# ENVIRONMENTAL MANAGEMENT SYSTEM



# **MOOSE CONSORTIUM**

PASSENGER RAIL FOR INTEGRATED TRANSIT THROUGHOUT CANADA'S GREATER NATIONAL CAPITAL REGION

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# LIST OF GUIDANCE SHEETS

From time to time as deemed necessary by the Consortium, environmental guidance sheets will be produced to give specific direction in the following areas:

# 1. Environmental Aspects

- a. Contaminated Sites
- b. Effluents
- c. Greenhouse Gases
- d. Halocarbons
- e. Hazardous Material
- f. Pesticides
- g. Species at Risk
- h. Spills
- i. Storage Tanks
- j. Wastes
- k. Water

# 2. Environmental Stewardship

- a. Business Planning Process (pending)
- b. Communication Strategy
- c. Environmental Assessments
- d. Environmental Audits
- e. Legislation and Directives
- f. Pollution Prevention
- g. Quarterly Financial Reviews Format
- h. Recurrent Reports and Submissions
- i. Responsibilities
- j. Strategic Environmental Assessment

#### INTRODUCTION

- 1. Moose Consortium (the Consortium) is actively pursuing the development of a passenger rail system serving the Greater National Capital Region, from Smiths Falls, ON in the south, to La Pêche, QC in the north, integrated with service to east to Montebello QC and Alexandria ON and west to Bristol QC and Arnprior ON. The vision is for a safe, affordable, comfortable and sustainable rail service connecting urban and rural travellers, linked efficiently with other transporation providers such as OC-Transpo, STO and VIA, for seamless service.
- 2. In order to meet the highest standards of environmental management and sustainability, the Consortium has undertaken to adopt an Environmental Management System compliant with the ISO 14000 series of standards. Should the Consortium proceed from its current feasibility phase to an Operational Phase, it is the Consortium's intent to seek formal certification of a later version of this EMS and its application to Moose Consortium operations.

#### **SECTION 1- BACKGROUND**

- 3. The operation of any rail service regardless of size, frequency and passenger/freight volume, carries with it inherent environmental risk. A wide varriety of environmental aspects must therefore be considered, the risks understood and managed and mitigation strategies must be in place to deal with all possible environmental impacts.
- 4. The proposed operations of the Consortium are on designated federal works and thus fall under federal jurisdiction. Because the works are existing railway right of ways, and because they do not impact designated wildlife areas or migratory bird sanctuaries, an Environmental Assessment under the Canadian Environmental Assessment Agency Act is not required (CANADIAN ENVIRONMENTAL ASSESSMENT ACT, 2012 Regulations Designating Physical Activities; paras 1 and 28).
- 5. Notwithstanding the above, the proposed railway operation will be required to comply with all applicable municipal, provincial and federal environmental protection and reporting by-laws, statutes and regulations.

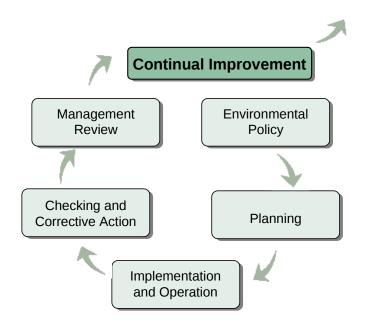
#### **SECTION 2- AIM**

- 3. This is the framework document for the Moose Consortium EMS. It identifies the elements and procedures of the organization's EMS and constitutes the directive to all elements of the organization regarding environmental management. This document also contains a list of available tools. This information will allow Moose Consortium to incorporate environmental values into its operational policies and to display due diligence in pursuing all its activities while at the same time maintaining its operational capability.
- 4. Each section of the document presents the background for the directives. These directives must be observed by the Consortium when managing daily activities. The directives stated in this document also apply to any individual, organization or business, internal or external to the Consortium that does business with the Consortium or uses goods and services belonging to the Consortium.

# **SECTION 3- FORMAT**

5. This document is structured according to the principles of the ISO 14001 standard, as follows:

Figure 1 Environmental Management System

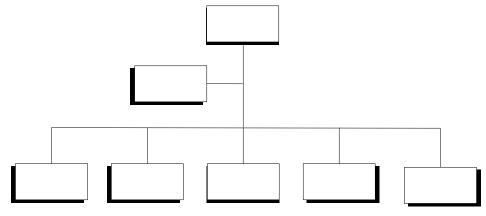


# **SECTION 4- APPLICATION**

6. This document is intended for elements under the direction of the Members of the Consortium. These elements must ensure that the information contained in this document is transmitted to and understood by all of the units for which they are responsible.

Figure 2 Moose Consortium Corporate Governance Structure

NOTE: Moose Consortium Corporate Governance structure is currently in development. This image is a placeholder.



7. **Outside Contracts and Alternative Service Delivery (ASD).** In fulfilling its obligations, the Consortium uses outside consultants to complete projects or conduct research. Contractors working for the Consortium must meet the same environmental requirements as the Consortium. These requirements include compliance with environmental standards and with the directives included in this document, as well as with all applicable environmental laws and regulations. To ensure that contractors are aware of and account for the environmental requirements related to the proposed work, these must be included in calls for tenders and agreements.

#### **CHAPTER 2**

#### **POLICY**

- 1. **Background.** Moose Consortium's *Environmental Policy* drives the implementation and improvement of the organization's environmental management system. The policy reflects the commitment of top management to compliance with applicable laws and continual improvement. The policy provides the basis that Moose Consortium uses in setting its environmental objectives and targets.
- 2. Moose Consortium *Environmental Policy* is an annex to the EMS and it is the responsibility off all elements of the Consortium to be aware of its contents. The promulgation of the Policy is an undertaking by the management of Moose Consortium and its dissemination forms part of the EMS Communications Strategy. (Chapter 2, c.)

#### **CHAPTER 3**

# **PLANNING**

#### **SECTION 1- ENVIRONMENTAL ASPECTS**

- 1. **Background.** Moose Consortium activities and their potential impacts on the environment are identified in the Environmental guidance Sheets listed below.
- 2. **Directives.** The above-mentioned guidance sheets paint a picture of Moose Consortium activities and help to identify the significant environmental aspects of these activities. Significant environmental aspects related to the Consortium's activities must be taken into consideration in setting environmental objectives.
- 3. To keep this information up to date, the Consortium must:
  - a. Update environmental studies in the light of new activities, new means of carrying out these activities, or changes in the environment.
  - b. Update Environmental Guidance Sheets as necessary.
- 4. Furthermore, to ensure and facilitate transmission of information, the management of Moose Consortium must be cognizant of any significant new environmental aspect that is associated with its activity or that occurs on Moose Consortium property. This will make it possible to integrate this aspect into the EMS.

# **SECTION 2- LEGAL AND OTHER REQUIREMENTS**

- 5. **Background.** Moose Consortium must comply with all applicable environmental legislation, which is constantly evolving. The Internet provides access to legislative texts and updated versions of environmental legislation and policies are available on the Environment Canada website (http://www.ec.gc.ca/EnviroRegs/eng/Default.cfm
- 6. **Directives.** The Consortium is responsible for identifying the laws and regulations applicable to its activities and environmental aspects, for keeping up-to-date copies of these and making them available, and for communicating new legislative and statutory requirements to all concerned parties. Moose Consortium must ensure that a compliance monitoring system is implemented and that it is also applied to all areas of operation under its responsibility.

#### **SECTION 3- OBJECTIVES AND EXPECTED RESULTS**

- 7. **Background.** The Consortium will set its environmental objectives based on its significant environmental aspects. The objectives established are aimed at improvement in its environmental management and its environmental performance. The Consortium will set objectives and expected results for each fiscal year. Several guidance sheets also present long-term objectives and taken together these elements represent a Moose Consortium Sustainable Development Strategy (SDS)
- 8. Moose Consortium SDS provides the strategic direction and priorities of the Consortium's Environmental Program for a three-year period. The SDS includes a series of objectives, targets and commitments to continual improvement aimed at protecting human health, the environment, the health of our ecosystems and the atmosphere, and at fully integrating environmental considerations into Moose Consortium management systems, processes and activities. The Consortium has committed to supporting the implementation of the objectives, targets and commitments to continual improvement of the SDS.
- 9. **Directives**. Moose Consortium EMS and SDS which taken together form the Consortium's Environmental Program must be considered when establishing objectives and targets specific to each business unit of the Consortium. All elements of the Consortium are responsible for complying with these directives and contributing to the achievement of the results expected.

# **SECTION 4- ENVIRONMENTAL MANAGEMENT PLANS AND PROGRAMS**

- 10. **Background.** Environmental management plans and programs are necessary and must be implemented in order to attain established objectives and targets. A number of environmental management programs will be initiated within the Consortium. These programs are primarily designed to ensure compliance with applicable legislation. They may also target the prevention of pollution and the preservation of biodiversity and natural habitats. The *Pollution Prevention Guidance Sheet* defines the concept and its application.
- 11. Proper management of Moose Consortium's significant environmental aspects makes it possible to reduce risks to the environment, prevent pollution, demonstrate its commitment to improving environmental performance, and in certain cases, achieve substantial long-term savings.
- 12. Planning of environmental management and consequential environmental programs must include the integration of environmental factors in the design, acquisition, use and disposal of equipment and infrastructure, and in defining the requirements for these.

- 13. **Directives.** All sub-units of Moose Consortium must incorporate their environmental management plans and programs into the EMS. All significant environmental aspects must be taken into account when planning these environmental management plans and programs.
- 14. Sub-units must respect the requirements presented in the following guidance sheets:
  - a. Contaminated Sites;
  - b. Effluents;
  - c. Greenhouses Gases;
  - d. Halocarbons;
  - e. Hazardous Material;
  - f. Pesticides;
  - g. Pollution Prevention;
  - h. Species at Risk;
  - i. Spills;
  - j. Storage Tanks;
  - k. Sustainable Military Training;
  - I. Wastes;
  - m. Water.



#### **IMPLEMENTATION**

#### **SECTION 1- PRIORITIES**

- 1. **Background.** To ensure proper environmental management in accordance with available human and financial resources, Moose Consortium environmental actions are prioritized as follows:
  - a. Priority 1: Elimination of risks to human health and safety
  - b. Priority 2: Compliance with all applicable laws and regulations
  - c. Priority 3: Reduction of environmental risks
  - d. Priority 4: Rehabilitation and/or improvement of the environment
- 2. **Directives.** All Moose Consortium sub-units, contractors and suppliers must respect these priorities when planning their projects and activities and when implementing the EMS.

# **SECTION 2- RESOURCES**

- 3. **Background.** Moose Consortium understands that maintaining and improving the Environmental Program requires adequate human and financial resources. The Corporate Business Planning process will provide the mechanism through which the scope of the required resources can be clarified and resources can be allocated accordingly. Each year, the Consortium will issue Environmental Management Operations and Resource Direction with which the sub-units of the Consortium will align their respective business plans. Some of these directives deal with the Environment Program. Through its year end reporting mechanisms, the Consortium will report to interested parties the resources expended and actions taken in support of the Environmental Management System.
- 4. To enable the Consortium to respond to existing and new legislative requirements and other steadily mounting environmental pressures, it must identify financial needs. The Consortium will identify any shortfalls or surpluses in funding for environmental management activities and as part of the business planning process, will identify the risks associated with any shortfalls and establish mitigation plans where applicable.
- 5. The main source of funding for Consortium environmental projects is internal funding. This source of funds may from time to time be supplemented by funding allocated from other sources and these funds will be allocated on the basis of EMS and Business plan priorities.
- 6. To ensure appropriate Consortium-level monitoring, all expenses supporting the Environmental Program must be reported in all Consortium business reporting vehicles.
- 7. Quarterly financial reviews will be provided in accordance with the timetable established annually by the Consortium's Comptroller. The purpose of these reviews is to ensure adequate monitoring of the financial resources allocated to the Environmental Program. The format for these reviews is provided in the *Quarterly Financial Reviews Format Guidance Sheet*.



# **SECTION 3- TRAINING AND COMPETENCE**

- 8. **Background.** Training and professional development help to maintain and increase the level of awareness and knowledge of individuals involved in environment management and to improve their skills. Complete descriptions of the minimum requirements for any environmental positions within the Consortium will be included in the statement of qualifications for each position.
- 9. **Directives.** The Consortium must ensure that its environmental specialists meet the specific requirements of their position and must evaluate and fill the environmental training needs of their personnel (e.g. halocarbon management, tank management, etc.).

#### **SECTION 4- COMMUNICATION AND AWARENESS**

- 10. **Background.** The Consortium's Environmental Management communication plan is presented in the *Communication Strategy Guidance Sheet*. The plan is one of the tools for ensuring communication and awareness-raising within the Consortium as well as with external stakeholders.
- 11. **Directives.** The Consortium will develop an Environmental Management communication plan that cover awareness raising, lessons learned, and the communication of progress achieved through the Environmental Program. Raising awareness is an important aspect that must be part of the communication plan. Major environmental events could be opportunities for communication (e.g. Environment Week, Earth Day, Clean Air Day). Various means of communication such as the Intranet, local newspapers, e-mail, and promotional tools should be used. Communication plans must include both internal and external communications.

#### **SECTION 5- EMS DOCUMENTATION**

- 12. **Background.** The Consortium's EMS documentation is identified in Annex A and includes all the documents used to develop the EMS: environmental policies, legislation and regulations, directives and orders, environmental programs and environmental databases.
- 13. **Directives.** The Consortium must make sure that documentation relating to its EMS is easily accessible and it must update and check this documentation in order to ensure that it remains current. Moreover, the Consortium must inform all applicable parties of the directives related to EMS Documentation.

#### **SECTION 6- DOCUMENT CONTROL**

- 14. **Background.** The Consortium's EMS document will be accessible to all employees and other interested parties on the Consortium's internet Website.
- 15. Since the EMS document is henceforth only available as an electronic version and updates are made continuously, it is necessary to ensure that a copy of the EMS document is saved and archived regularly.



# **SECTION 7 - OPERATIONAL CONTROL**

- 16. **Background.** Operational control allows procedures relating to all environmental aspects, environmental policy requirements and attainment of established objectives and targets to be implemented and kept up to date. The procedures related to the management of the EMS are collected in this document and the guidance sheets.
- 17. **Directives.** The Consortium must implement procedures to monitor and control the significant environmental aspects of its operations, respect the requirements of the EMS and achieve set objectives and targets.

# **SECTION 8- EMERGENCY PREPAREDNESS AND RESPONSE**

- 18. **Background.** The Consortium's emergency preparedness and response capacity allows environmental impacts associated with an emergency to be reduced or prevented.
- 19. **Directives.** The Consortium must ensure that emergencies can be dealt with. They must also comply with applicable regulations and directives. The Consortium's Health and Safety Management System establishes the directives for handling major incidents.
- 20. The Consortium must ensure that sites under its responsibility (e.g. maintenance facilities) identify environmental risks and implement the appropriate environmental emergency response plans.
- 21. In addition, to ensure an optimal response:
  - a. The emergency response plan must be tested and refined through drills;
  - b. Members of the intervention team must have the appropriate qualifications:
  - c. Response equipment must be readily available and in good condition; and
  - d. The response plan must be amended and improved as needed.
- 22. The Consortium must keep a record of all drills performed and training given to prevent and respond to emergencies.



#### **VERIFICATION AND CORRECTIVE ACTION**

#### **SECTION 1- MONITORING AND MEASUREMENT**

- 1. **Background.** Monitoring and measurement of Moose Consortium Environmental Management performance will be carried out using various procedures at the various organizational levels (audit programs, implementation of the monitoring measures prescribed in the EMS guidance sheets, performance indicators). Monitoring this performance helps ensure that environmental programs at all levels are in line with the EMS.
- 2. Achievement of the environmental objectives in the business plan and of the EMS objectives and targets is measured at the end of each fiscal year using a set of environmental performance indicators. Progress with regard to targets and commitments is measured at the same time and will be published in an appropriate corporate report.
- 3. During the year, the Consortium will look at the progress towards the program objectives in order to be able to prescribe adjustments or additional measures as needed.
- 4. **Directives.** The Consortium must record annual data for the performance indicators linked to the Environmental Program and the EMS.

#### SECTION 2- NON-COMPLIANCE AND CORRECTIVE AND PREVENTIVE ACTION

- 5. **Background.** The Consortium will establish procedures to detect non-compliance, ensure follow-up and correct any non-compliance detected. One of the methods for detecting non-compliance is the use of indicators. Non-compliance related to performance indicators means that EMS objectives and/or targets were not achieved. The environmental audit process is another method for detecting non-compliance. Legal compliance audit programs can also warn of non-compliance with applicable laws and regulations, as can warning letters sent by regulatory departments or agencies.
- 6. **Directives.** In the event of non-compliance with applicable laws and regulations, the Consortium will establish, in cooperation with the problem site, an action plan to correct these deficiencies quickly. Implementation of these measures may be verified during the year or at the end of the fiscal year, through appropriate means. If a warning letter is sent by Environment Canada or Fisheries and Oceans Canada in response to non-compliance with the law, a specific procedure must be followed (see Appendix A of the *Legislation and Directives Guidance Sheet*). Corrective action could be checked by the organization that noted the non-compliance and sent the letter.
- 7. In the event of failure to achieve the targets and goals established for the Environmental Program, the directive is the same as for environmental audits. The Consortium, in cooperation with the problem site, must establish an action plan to allow the situation to be corrected and the established targets to be reached. The implementation of the plan should be verified during the year or at the end of the fiscal year, as appropriate.
- 8. Measures will also have to be taken to prevent repeated non-compliance.



# **SECTION 3- RECORDS**

- 9. **Background.** Keeping records allows the Consortium's Environmental Program and EMS performance to be monitored.
- 10. **Directives.** The Consortium will maintain records of environmental performance in accordance with regulatory requirements where applicable (see the various guidance sheets).

#### **SECTION 4- ENVIRONMENTAL MANAGEMENT SYSTEM AUDITS**

- 11. **Background.** The Consortium should consider the establishment of an internal audit program permitting environmental management to be checked. This program would consist of visits to operational sites under the responsibility of the Consortium and its partners. Consideration should be given to engaging third party environmental consultants for this audit program.
- 12. The audits specifically target the environmental management system. Audits performed do not identify non-compliance with legal and regulatory requirements, rather deficiencies in environmental management, as identified on the basis of the ISO 14001 principles. The scope of these audits does not allow an exhaustive review of compliance with environmental legislation. However, flagrant non-compliance with the law may occasionally be noted by the audit team.
- 13. **Directives.** All Consortium employees, partners and other interested parties must take an active part in the environmental audit program, in accordance with the audit procedure described in the *Environmental Audit Program Guidance Sheet*. If deficiencies are observed during environmental audits, the Consortium must establish, in cooperation with the audit target, an action plan to correct these deficiencies. Measures to correct these deficiencies must be based on consideration of the environmental, legal, and operational risks involved. Implementation of these measures may be verified during the year or at the time of the next audit cycle. Measures will also have to be taken to prevent similar deficiencies.



#### MANAGEMENT REVIEW

#### SECTION 1- PROGRESS OF THE ENVIRONMENTAL PROGRAM

- 1. The overall progress of the environmental program will be discussed at the Consortium's managing body quarterly meetings.
- 2. The *Recurrent Reports and Submissions Guidance Sheet* provides the list of reports and other environmental submissions that must be generated by various levels on a regular basis to be discussed at these meetings. (Other ad hoc reports and submissions can be required; see the guidance sheet of the various programs for more details.)

# **SECTION 2- REVIEW AND UPDATING OF THE EMS**

3. Analysis of the annual report on the Consortium's environmental performance and of the environmental audit reports make it possible to reassess the EMS and to correct it if necessary. Changes will also have to be made in the case of new legislative requirements, new policies, or new directives. A review of the EMS must also be conducted when major changes are made to environmental statutes and regulations affecting the Consortium's operations.

# LAST UPDATE

December 2015