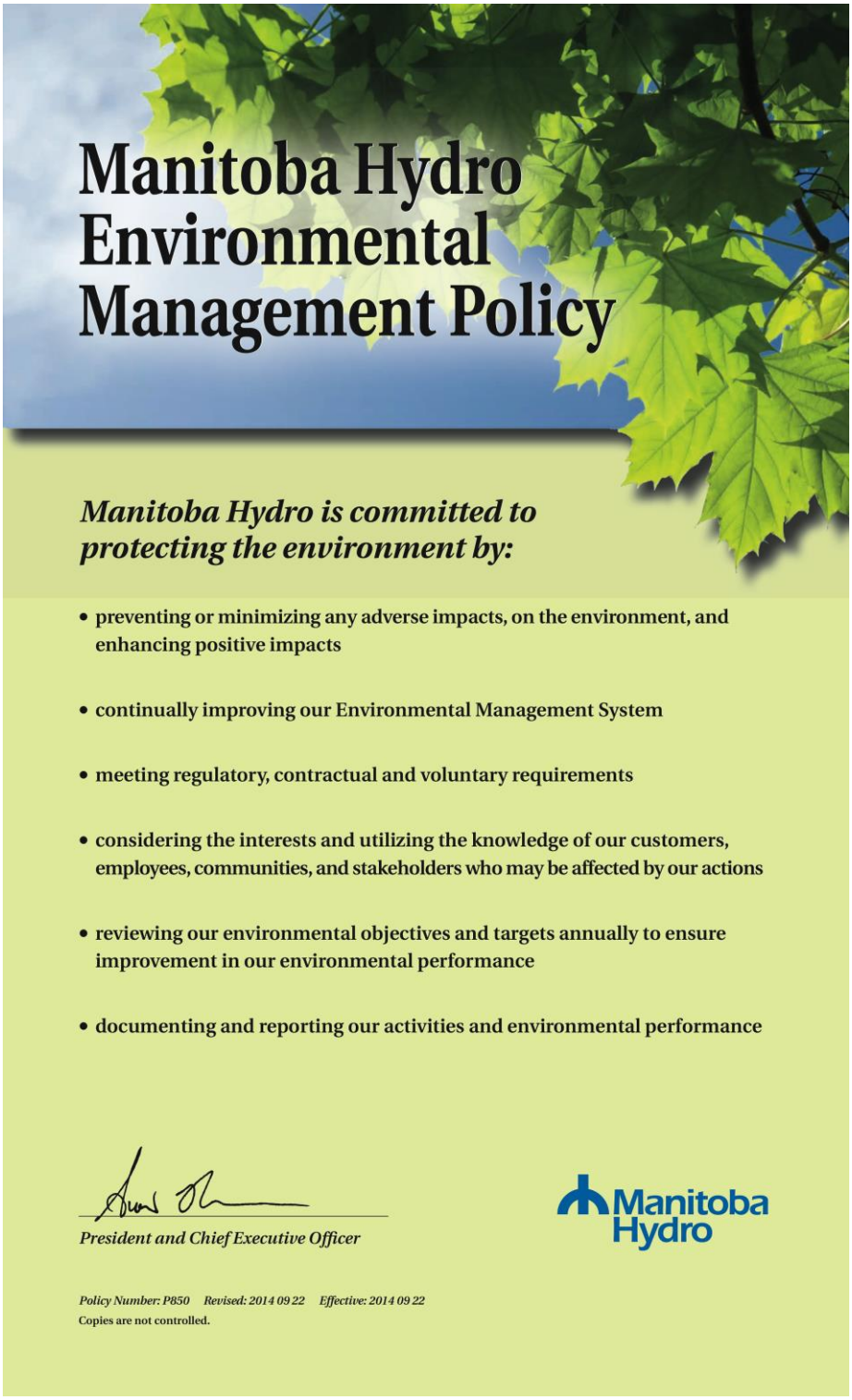
Appendices

Appendix A. Major electrical and gas facilities



(Manitoba Hydro, 2015b)

Appendix B. Manitoba Hydro Environmental Management Policy



Manitoba Hydro Environmental Management Policy

Manitoba Hydro is committed to protecting the environment by:

- preventing or minimizing any adverse impacts, on the environment, and enhancing positive impacts
- continually improving our Environmental Management System
- meeting regulatory, contractual and voluntary requirements
- considering the interests and utilizing the knowledge of our customers, employees, communities, and stakeholders who may be affected by our actions
- reviewing our environmental objectives and targets annually to ensure improvement in our environmental performance
- documenting and reporting our activities and environmental performance

President and Chief Executive Officer

Manitoba Hydro

Policy Number: P850 Revised: 2014 09 22 Effective: 2014 09 22
Copies are not controlled.

(Manitoba Hydro, 2014)

Appendix C. United States Sentencing Guidelines Requirements

2. EFFECTIVE COMPLIANCE AND ETHICS PROGRAM

Historical Note: Effective November 1, 2004 (see Appendix C, amendment 673).

§8B2.1. Effective Compliance and Ethics Program

(a) To have an effective compliance and ethics program, for purposes of subsection (f) of §8C2.5 (Culpability Score) and subsection (b)(1) of §8D1.4 (Recommended Conditions of Probation - Organizations), an organization shall—

(1) exercise due diligence to prevent and detect criminal conduct; and

(2) otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

Such compliance and ethics program shall be reasonably designed, implemented, and enforced so that the program is generally effective in preventing and detecting criminal conduct. The failure to prevent or detect the instant offense does not necessarily mean that the program is not generally effective in preventing and detecting criminal conduct.

(b) Due diligence and the promotion of an organizational culture that encourages ethical conduct and a commitment to compliance with the law within the meaning of subsection (a) minimally require the following:

(1) The organization shall establish standards and procedures to prevent and detect criminal conduct.

(2) (A) The organization's governing authority shall be knowledgeable about the content and operation of the compliance and ethics program and shall exercise reasonable oversight with respect to the implementation and effectiveness of the compliance and ethics program.

(B) High-level personnel of the organization shall ensure that the organization has an effective compliance and ethics program, as described in this guideline. Specific individual(s) within high-level personnel shall be assigned overall responsibility for the compliance and ethics program.

(C) Specific individual(s) within the organization shall be delegated day-to-day operational responsibility for the compliance and ethics program. Individual(s) with operational responsibility shall report periodically to high-level personnel and, as appropriate, to the governing authority, or an appropriate subgroup of the governing authority, on the effectiveness of the compliance and ethics program. To carry out such operational responsibility, such individual(s) shall be given adequate resources, appropriate authority, and direct access to the governing authority or an appropriate subgroup of the governing authority.

(3) The organization shall use reasonable efforts not to include within the substantial authority personnel of the organization any individual whom the organization knew, or should have known through the exercise of due diligence, has engaged in illegal activities or other conduct inconsistent with an effective compliance and ethics program.

(4) (A) The organization shall take reasonable steps to communicate periodically and in a practical manner its standards and procedures, and other aspects of the compliance and ethics program, to the individuals referred to in subparagraph (B) by conducting effective training programs and otherwise disseminating information appropriate to such individuals' respective roles and responsibilities.

(B) The individuals referred to in subparagraph (A) are the members of the governing authority, high-level personnel, substantial authority personnel, the organization's employees, and, as appropriate, the organization's agents.

(5) The organization shall take reasonable steps—

(A) to ensure that the organization's compliance and ethics program is followed, including monitoring and auditing to detect criminal conduct;

(B) to evaluate periodically the effectiveness of the organization's compliance and ethics program; and

(C) to have and publicize a system, which may include mechanisms that allow for anonymity or confidentiality, whereby the organization's employees and agents may report or seek guidance regarding potential or actual criminal conduct without fear of retaliation.

(6) The organization's compliance and ethics program shall be promoted and enforced consistently throughout the organization through (A) appropriate incentives to perform in accordance with the compliance and ethics program; and (B) appropriate disciplinary measures for engaging in criminal conduct and for failing to take reasonable steps to prevent or detect criminal conduct.

(7) After criminal conduct has been detected, the organization shall take reasonable steps to respond appropriately to the criminal conduct and to prevent further similar criminal conduct, including making any necessary modifications to the organization's compliance and ethics program.

(c) In implementing subsection (b), the organization shall periodically assess the risk of criminal conduct and shall take appropriate steps to design, implement, or modify each requirement set forth in subsection (b) to reduce the risk of criminal conduct identified through this process.

(United States Sentencing Commission, 2014, p. 503-504)

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Compliance and Ethics Leadership Council (CELC). (2009b). *Preparing for Increased Regulatory Activity*. Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2010). *Compliance and Ethics Program Strategic Roadmap.* Washington, D.C.: Compliance Executive Board.

Compliance and Ethics Leadership Council (CELC). (2012). *Driving Compliance and Ethics Program Effectiveness.* Washington, D.C.: Compliance Executive Board.

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Thanks,

Brian

> Brian K. Lee
Practice Leader

CEB Compliance & Legal Practice

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Figure 12. PwC's compliance framework (PwC US, 2015, p. 11)

Hi Catie,

Thanks for sending these back. We received the signed form back from the US so you can go ahead and published the diagram in your thesis, provided you attribute it to PwC US.
Please let me know when the thesis is published so we can keep an eye out for it.

Thanks again,

Jen

Jen Barrett
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